


## Article

# Practical Experiences with the Application of Corporate Social Responsibility Principles in a Higher Education Environment

Peter Madzík \* , Pavol Budaj and Anna Chocholáková

Department of Management, Catholic University in Ruzomberok, Nabrezie Jana Pavla II. c. 15, 058 01 Poprad, Slovakia; pavol.budaj@ku.sk (P.B.); anna.chocholakova@ku.sk (A.C.)

\* Correspondence: peter.madzik@ku.sk; Tel.: +421-904-375-425

Received: 9 April 2018; Accepted: 21 May 2018; Published: 25 May 2018



**Abstract:** Raising awareness related to sustainable development can take different forms. One of them is represented by recommended documents, including the International Standard ISO 26000 Guidance on Social Responsibility. Although it concerns the approach of integrating sustainable development and social responsibility, the results of its practical application are very rarely found in the literature. The aim of this paper is to present a method of applying ISO 26000 within a university environment. It offers an illustrative methodological apparatus allowing quantification of social responsibility principles and influences of an organisation focused on a detailed analysis of its performance in the area of social responsibility. The results are presented in the form of a case study and their role is to provide a verifiable manual for the structural process of an analysis and practical application related to the topic of social responsibility and sustainable development. The results also showed that if an organisation applies this procedure it obtains valuable information necessary to support decision-making processes.

**Keywords:** sustainable development; ISO 26000; social responsibility; measurement; performance; university

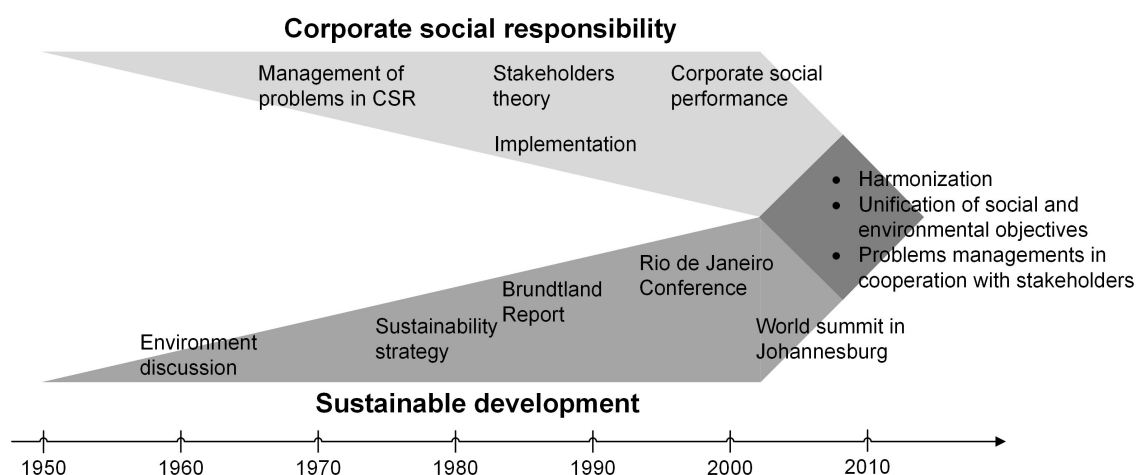
## 1. Introduction

### 1.1. Sustainable Development and Social Responsibility

The significance of issues related to sustainable development (SD) is growing under the influence of accelerating global changes. Regarding sustainability, these changes should take into account the needs and expectations of a wide range of stakeholders in a systematic manner, including fulfilment of the system's environmental element. The term “sustainable development” represents a concept that approximately began to develop in the 1950s, in parallel with the concept of social responsibility [1]. This term has long belonged to the vocabulary of ecologists and economists, who were trying to look for solutions to global problems, such as global warming [2], population explosion [3], poverty of the Third World [4], and so on. There are several expert studies documenting the history of the development of the sustainability concept [5]. However, at the moment, the most current and most frequently used SD model is considered to be the triple-bottom-line [6]. Three main aspects affecting sustainable development dominate this model: economic, social, and environmental. These three aspects cannot be interchanged [7].

Sustainable development has several elements similar to the term “social responsibility” (or corporate social responsibility—CSR) and it is, therefore, suitable to define their mutual relationship—see Figure 1. In the past, social responsibility was focused on the organisation and its

relationship to its environment (both corporate and natural) [8]. Sustainable development represented a summary expression of the wider expectations of society which should be taken into account by organisations striving to act responsibly. The main objective of social responsibility is the effort to contribute to sustainable development [9]. This interpretation determined socially responsible behaviour as a tool for achieving sustainable development, as confirmed by several academically acknowledged studies [10]. As, in the past, sustainable development could have been understood as the objective of the whole of society, socially responsible behaviour could have been understood as a tool of the organisation for the fulfilment of this main objective.



**Figure 1.** Relationship between corporate social responsibility and sustainable development [11].

#### 1.1.1. Trends in Social Responsibility Research

The international political debate that focused on sustainability, and later also on social responsibility, naturally spread into the academic environment. Many hold the opinion, and Carroll [12] showed this in his study, that ethical and philanthropic responsibility form the basis of CSR. However, implementation of CSR does not necessarily require personal ideological background. It is often purely pragmatic. Zadek [13], for instance, identified four main reasons for CSR application: defending one's reputation, justification of benefits over cost, integration with one's broader strategies and learning, innovation, and risk management. These two very contrasting views are both explicitly or implicitly supported by other studies focused on CSR [14,15]. Further developments showed that both types of reasons are relevant for CSR implementation—Bocken, for example, identified eight basic archetypes that make organisations focus on CSR. Lantos [16] claims that ethics is mandatory for CSR implementation, but purely altruistic CSR is not a legitimate role of a business. Academic discussion later focused on defining basic predictors of successful CSR implementation—whether in the form of reactive and proactive predictors [17], or as more technically oriented criteria as proposed by Dyllick [7].

This research led to various CSR categorisations which describe CSR from different viewpoints and on different levels. Aguinis [17], for example, holds that CSR should be grasped from three multi-level perspectives: institutional, organisational, and individual. The institutional perspective takes into account the socio-political milieu of a country and its respective laws and standards [18]. The organisation perspective (also called meta-perspective) focuses on firms. Research done from this perspective stresses firm performance, stakeholder definition, and salience [19], but also focuses on the original [7] and extended triple bottom line [20]. The individual perspective focuses on individual motivation [21], or on the support for responsibility culture [22,23].

However, there are still views that the measuring of CSR is problematic, mainly because there is no unified and correct definition of CSR [24]. Attempts at terminological and interpretational unification

of social responsibility in relation to sustainable development led to the creation of the International Standard ISO, which was accepted into the international standardisation system in 2010, under the name “ISO 26000:2010 Guidance on Social Responsibility”. This standard contains a wide range of information from the areas of both sustainable development and corporate social responsibility, which it synthesises in a systematic manner. It was created for the purpose of bringing SD and CSR principles closer to organisations of any type and it should especially serve as an aid in the implementation of these principles into management.

#### 1.1.2. The ISO 26000 Standard

Attempts for the universality of approaches to CSR resulted in international guidance in the form of the ISO 26000 standard. This standard summarised a set of “best practices” in the field of procedures for the provision of corporate social responsibility, without regard to the focus or orientation of the organisation [25].

The ISO 26000 standard, Guidance on Social Responsibility, belongs to a number of current standards intended for organisations of any type which aim to initiate and support improvement in the given field (ISO 26000 standard in the field of Social Responsibility). The ISO 26000 standard does not have the nature of requirements (such as e.g., ISO 9001), i.e., it does not stipulate any explicit requirements for the organisation in the given field and is not intended for certification. However, the ISO 26000 standard contains recommendations, the implementation of which has proved to be successful within organisations that belong to European and world leaders in the field of corporate social responsibility [26]. This standard can be understood as a set of recommendations that can help an organisation reach a certain level in the field of social responsibility and sustainability. The organisation itself decides whether to implement all the systematic elements of the standard. The ISO 26000 is not meant for certification, and so it can be implemented either partially or fully. It can even be used as an addition to more complex sustainability initiatives of the organisation.

The ISO 26000 standard is based on several international agreements and treaties. This broadly designed document makes reference to actual legal documents drafted by the International Labour Organization, Millennium Ecosystem Assessment, United Nations Environment Programme, OECD, United Nations, UNESCO, or the United Nations Environment Programme. All the various mutual elements between ISO 26000 and SD are supposed to help organisations effectively follow the principles of SD.

There are no sector-related exceptions for the application of this standard—i.e., it is a generic standard, applicable to any organisation. On the one hand, this can help with its wider distribution [27], but on the other hand, difficulties concerning interpretation of some parts that are written too generally can occur [28]. Certain parts of the standard can, therefore, appear to be only marginal for a certain type of organisation.

#### 1.2. Universities and Utilisation of System Approaches and Concepts

Universities have an important and irreplaceable role in the formation and growth of human capital (as part of an intellectual capital). They are not an isolated subject in their function and, therefore, they influence and are influenced by other elements of the system. In order to maintain their competitiveness, universities are forced to meet requirements of their stakeholders [29] and existing system approaches or concepts can serve as guidance to achieve this goal.

The most frequently standardised concepts utilised in the higher education sector are as follows [30,31]: (1) Common Assessment Framework (CAF), (2) European Standards and Guidelines (ESG)—a system tool intended for quality management directly at universities, and (3) a universal approach of ISO 9001 with sector-specific modification of the International Workgroup Agreement (IWA2):

- (1) The CAF model is based upon the assumption that an organisation achieves excellent results in performance, in relation to citizens/clients, employees, and society on the grounds of leadership, strategy and planning, employees, partnerships, and processes. A specialised model of this

type was issued in 2010 with a subsequent update in 2013, named “CAF and Education”. This model is based on the classic CAF model, respecting its basic elements (nine main criteria and 28 sub-criteria), with a difference in the explanation of some examples and processes of self-assessment, which increases the flexibility of the model application.

- (2) The provision and improvement of quality is also one of the key topics in the field of European university systems [32]. The current ESG represent a basis of legislative requirements for the creation of an internal quality assurance system in the environment of tertiary education in most EU countries [33]. ESG emphasises basic principles which are of crucial importance for the area of quality management [34]. We can, therefore, perceive ESG as a certain framework of reference and individual institutions can choose and decide on the implementation of particular “best practices” [35].
- (3) The IWA2 is a document issued by ISO and its aim is to help educational institutions with implementation of the ISO 9001 standard into their educational system [36]. The workshop agreement IWA2 “Quality Management Systems—Guidelines for the Application of ISO 9001 in Education” was prepared with the aim to provide education institutions throughout the world with a uniform approach to quality management [37].

In the past, implementation of international management standards, such as ISO 9001 and ISO 14001, in the environment of universities faced problems with interpretation of an over-technical language. Especially ISO 9001 [38]. Those are also the main reasons for the past and on-going sectorial modifications. While development in the field of quality management at universities has undergone several stages (from ISO 9001, through IWA2, CAF, CAF and Education to ESG), the basis of the evaluation of an environmental aspect of university management is mainly ISO 14001, which is usually accompanied by other specialised evaluation tools [39]. More detailed information about the development of application of standards at universities can be found in specialised journals, such as the Assessment and Evaluation in Higher Education or the International Journal of Sustainability in Higher Education.

With regards to the purpose of system management, its impact on education should also be mentioned. While ISO 9001 has primarily a procedural component of implementation—that is to say, *how* to ensure specific areas—ISO 14001, and especially ISO 26000, have a very important content component of implementation—*what* should be the focus. This content component can, for example, influence which courses to teach (student projects focused on the protection of the environment—waste separation, pollution monitoring, analysis of legislation), how to change course content (topics the solution of which the faculty addressed, and the provision of practical demonstrations—community projects, social services, counselling, and so on), but also the mutual connection of courses through a system and step-by-step method (e.g., the solution of long-term student projects from the defining of the objectives, through implementation of activities, up to the evaluation of the impact of the project).

Universities are an integral part of the overall social system. They belong to a group of organisations that provide majority services. In the past, from a scientific and applicative perspective, a great deal of attention was given to the understanding of differences between service organisations and manufacturing organisations [21,35,40].

Nevertheless, it became more and more clear that although universities have some features in common with service organisations, they are so specific in some areas that they require a different approach towards management [41]. One of the major differences is the very purpose of a university—the development of knowledge about the world around us [29]. This is, of course, reflected in the organisational structure, missions, and activities of universities. There are many views on these specifications, but with regard to the nature of this study, three of them, in particular, may be mentioned.

The first difference is with respect to the stakeholders of a university. One of the most important stakeholders is the “customer” of the university. Currently, it is possible to say that most opinions are inclined to the notion that the customers of a university are the students [42]. However, experience

shows that even though the student is the main beneficiary of education, one that should feel the benefits is the workplace, that is to say, is the potential employer of the student [29]. Each of these two types of “customer”, however, has different types of requirements from the university. For example, a student can only partially determine whether the content of education reflects the needs of the workplace (however, the workplace is able to determine that), and vice versa, employers only partially know how to judge the form of education—the teaching method, a logical continuation of topics, the pedagogical process (the student, however, can identify that). This naturally entails the need for a specific management of the university.

The other differences are the processes that take place at a university, with education and science as the main ones. The main processes of each organisation are intended to “produce” outputs—products. The educational process, however, takes a great deal of time (compared to other types of services like transport, accommodation, restaurants, etc.), which naturally puts obstacles in the way of rapid feedback and, subsequently, to correction, if the outcome of the process does not comply with the specifications, as it should. However, what is the outcome of education, i.e., its product? The product is the third difference of universities from other types of organisations. Currently, the output of educational process is considered to be “a set of knowledge, skills, competencies, and accomplishments” which the participant of education (usually a student) should have at their disposal at the end of the education. Measuring the level of learning outcomes is often subject to various evaluation schemes, both within the education system, where the knowledge, skills, and competencies of a student are assessed [29], or with respect to the final effect of education, where the fact of how the student applied this knowledge, skills, and competencies in the labour market is assessed [43].

There are, of course, several views on the differences of universities from other types of organisations, which stress, for example, the intellectual or developmental function of universities [40], where it is also possible to consider other interested parties as a customer, such as local self-government, or the fundamental cell of society—family. Some studies stress the important position of universities in different social issues [44], or their unique environment where principles of free thinking form the basis of progress [45], or education focused on research results, which distinguishes universities from other educational institutions. With regard to the subject of the present study, however, only three differences of universities were included—customer, processes, and product. This is primarily because generic standards, such as ISO 26000, but also ISO 9001 and ISO 14001, put a great deal of stress on these three terms, and their definition within the university framework is crucial for correct implementation of such standards.

### *1.3. Sustainable Development Approaches in University Environment*

Universities started to pay a great deal of attention to sustainability and, later, CSR at the end of the millennium. As Vasilescu [46] shows, the Bologna Process and World Declaration on Higher Education or Communication of the 2009 UNESCO World Conference on Higher Education highlight that social responsibility is increasingly considered an intrinsic aspect of the higher education system. Universities have an important role in relation to sustainable development and social responsibility. This role is mainly reflected in two aspects. The first is assessing the impact of a university on its environment similarly as it is evaluated in other organisations. This assessment of universities can be implemented through universal approaches where, apart from ISO 14001, EMAS (European Union Eco-Management and Audit Scheme) OHSAS 18001, and/or SA8000 can be used, for example [39]. The second aspect is the possibility to use a specific approach focused on assessing sustainable development in universities—AISHE (Auditing Instruments for Sustainability in Higher Education), STARS (Sustainability Tracking, Assessment and Rating, System), Green Matrices, Green League, UEMS (University Environmental Management System), and a number of others [47]. The university has, in the area of social responsibility and sustainable development, an irreplaceable position—it would be difficult to find another institution/organisation with such opportunities for a long-term appeal to the principles of responsibility and sustainability, in relation to young people. As seen above,



there are a number of approaches to sustainability implementation and assessment. In regard to the heterogeneous and specific environment of universities, it is difficult to pinpoint the most suitable one. Positivistically speaking, every systematic approach can be useful to universities based on the information it provides.

Some studies even suggest that social responsibility at universities should be termed USR (University Social Responsibility), rather than CSR [46]. However, since implementation of CSR is still limited, Vasilescu [46] agrees that this new terminology would not be much appreciated by academia and would not follow the more successful example of CSP (corporate social performance) [24]. Although there exist many systematic tools for integration of sustainability and CSR principles into the university environment, there are still many questions to be answered. Some studies show that, generally speaking, attention should be focused on methodology, which helps better understand CSR [17,22]. At the same time, the level of understanding of CSR, even at universities, is rather low. Lantos [16] showed that, in general, the controversy over CSR stems from a failure to distinguish among ethical, altruistic, and strategic forms. Disterheft [48] even implies that many universities apply only a part of CSR—its environmental principles. This only confirmed older findings that under “sustainability” or “CSR” that academia often imagines only the environmental factor of sustainability [49].

What is important, however, is that universities should take a systematic approach to sustainability. Early studies [22,24,50] presented empirical evidence of the lack of systematicity in CSR implementation and measuring. The ISO 26000 is a standard of precisely such a systematic nature. Taking into account the amount of effort and consensus put into its creation, implementation of this standard offers a suitable empirical opportunity.

This paper aims to present the results of the individual phases of ISO 26000 standard implementation in the environment of a university institution. The authors would like to point out possible methods for incorporation of principles and socially responsible activities into the system of a university or faculty management and, thus, support university emphasis on sustainable development. We would like to stress that we focused only on the structure of the ISO 26000 standard, and not on other approaches to sustainability. We did so in order to highlight the specific nature of this approach, and to ensure wide applicability of this solution (since ISO 26000 is a unified international document).

## 2. Materials and Methods

This paper presents a case study. It shows an application of SD and social responsibility principles in the framework of a university. We implemented ISO 26000 so that the faculty may identify which areas of SD and social responsibility to improve. This case study is the result of a project that was solved by a team of 84 employees and four external consultants. The team consisted of members of the faculty's top management, heads of departments or institutes, guarantors of syllabuses offered by the faculty, and other university teachers or administrative staff. The external consultants were experts in social responsibility, environmental management, standardisation of managerial systems, and data processing.

The structure of employees was determined so that it represents employees who are active also in important posts in communal policy, civil associations or they participate in activities executed by various stakeholders. Specifically, it concerned officials representing different city commissions, employees of retirement homes, asylum centres, children's homes, etc. At the same time, the members of the teams were internal employees of the faculty and so they participated directly in the educational and research process. Implementation of ISO 26000 had five phases. Their aim was, first, to deepen team members' understanding of issues related to sustainability and social responsibility, and then to analyse and improve its overall level. The field of sustainability and social responsibility is of course more complex, but ISO 26000 offers a suitable framework for a systematic approach to the issues it contains.

Phase 1 (raising awareness) was aimed at presentation of the social responsibility issue, objectives of the sub-project and the main work tool, the ISO 26000 standard. This phase consisted of four workshops focused on unification of used terminology, sharing of current experience with social responsibility, setting of a certain starting level of knowledge about the given issue, and engagement of employees. The purpose of this phase was to avoid potential problems stemming from a lack of understanding of the faculty's social responsibility.

Phase 2 (cultivating people) worked with the part of ISO 26000 which deals with social responsibility principles. When we already know what social responsibility is, it is reasonable to learn about its principles. These principles were, in line with the standard, explained to team members, discussed and then examples of their application were presented in order to assure the highest possible rate of their understanding. The strategy of the faculty is defined in the faculty's central document, called "Long-term intention", which includes the main areas and activities in which the faculty develops and plans to develop long-term efforts, with a focus on fulfilling its strategic objectives. Using group relation analysis, the relationship between social responsibility principles (ISO 26000) and the faculty's main areas (Long-term intention) were compared. This comparison was carried out by means of a relationship matrix, which in combination with perceived importance of principles allowed us to determine the positions (level) of individual principles in the current system of faculty management and also in the perceptions of its employees.

Phase 3 (stakeholders) was focused on identification of stakeholders, both from internal and external environment. It is impossible to assess the level of social responsibility if we do not identify the stakeholders first. In addition to the initial brainstorming that helped with the identification of direct stakeholders (such as students and employees), the project team also worked with internal documents. These included especially output reports from solved scientific and application projects of the faculty, which were analysed as to their content with a focus on finding direct and indirect benefactors of the projects' outputs. Strategic partnerships (in the form of contractual relationships) at a regional, national, and international level were also examined, also with the aim to identify the highest possible number of individuals or groups that can be directly or indirectly influenced by the activities of the faculty.

Phase 4 (performance analysis) represented a time-demanding phase of the solution. This phase focuses on collection and assessment of information related to social responsibility. The data collection and assessment should have a unified structure. Several follow-up activities were carried out in this phase:

- (1) explanation and interpretation of individual ISO 26000 parts related to social responsibility towards core subjects;
- (2) proposal of a suitable data structure for systematic analysis of the activities and processes of the faculty and a proposal of the method for processing such data;
- (3) decomposition of main faculty processes into particular activities and decisions (Work breakdown structure method—WBS);
- (4) evaluation of characteristics of these activities and decisions (impacts and their magnitude, intensity, stakeholders, etc.);
- (5) converted scale of impacts and their graphical interpretation; and
- (6) identification of the strengths and weaknesses of the faculty.

The last phase, Phase 5 (performance management), consisted of the determination of solution priorities and of modelling the future impact of such priorities on the performance in the field of social responsibility. This phase requires all four previous phases because they will show us areas suitable for improvement. The output of this phase was represented by specific implementation steps—managerial, organisational, technical, or other.

A similar methodology could be found in earlier studies. For instance, Krizek [51] claims that implementation of sustainability principles at universities should consist of four phases: grassroots; executive acceptance of the business case for sustainability; the visionary campus leader; and a fully

self-actualised and integrated campus community. These phases share many aspects with the first two aspects of our approach. Our approach can, thus, be seen as a logical enhancement with a systematic focus on CSR in university environment.

The ISO 26000 standard was used as the main solution framework, but other sources necessary for this subproject also played an important role. There were two other factors that played an important role in addition to common human, material, financial and time resources. The first was utilisation of external experts with extensive experience in implementation of ISO standards who could promptly help us with problems of misinterpretation or vagueness of information. The second factor was experience acquired by the solution team in three previous subprojects, namely: (1) implementation of ISO 9001 in the form of the International Workgroup Agreement—IWA2; (2) implementation of the Common Assessment Framework—CAF; and (3) implementation of the European Standards and Guidelines for quality assurance in the European Higher Education Area—ESG. As more than 70% of the project team members also participated in three previous subprojects, it significantly eliminated the time necessary for understanding principles and the purpose of management systems, which include also the ISO 26000 standard. Solution results are structured with regard to research design, which can be seen on Figure 2. Characteristics of individual phases and the main results arising from them are contained in the following chapters, 3.1–3.5.

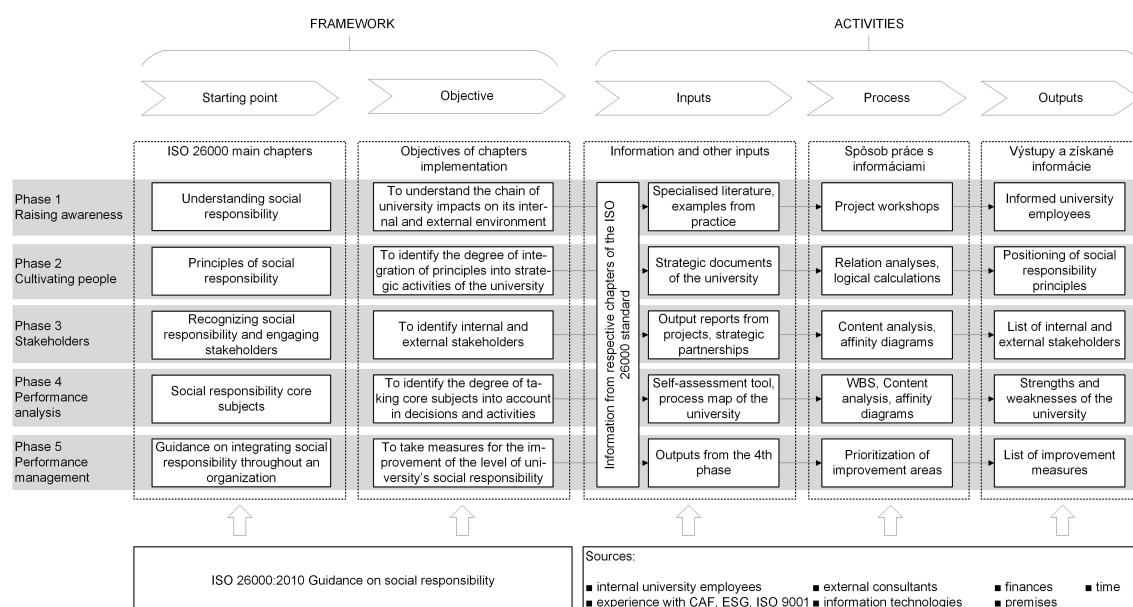


Figure 2. Framework and main activities of the subproject.

### 3. Results

#### 3.1. Phase 1—Raising Awareness

Members of the project team consisted mainly of internal employees of the Faculty of Education of the Catholic University. The Catholic University in Ružomberok is a Slovak public university opened for students regardless of their nationality, political views, or religion. Its establishment was agreed in 2000, based on a decision by the Slovak Republic legislation. The Catholic University also relies on the following values recognised and respected in academia: truth, unity, professionalism, and responsibility.

The composition of the team of the faculty's internal employees was varied as to their scientific and pedagogic field of activity, position as to office held, or practical experience. The external part of the project team consisted of consultants in the field of implementation of management systems and their task was to cover the methodological aspect of solution and to provide expert consultancy.



The main aim of the first phase was to raise professional competence of the project team in the field of social responsibility and sustainable development. The activities of this phase took place in the form of four one-day workshops at weekly intervals. Appendix A contains the list of objectives, contents, and best practices of the workshops.

This review also shows the identified best practices related to the respective workshops. However, in general, in all four workshops, it was worth using analogies, examples and discussions with participants, in order to provide a uniform terminological basis and to achieve a minimum level of knowledge of the topic of social responsibility. Even though this basic phase reduced the risk of failure of the following four phases, two more areas were identified in the later process to which it was necessary to pay attention. The first one was the necessary attendance of the highest managing workers of the faculty at all workshops. The second area which should not be underestimated is setting of interim tasks. This problem is also often mentioned in specialised literature [52,53].

### 3.2. Phase 2—Cultivating People

In the second phase, attention of the project team was focused on analysis of social responsibility principles. The main information input for this phase was the ISO 26000 standard, which states and describes social responsibility principles, and the main strategic document of the Faculty of Education of the Catholic University (FECU)—the “long-term intention”. Team members broke down this long-term intention into smaller parts and later into planned activities. This was followed by a group discussion about each part of the long-term intention with the aim to clarify the purpose of each respective part. Such clarification was necessary, as after each partial discussion the team members individually evaluated the intensity of the relationship of the area (or activity) in question to a particular social responsibility principle. This evaluation resulted in a relationship matrix containing mean values of relationships (a scale from 0 to 5 points was used). The degree of perceived importance of the principles from the perspective of the internal team members was determined together with this analysis. The combination of these two perspectives enabled us to position social responsibility principles from the perspective of their actual fulfilment in the main managing document and from the perspective of their perceived importance—Figure 3.

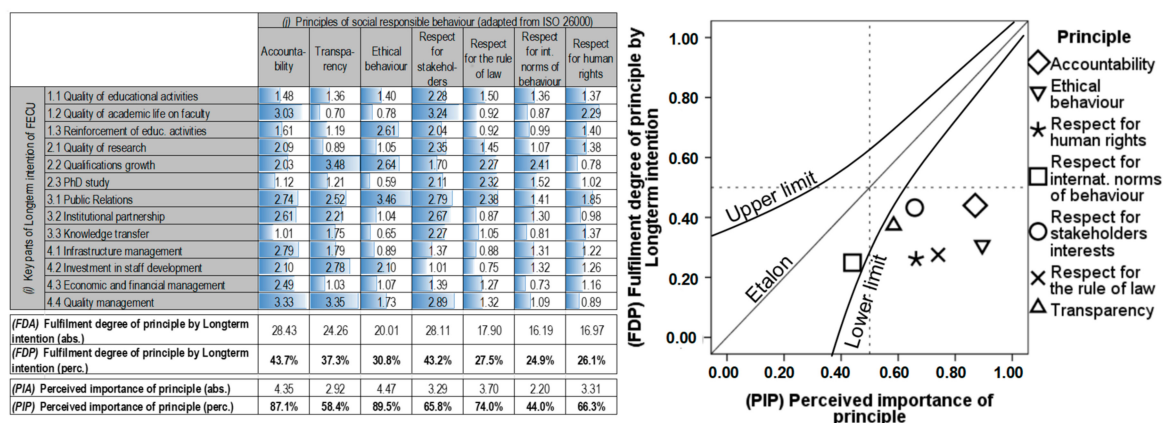


Figure 3. Positioning of social responsibility principles.

Figure 3 shows the result of this analysis. Intensity of individual relationships between Principles of social responsibility behaviour (i) and Key parts of the long-term intention of the FECU was calculated through mean value of the evaluation of each relationship by every member of the project team. The following scale was applied: from “0—zero impact” to “5—very high impact” [54]. On the grounds of this calculation, it was subsequently possible to calculate the fulfilment degree of principle in absolute (FDA) or percentage (FDP) expression. In addition to assessing the intensity of the impacts, team members also had to evaluate the importance they attach to the individual principles of socially

responsible behaviour. This was again done using the scale 0–5, whereby the mean value was used for calculating the absolute (PIA) and percentage (PIP) value of the perceived importance of principle. Methods for calculating these four parameters are expressed by the Equations (1)–(5):

$$FDA_{(j)} = \sum_{i=1}^{13} x_{ij}; j = 1, 2, \dots, 7 \quad (1)$$

$$x_{ij} = \frac{1}{n} * \sum_{k=1}^n (x_{ij})_k \quad (2)$$

where  $x_{ij}$  represents average intensity of the relationship between elements of the long-term intention ( $i$ ) and principles of social responsibility behaviour ( $j$ ), whereas  $x_{ij} \in <0; 5>$ ;  $(x_{ij})_k$  represents the value assigned by the respondent  $k$  to the relationship between ( $i$ ) and ( $j$ );  $n$  represents the total number of respondents.

$$FDP_{(j)} = \frac{FDA_{(j)}}{65} * 100; 65 = \max \left\{ \sum_i x_{ij} \right\} \quad (3)$$

where the value 65 represents the maximum intensity of the relationships between ( $i$ ) and ( $j$ ) ( $5 \times 13 = 65$ ).

$$PIA = \frac{1}{n} * \sum_{k=1}^n w_{kj} \quad (4)$$

where  $w_{kj}$  represents the importance level from interval  $<0; 5>$  of the principle ( $j$ ) evaluated by the respondent  $k$ ;  $n$  represents the total number of respondents.

$$PIP = \frac{PIA_{(j)}}{5} * 100 \quad (5)$$

where 5 is the maximum possible value for  $w_{kj}$ .

The results of the above evaluations allow us to display positions for individual principles with regard to their actual application (FDP) and their perceived importance (PIP), as is shown on the right part of Figure 3. As can be seen, despite the high degree of importance of principles, their actual application is considerably lower. A later discussion implied that these results may be understood as the difference in the perception of the principles' importance from the view of the faculty management (who prepared the long-term intention of FECU) and other members of academia. The logic of this comparison is based on the approach taken from quality management, known as a performance-importance matrix [55]. Ideally, elements in this matrix will have the same value of  $x$  and  $y$  parameters and will, thus, be on a notional diagonal straight line—the benchmark standard. However, it is almost impossible to achieve this state in reality and, therefore, two more curves were added in the course of time to this matrix—upper and lower control limits, with a so-called target zone between them. It is logical to accept wider tolerance limits of performance for elements with a lower degree of importance than for elements with a higher degree of importance. The organisation can adjust the “strictness” of tolerance limits with regard to its own ambitions and context [38].

Results of this phase imply that the FECU paid partial attention to compliance with social responsibility principles during the project, but there is also significant potential for their wider implementation in processes, activities and decisions of the faculty. This phase also led to recommendations for reviewing the long-term intention of the FECU with regard to explicit incorporation of social responsibility principles, which were demonstrably insufficiently covered. The aim of the aforementioned recommendations was to bring the principles closer to the target value. As the hypothetical shift of points in the coordinate system in Figure 3 is possible only upwards (by increasing FDP; decreasing PIP is illogical and not possible), the priority of the incorporation of individual principles is given by the vertical distance of the principle from the lower limit. Accordingly, the priority was determined as follows: ethical behaviour, respect to the rule of law, accountability,

and respect to human rights. In addition to pointing out the “performance gap” in the field of social responsibility, this whole phase had an important motivating nature for the members of the project team.

### 3.3. Phase 3—Stakeholders

Identification of stakeholders took place during one workshop, whereby four techniques were used. The first one was brainstorming, which helped to identify the most obvious stakeholders, usually from the internal or close external environment of the faculty. The second technique consisted of reviewing strategic partnerships that the faculty or university has established. The third technique consisted of reviewing output reports from previous projects solved at the faculty during a period of the last five years. The last used technique was the asking of targeted questions from the ISO 26000 standard (Chapter 5.3.2). These are eight questions, which were also later used for the analysis of organisational performance and were incorporated into the evaluation form. These questions also identified more remote or indirect stakeholders.

Results of the identification of stakeholders are shown on Figure 4. The time (in minutes) required for the identification of individual stakeholders was recorded by external consultants during the process of identification. The result shows the effectiveness of individual techniques. It can be seen that brainstorming is a very effective technique for quick identification of (mainly internal) stakeholders. The brainstorming process took 22 min and a total of 23 stakeholders were identified. The second technique, partnership review, helped to identify 12 stakeholders in approximately 70 min. The effectiveness of the third technique, projects review, was similar: 13 new stakeholders in around 100 min. The last technique used targeted questions from the ISO 26000 standard. It turned out that the effectiveness of this technique is very high, as it helped to identify a further 31 stakeholders in a relatively short time—approximately 50 min. Seventy-nine (79) stakeholders (individuals or groups) that have an interest in any decision or activity of the organisation were identified using the aforementioned four techniques. However, the process of identification of stakeholders remained open, as it was assumed that some other relevant stakeholders would be identified later in the process. Other stakeholders were identified at a later phase (phase 4—performance analysis) and their total number grew by 21, with the total number of identified stakeholders reaching 100 stakeholders.

For the purpose of a better understanding and engagement of stakeholders, stakeholder analysis was performed. Stakeholder analysis consists of assigning two parameters to each stakeholder. These parameters are usually “power” and “interest”. Since this is an internal analysis (from the viewpoint of the organisation doing the analysis), there is no need to directly engage the stakeholders in assigning these two parameters [56,57]. Some mirror studies have shown that stakeholders often overestimate their importance for the organisation. It is because of this that the assessment of suppliers is often done internally [58]. The concept of scale is most frequently used for the determination of these two parameters. However, during the discussion some members of the project team pointed to the possibility of another interpretation of the term “power”. Power can be perceived as (1) the intensity with which an individual or a group can influence the activities and decisions of the subject, but also as (2) social power based on the size of the group. Stakeholders were, therefore, assessed by team members using three perspectives:

- (1) Power of the stakeholder—a direct scoring method on a scale of 0 to 5 was used, where the value “0” meant no influence by the stakeholder on activities and decisions of the faculty, and “5” meant a very high influence by the stakeholder on activities and decisions of the faculty.
- (2) Interest of the stakeholder—similarly to the previous parameter, a direct scoring method on a scale of 0 to 5 was also used here, where the value “0” meant no interest by the stakeholder in activities and decisions taken at the faculty, and “5” meant a very high interest by the stakeholder in activities and decisions taken at the faculty.
- (3) Size of the stakeholder—this parameter represented the size of the group, determined by an estimate of the number of people it contained.

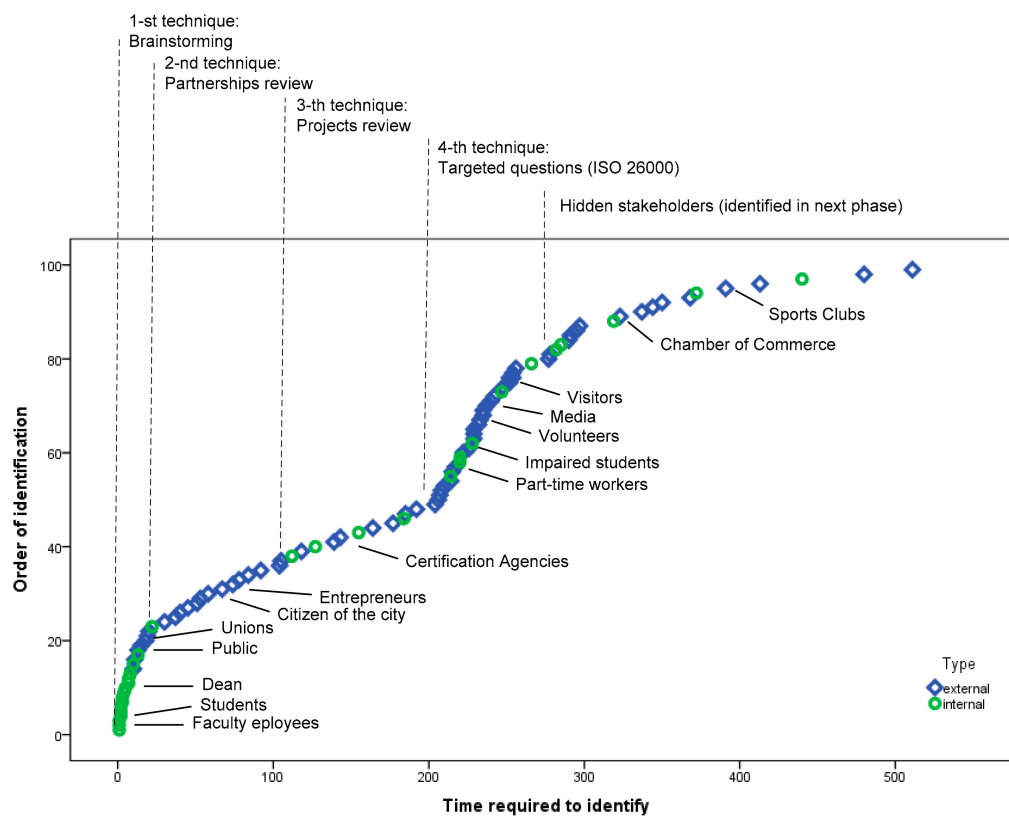


Figure 4. Identification of the stakeholders by means of the used techniques.

This evaluation resulted in two matrices of stakeholders, as shown in Figure 5. The individual points in these matrices represent particular stakeholders. The matrix displayed on the left represents a standard stakeholder analysis, where the coordinate system is formed by two parameters—power (axis  $y$ ) and interest (axis  $x$ )—and the right part shows a stakeholder analysis from the size/interest perspective.

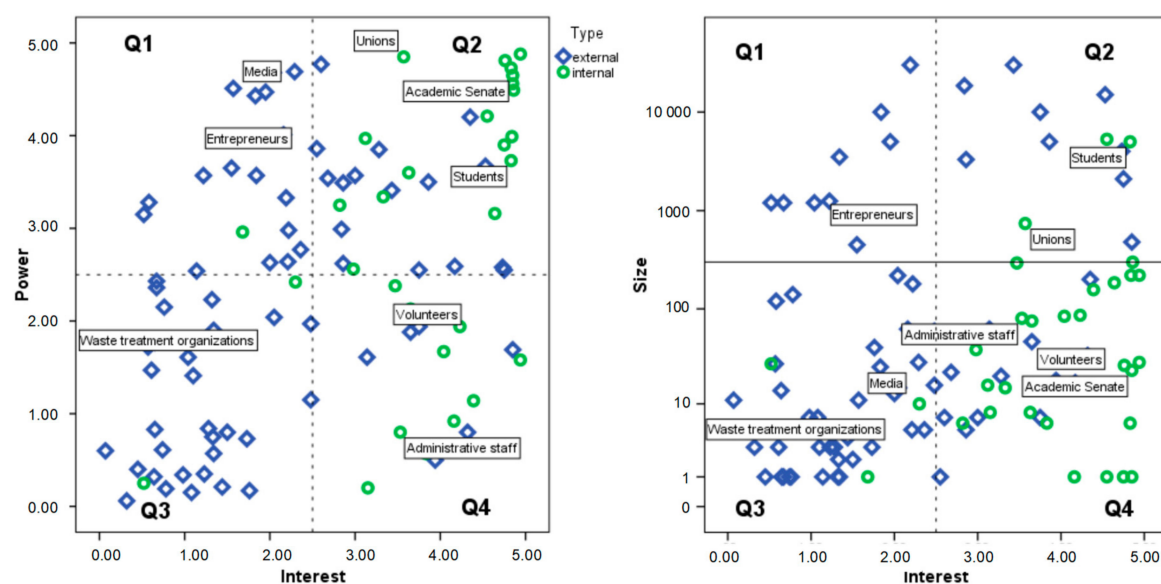


Figure 5. Stakeholder analysis.

Stakeholder analysis enables the determination of a strategy of managing relationships with stakeholders [56]. This strategy is determined by the quadrant in which a particular stakeholder is located. The strategy “keep satisfied” based on occasional communication with the stakeholder, is recommended for stakeholders located in quadrant Q1. The strategy “manage intensively” is recommended for stakeholders located in quadrant Q2. The strategy “monitor” should be applied to stakeholders located in quadrant Q3. The last strategy is to “keep informed”, and should be applied to stakeholders located in quadrant Q4.

The results of the stakeholder analysis, shown in Figure 5, showed that a different interpretation of the term “power” brings a different distribution of stakeholders in the coordinate system. It can be seen that in the typical stakeholder analysis (left part of Figure 5) internal stakeholders were located mainly in quadrant Q2 and, thus, the strategy “manage intensively” should be applied to them. After the alternative approach was applied to the stakeholder analysis (right part of Figure 5), it can be seen that a large part of internal stakeholders moved to quadrant Q4 “keep informed”. Shifts were also observed in the case of external stakeholders. The parts of Figure 5 show a relatively high rate of interest among external stakeholders (they are located more to the right in both parts of Figure 5). This clearly implies that universities play a key role in the society and their impact on various external stakeholders should definitely not be underestimated [59,60].

This comparison enabled the specification of key stakeholders, significantly helped with the realisation of the width of the social responsibility issue across the whole project team and also helped in the following analysis of the impacts realised in phase 4.

### 3.4. Phase 4—Performance Analysis in the Field of Social Responsibility

It is possible to proceed in various ways in order to obtain a complex analysis of the current status in an organisation. The procedure is sometimes based on an analysis of the objectives and methods to achieve them [61], on processes [62], on organisational units [63], or on the grounds of some standardised framework (e.g., CAF). Performance analysis in the field of social responsibility was performed on the grounds of a thorough examination of the ISO 26000 standard and its core subjects. There are seven such core subjects in the standard, which form more specific “issues” (subgroup of core subject).

#### 3.4.1. Variables

The ISO 26000 standard only offers guidance for the analysis and does not contain any complex methodological apparatus for the quantification of performance. As the project team also included experts from the field of analytical data processing, it was proposed to make the evaluation of the faculty performance in the field of social responsibility primarily quantitative. To this end, it was necessary to propose a suitable structure of data, which would allow working with the results later. Table 1 shows an overview of variables proposed by the project team. In addition to the characteristics of the variables, the table also contains the justification and reference to a respective chapter of the ISO 26000 standard containing an argument for the usage of the given variable.

The project team was divided into seven groups, whereby each group had to identify and quantify the influences of the faculty in one of seven core subjects.

At first, each group of researchers identified possible impacts of the faculty on other internal stakeholders (e.g., employees, students, etc.), but first of all on the external stakeholders (e.g., local and regional self-administration, entrepreneurs, various associations, or employees of social services homes). Then they addressed individual stakeholders and within workshops, or informal appointments with them and the group, they communicated the influence. Apart from the fact that the stakeholders participated in identifying the size of the influence, they were also interested in accepting conclusions, resulting from analysis concerning the areas which concerned them.



**Table 1.** Data file structure.

	Variable	Subvariable	Type	Measure	Legitimacy
A	Influence ID	-	String	Nominal	Simple identification of the influence. For instance, a designation of influence “2_3_1” refers to core subject no. 2., issue no. 3 and influence no. 1 (Chapter 6 in ISO 26000)
B	Influence name	-	String	Nominal	Name of the activity or decision (Chapters 6.1–6.8 in ISO 26000)
C	Influence type	Direct Indirect	String	Nominal	Activities and decisions of the organisation can affect stakeholders directly or indirectly (Chapter 6 in ISO 26000)
D	Stakeholder	-	String	Nominal	Determination of stakeholders concerned by the influence (Chapter 5 in ISO 26000)
E	Involvement form	Legal obligations Pos/Neg influence Concerns Past experience Help to address Affect Disadvantages Value chain Total	Numeric	Nominal {0;1}	Stakeholders can be involved in the aforementioned influence in various ways. Such ways of involvement are defined by the standard and were also described in the form of eight questions in Section 3.3 hereof.
F	Aspect	Social Economic Environmental	Numeric	Scale <sup>1</sup>	Activities and decisions of the organisation can have various aspects with regard to the triple bottom line. (Chapter 3 in ISO 26000)
G	Size of influence	Positive Negative	Numeric	Scale <sup>1</sup>	Some influences can have positive and negative impacts at the same time, the size of which can vary (Chapter 3 in ISO 26000)

<sup>1</sup> Scale: 1 = low; 2 = medium; 3 = high.

Issues within ISO 26000 are relatively well formulated and members of the project team were able to identify relatively many influences by using them, many such influences were latent at first sight. An influence means any activity or decision of an organisation that can influence any of its internal or external stakeholders. After the influences were examined and evaluated, it was possible to proceed with their analysis, the aim of which was to assess the performance of the faculty in the field of social responsibility.

### 3.4.2. Analysis

The project team identified a total of 156 influences (i.e., decisions and activities of the faculty). The majority of them concerned several stakeholders at the same time, which were necessary to assess separately. After taking this into account, as much as 609 influences were assessed in total. The resulting data file was exported from the spreadsheet into statistical software IBM SPSS Statistics (IBM, New York, NY, USA), where all subsequent analyses were performed.

It was possible to get a range of analytical outputs through a combination of individual variables entering basic and more advanced statistical analyses. Any logically justified combination of two or more variables can bring the required interpretation and therefore the analyses shown below must be seen as major ones, which can be later stratified in more detail, or other analyses can be used.

The overall evaluation of the intensity of all 156 influences helped to identify a relatively large amount of activities and decisions, which are significantly related to social responsibility.

Put simply, it may be noted that the size of the overall impact is set by the number of stakeholders it impacts, by the number of dimensions it has with regard to the triple bottom line, as well as by the size of the final impact effect. A range of different factors that influence the size of the overall impact have been defined, but it can be adjusted, of course, if necessary.

The graphic interpretation of all 156 influences lacks clarity, and the results can be stratified. Figure 6 shows an example of such a stratification, showing results for the core subject 1—organisational governance. A stratification of the results at the first level was carried out according to variable A

(Table 1: influence ID) and at the second level, according to variable D (stakeholder). The left part of Figure 6 shows an overview of the intensity of a total of 14 influences, where it can be seen that influences 1\_1\_11 (formal mechanism for decision evaluation), 1\_1\_2 (workloads) and 1\_1\_1 (process of long-term intention creation) belong to the most important ones with regard to social responsibility. This type of results assessment was already used in Lozano [64], who tried to introduce the so-called GASU (Graphical Assessment of Sustainability in Universities). The right part shows the size of total influence by particular stakeholders. Due to core subject 1 (organisational governance), it is no surprise that the activities and decisions in this area mostly affect internal stakeholders—faculty employees and faculty management. Analysis of the other six core subjects showed different results, but it became clear that students and researchers were the most affected stakeholders. That is, of course, only natural, since training of well-educated students and production of research results are the two basic activities of universities [65].

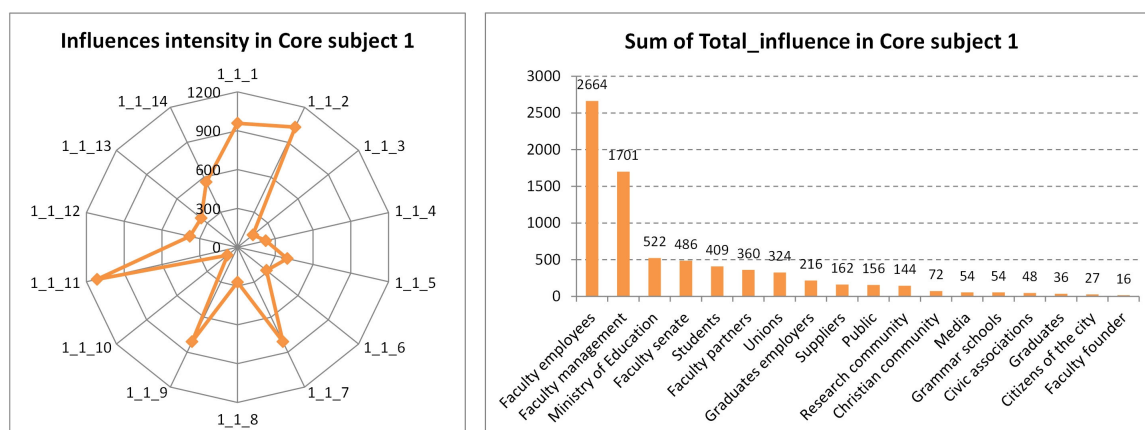
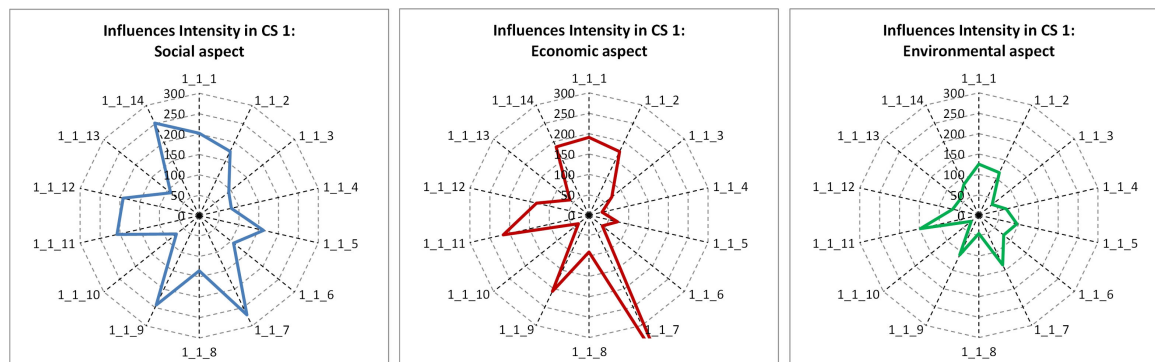


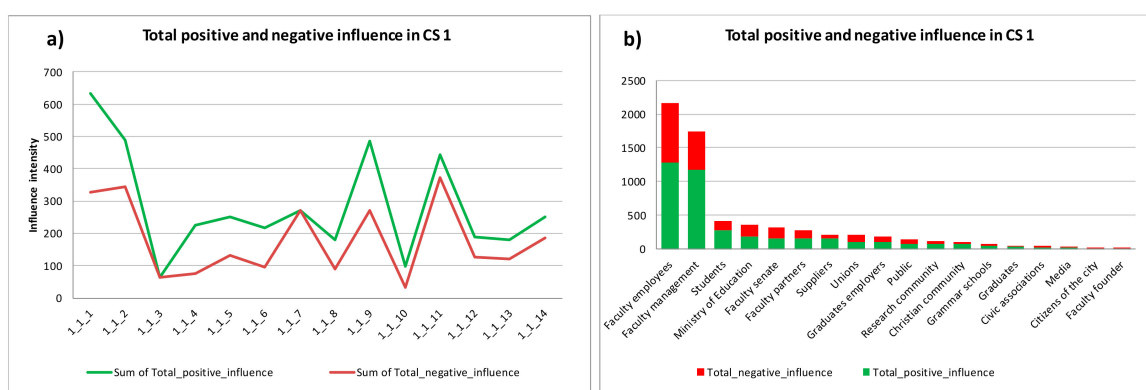
Figure 6. Intensity of identified influences in core subject 1.

In order to better understand the factors affecting the intensity of influences, the results could be stratified from at least two perspectives. The first was the triple bottom line concept of sustainable development—i.e., an evaluation of the influences from a social, economic, and environmental aspects. The results shown in Figure 7 point to the internal components of individual influences from these three aspects. Such a relatively deep stratification proved to be effective in the next phase of the project solution—Phase 5: performance management—as the proposal of measures could have been directly based on identified gaps in performance (i.e., a weak intensity of influences in some of the three aspects). Although this is a graphic interpretation of performance of only one core subject, similar results were obtained with the other six core subjects. This shows that the social aspect is the most important aspect of social responsibility and the environmental aspect is the least important one. This is a rather interesting suggestion because earlier studies showed that under “sustainability” or “social responsibility” most academics imagine the environmental aspect [48,49]. Our results show that there is a significant gap between the perceived and the real importance of this aspect.

The second perspective was an evaluation of influences according to their nature, i.e., according to whether the influence can have a positive or negative effect. It should be mentioned that several influences had positive and negative effects at the same time. Figure 8 shows an example of the evaluation of influences according to their nature, where the left part uses a stratification of results according to variable A (influence ID) and variable G (size of influence) and the right part uses a stratification according to variable D (stakeholder) and variable G (size of influence).



**Figure 7.** Intensity of the identified influences in the core subject (CS) 1—stratification according to aspect.



**Figure 8.** Total positive and negative influence in core subject (CS) 1—stratification according to “A” influence ID (a) and according to “D” stakeholder (b).

Interpretation of these results is relatively simple. As can be seen on the left part of Figure 8, the size of the negative influences is lower than the size of the positive ones, whereas the ratio between them is relatively stable. Therefore, it can be assumed that all 14 influences in the core subject 1 have relatively the same ratio of risk to expected benefits. It can also be seen that the resulting effect of some influences is rather low and currently contributes only a little to social responsibility. The right part allows the identification of the size of positive and negative influences according to individual stakeholders. It can also be established in this case that the emphasis of current faculty activities in the core subject 1 (organisational governance) is, to a large extent, focused on internal stakeholders. Our results show that there are more positive than negative influences in the other core subjects, as well. Students and, to a certain extent, teachers, belong to the most affected stakeholders. In many cases, the learning process clearly influences individual opinions about sustainability or social responsibility. These findings support earlier studies which suggested the necessity of introducing sustainability into curriculum [65].

The presented analytical outputs serve as an illustration. Other core subjects were also analysed on the same principle. The proposed data structure enables the creation of virtually any combination of variables, which will bring valuable analytical information after processing.

### 3.4.3. Summary of the Main Findings

One-hundred fifty-six (156) influences of the faculty on its stakeholders were identified through the analysis. Each influence was quantified, which allowed an assessment of its current level, as well as selecting those on which the faculty can focus its attention, with the aim to improve its socially

responsible behaviour. The project team, therefore, created an overview of the sizes of all positive and negative influences, which is graphically expressed in Figure 9.

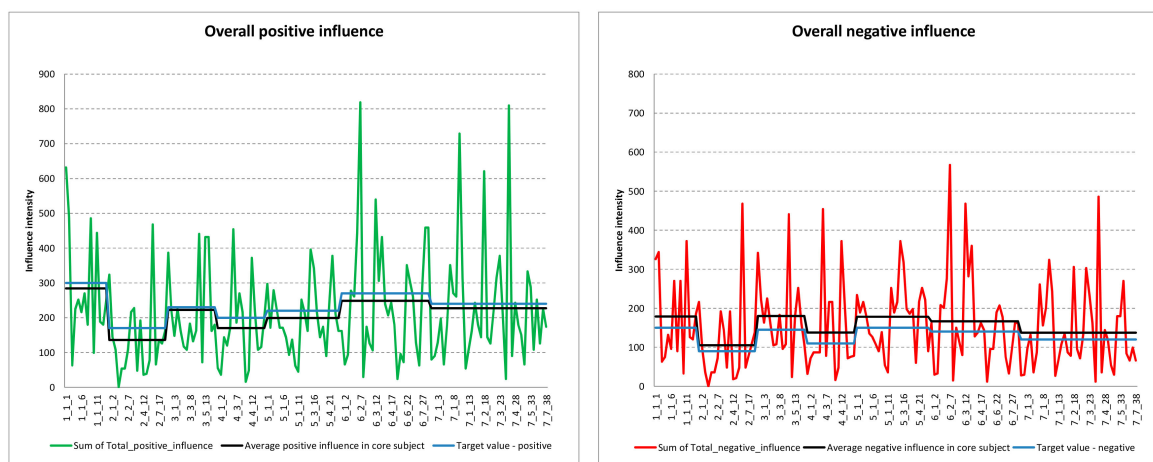


Figure 9. Overall positive and negative influences of the faculty.

Figure 9 shows a relatively wide range of sizes of influences, both in their positive and negative effects. This is nothing unnatural, as some influences can only have a slight indirect effect on more remote stakeholders [66]. As can be seen in Figure 9, the mean value of influences in each core subject varied. In order to improve the level of social responsibility of the faculty, the project team determined target mean values they would like to achieve in each core subject. The aim was to increase the effect of the positive and reduce the effect of the negative influences.

As it will not be efficient or economical to focus attention on measures related to all 156 identified influences, team members decided, in line with the Pareto principle [67], which influences should be focused on in the implementation of improvements. This was the final activity in this analytical phase, which was done by way of exclusion. A list of preliminary suitable influences, which the faculty can affect—either to increase their positive effect or reduce their negative effect—was gradually created. This list contained 30 influences, which formed the main input information for the fifth phase—performance management.

### 3.5. Phase 5—Performance Management

The aim of the last phase was to take suitable measures for the improvement of the level of the faculty's social responsibility. However, as it turned out during the initial discussion, it was rather problematic to assess the priority for solving influences [68], which would form the basis for the time schedule of activities for the improvement of social responsibility. In order to eliminate this problem, it was decided that each change required for the modification of the influence will be assessed from two perspectives.

The first was the expected impact of the change, which was estimated on the grounds of change modelling in the data file. The stratification of influence provided important information about what the change in the given influence should relate to. Each influence consisted of three aspects—social, economic, and environmental. If it was required to reduce the effect of the influence (because it was negative), the team determined in which of those three aspects it was high and proposed measures for its reduction. Conversely, if it was required to increase the effect of the influence (because it was positive), the team directed their proposals to the lowest aspect. Information from a decomposition of the influences, similarly to that shown in Figure 6, was used for this assessment.

The second was the expected effort of change. Effort was evaluated on the grounds of the estimated number of direct and indirect man-hours necessary for the implementation and monitoring of change in the respective influence.

Afterwards, both perspectives were transformed to the scale of 0–100. The resulting distribution was divided into four quadrants, which helped in the decision about the order of implementation of measures in individual influences (see Figure 10).

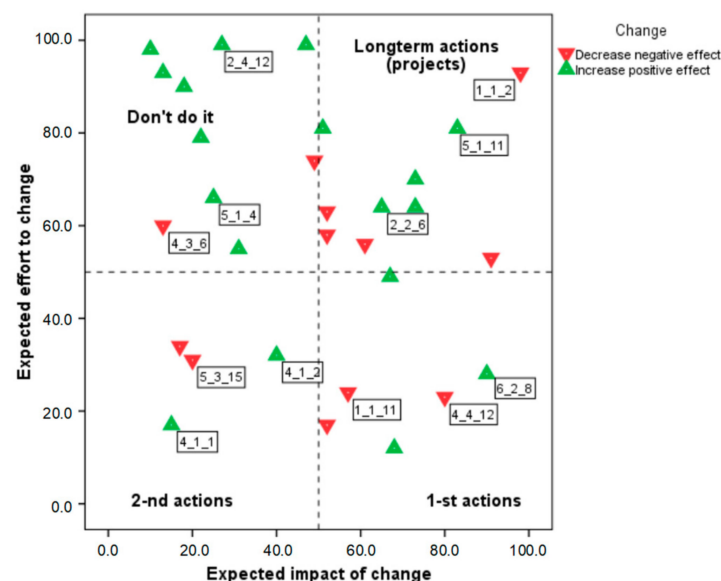


Figure 10. Effort/impact matrix.

Changes of the influences that will bring a relatively high effect and the implementation of which is relatively simple (low effort) are located in quadrant “first actions”. This quadrant includes influences such as 1\_1\_11: a formal mechanism for decision evaluation, 6\_2\_8: a process of injury risk estimate or 4\_4\_12: water and waste management. Thus, it should be possible to implement influences in this quadrant virtually immediately. Changes with a smaller benefit, but still relatively simple, should be implemented next—these are in quadrant “second actions”. Long-term projects, requiring relatively high effort, but also bringing the required effect are located in quadrant “Long-term actions (projects)”. It is not very rational to change influences in the quadrant “Don’t do it” as efforts are high and the effect is relatively small. It is necessary to mention that quadrant analysis has its limits and interpretation risks. If it is not interpreted graphically, but only using the four categories, information regarding the position of particular elements in the diagram may be “lost.” This danger may be avoided by dividing the diagram not into four ( $2 \times 2$ ), but into nine ( $3 \times 3$ ), or more, parts. It may also be useful to set an ideal point (in the lower-right: minimum effort and maximum effect) and calculate the distance of particular elements from this point.

The implementation of improvements in our case concerned a total of 20 influences. Improvements had a diverse nature and it is not possible to describe them in detail in this study due to their extent, but we can mention several relatively frequent changes of the faculty management system:

- (1) modifications of management documentation;
- (2) collection and evaluation of information;
- (3) creation of a communication strategy of the faculty; and
- (4) created partnerships with external subjects in support of involvement in the community.

This set of solutions arose from the results of the analyses performed at the faculty. It is, of course, possible that if another university implements the ISO 26000 standard, its measures will be different. The results of the solution and changes to the documentation caused discussion among the solution team of whether the changes should not also affect the content of education. In some cases, when the performance in a given field was demonstrably low, changes to the syllabus of selected courses



were recommended. Unfortunately, the research team encountered a legislative restriction, which governed conditions of content changes in subjects. The bureaucratic burden of this process meant that the changes have only partially been transferred into the content of some subjects; the form of education was modified more (i.e., excursions to organisations processing waste and excursions to re-education centres were implemented, while experts began to be invited to make sure lectures will be maintained).

#### 4. Discussion and Conclusions

The orientation of various institutions towards sustainable development can be based on internal motivation and their own principles, which are translated into the system of management. However, it can also be based on an existing model or guideline, such as the ISO 26000 standard. This study was aimed at presenting an example of implementation of the ISO 26000 standard into the management of a university. As far as the authors of this study are aware, this is one of the first cases when this standard was implemented in a university environment.

Sustainability has been one of the key social issues for several decades. The environment we live in is essential for all of us. Sustainable development is, therefore, an issue to be addressed by all subjects, including universities. There exists, however, not only research in favour of sustainability at universities [69,70], but also critique of misconceptions of sustainability approaches [71]. The ISO 26000 standard could become a way out of such an ad hoc situation for various subjects, because it offers well-structured and relatively comprehensive instructions on how to systematically approach social responsibility and, thus, contribute to sustainable development. Universities play a key role in sustainable development, because they can influence opinions of individuals over a long period of time [72], in different cultures [73] and, thus, affect future behaviour of individuals in the environment we inhabit [74]. If, however, a university strives for a systematic approach, it should not be simply satisfied with a well-defined structure, but should also implement logical analysis and synthesis using various tools.

The number of system tools used to deal with the issue of quality at universities can be enriched through this standard with the perspective of social responsibility and sustainable development. The role of universities in society is indisputable [75] and, therefore, a systematic framework that helps to manage relationships with their external and internal stakeholders can only benefit them. The fact is that several studies showed in the past that universities are part of a wider social system and, therefore, their orientation to social responsibility and sustainable development should be significant [23]. The benefits of this study can be perceived from two aspects.

The first aspect is showing that principles supporting sustainable development can be implemented also in a specific institution, which the university certainly is compared with common industrial enterprises. There are many studies [49,65,76,77] about the specifics of university education, but this paper aims at “pacifying” potential opponents of standardised approaches.

The second aspect is the methodological aspect of this study. As implementation of the ISO 26000 standard was part of the project, experts in project management also participated in the solution. Acceleration of project activities was, therefore, very significant. As can be seen from the presented methodology, information was processed and used gradually and allowed the team members to make decisions based on facts. This methodology can be generalised because it is not sector-specific for the environment of university education. All five phases can be performed virtually in any organisation. This can be considered a significant benefit of this study, as the ISO 26000 standard has, similarly to other standards, one disadvantage: it declares only what should be done, but not the method of how to do it.

Our methodology also offers some theoretical suggestions. The presented case study can be seen as bringing just the type of evidence and recommendations for actions in the field of sustainability and CSR that are often lacking [78]. Many studies focus on different levels [17] or forms [7] of CSR and our approach could be used as a tool to supplement their drawbacks—be it the necessity of

measuring CSR [24], systematic approach to this topic [50], or the way of engaging individuals with CSR issues at universities [48]. However, effective implementation of our approach requires that certain conditions, such as providing enough information about CSR to university teachers, should be met first. Salzman [78] also suggests the need for this minimal level of knowledge and he suggests using coaching tools and valuation methodologies. Muijen [23] even hints to a more radical need for a cultural change strategy. The five phases we suggested can take this requirement into account.

Our approach offers independent findings, as well. Terminology can become a significant problem and a potential barrier when implementing standardised systems like the ISO 26000. At the same time, it became clear that implementation of sustainability or CSR principles at universities must be the result of engagement of as many members of academia as possible. For instance, Disterheft [48] showed that participative approach is the most often taken approach when implementing environmental principles at universities. Based on our experience, we can say that the same applies also to the ISO 26000. Environmental awareness at universities is rather high [48,49], but, based on our findings, it seems very overestimated in relation to the actual impact of the environmental aspect of CSR. On the other hand, our results show that the social and economic aspect of university CSR is quite important, but academics obviously tend to underestimate it. There are only few studies that point out this fact, but indications can be found in articles focused on the role of universities in the formation of their students [23,65]. On the other hand, this approach can be seen as too technocratic with too much quantitative stress. Several attempts in the past to implement standards in the university environment identified these kinds of barriers [29]. Apart from the abovementioned direct implications, this study also highlights other interesting areas of future research: integration or comparison of approaches focused on sustainability or CSR at universities; discussion about “measuring” CSR performance; ways to bring together the institutional, organisational, and individual levels of sustainability; and others.

The authors of this study are aware of the potential risks associated with the process of solution and the interpretation of the results. A certain degree of motivation in the organisation needs to be maintained in order to deal with the issue of social responsibility and sustainable development. Maintaining motivation is often a problem causing the failure of projects [79] and it is, therefore, necessary to point out this risk, as well. Another risk lies in the need for uniformity of terminology. Terminological misinterpretations can significantly reduce the level of understanding within the project team and can constitute a barrier to a smooth solution. The authors of this paper attempted to provide adequately and with sufficient explanation substantial information and important terms and to characterise them. The third risk is bias. This can be defined as the difference between actual and measured values. This bias was naturally present in those phases of the solution where quantitative data was used. Evaluation of the intensity of principles and influences was based on a quantitative-linguistic scale, which belongs to the most widely used methods in the social sciences [30]. As it concerns psychometrics, the estimated values might not reflect the reality absolutely exactly. The resulting effects were therefore interpreted with regard to this fact, which is also a recommendation for possible followers from other universities.

There are also contextual problems that hinder the implementation of the ISO 26000 at universities. Universities have been steadily avoiding management-oriented approaches [80,81], which can become a principal barrier to the implementation of sustainability and social responsibility ideas contained in the standard. Social responsibility is a very broad field and the ISO 26000 only focuses on its essential elements. These elements, however, together form a system that can be further improved. The ISO 26000 standard can become a guidance for those universities that have not yet paid a great deal of attention to social responsibility and sustainability. The standard can be also used for systematisation of activities the universities are already doing. It is well possible that the initial social responsibility system created according to ISO 26000 will not be all-encompassing and will be later improved.

Despite the aforementioned risks, this study offers relatively fresh and practical information which has not only an applicative, but also an argumentative nature. Evaluation of the impacts of any organisation has a long-term nature. The effect is often observed only later. The contribution of

an organisation to sustainable development can be definitely improved by means of the ISO 26000 standard. Since it is a standard, its purpose is to create a certain basic level system. Nobody says the system cannot be later improved. On the contrary, further improvement is implicitly supposed. However, experience from management quality [82] shows that it is better for an organisation with a low level of knowledge of a certain issue (e.g., quality, social responsibility) to improve gradually—progressing from simpler approaches to more specific and more advanced ones. Lee [22] also points out that the latest trends in the field of CSR show a shift from discussion about CSR to organisational analysis. The authors believe that this study can be one of the examples promoting not only awareness in the field of sustainable development, but also practical and social activities of universities.

**Author Contributions:** P.M. conceived and designed the research. P.B. and P.M. performed the data processes. P.B. wrote the paper. A.C. revised the research design and updated the paper. P.M. read the whole paper and edited it. All authors read and approved the final manuscript.

**Acknowledgments:** This research was supported by grant VEGA 0663/18 “Requirements non-linearity and its integration into quality management process”.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A. Workshop Characteristics

- Workshop 1: Introduction to the project and social responsibility
  - Objectives: Engagement of employees; Introduction to the project and the project team members; Support the motivation of the project team members.
  - Content: Main objectives, activities and time schedule of the project; ISO 26000 standard as the main work tool; Where are we and where can we get to?; The role of universities in the field of social responsibility.
  - Best practice: Techniques for the development of group thinking were proven successful; It is necessary to maintain interactivity (questions, examples, discussion support); It is suitable to explain the progression: Inputs-transformation-outputs-results-impacts; It is good to mention examples from practice; the external consultants can help with the creation of analogies that support understanding of social responsibility.
- Workshop 2: Social responsibility principles and their application
  - Objectives: To understand the seven main principles of social responsibility and their link to activities and decisions of an organisation.
  - Content: The seven principles and their application in an organisation: Accountability; Transparency; Ethical behaviour; Respect for stakeholder interests; Respect for the rule of law; Respect for international norms of behaviour; Respect for human rights.
  - Best practice: It is suitable to clarify terminology at the beginning in order to eliminate risk of misinterpretation; It is also suitable to explain application of principles using examples of taking a particular decision; To explain the method for integration of principles into the system of organisation management (documentation, system of employee development, building an image etc.).
- Workshop 3: University and relationship with stakeholders
  - Objectives: To define and understand the role of the university in relationship with its stakeholders.
  - Content: University mission; Who are the university’s stakeholders?; Methods for identification of the stakeholders; Direct and indirect general impacts of the university on the stakeholders; Intensity of the impacts and options of their management. (“impact” may

- be understood as the effect of an activity of a stakeholder, e.g., a university, on another stakeholder, e.g., inhabitants of a town. Engaging students in river cleaning is a direct impact, while presenting mutual activities with the town on the faculty's website is an indirect impact.)
- Best practice: Suitable are questions of the type “what are we doing and who can be directly or indirectly affected by it”?; Utilisation of If-Then technique also proved to be successful; Discussion about the system of education must be managed in order to prevent it from going too far from the workshop objective.
  - Workshop 4: Methods for implementation of management systems and sharing experience with social responsibility
    - To understand the purpose and methods for implementation of management systems at universities; To communicate experience of internal and external team members in the field of social responsibility.
    - Content: System and its characteristics; Management system of the organisation and its elements; Modification or development of the system with regard to ISO 26000 requirements; Own or communicated experience with social responsibility.
    - Best practice: It is suitable to use parallels with the system already implemented at the university; Examples based on a description of the method of design of a particular process of the university that significantly supported a quicker understanding.

## References

1. Randy Evans, W.; Pane Haden, S.S.; Clayton, R.W.; Novicevic, M.M. History-of-management-thought about social responsibility. *J. Manag. Hist.* **2013**, *19*, 8–32. [[CrossRef](#)]
2. Patenaude, G. Climate change diffusion: While the world tips, business schools lag. *Glob. Environ. Chang.* **2011**, *21*, 259–271. [[CrossRef](#)]
3. McNally, S. Global population explosion: Economic and health meltdown. *J. R. Soc. Med.* **2013**, *106*, 38–39. [[CrossRef](#)] [[PubMed](#)]
4. Weber, H. Reconstituting the ‘Third World’? Poverty reduction and territoriality in the global politics of development. *Third World Q.* **2004**, *25*, 187–206. [[CrossRef](#)]
5. Ebner, D.; Baumgartner, R.J. The relationship between Sustainable Development and Corporate Social Responsibility. In Proceedings of the Corporate Responsibility Research Conference, Dublin, Ireland, 4–5 September 2006.
6. Norman, W.; MacDonald, C. Getting to the bottom of the “Triple Bottom Line”. *Bus. Ethics Q.* **2004**, *14*, 243–262. [[CrossRef](#)]
7. Dyllick, T.; Hockerts, K. Beyond the business case for corporate sustainability. *Bus. Strategy Environ.* **2002**, *11*, 130–141. [[CrossRef](#)]
8. Čarnogurský, K.; Černá, L. The benefits of corporate social responsibility to society and social services. *Disput. Sci. Univ. Cathol. Ružomberok* **2012**, *12*, 53–61.
9. ISO. *ISO 26000: Guidance on Social Responsibility*; ISO: Geneva, Switzerland, 2011.
10. Öykü Iyigün, N. Corporate social responsibility and ethics in management in light of sustainable development. In *Business Law and Ethics: Concepts, Methodologies, Tools, and Applications*; Information Resources Management Association: Hershey, PA, USA, 2015.
11. Bussard, A.; Marček, E.; Markuš, M.; Bunčák, M. *Spoločensky zodpovedné podnikanie*; Nadácia Integra: Bratislava, Slovakia, 2005.
12. Carroll, A.B.; Shabana, K.M. The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice. *Int. J. Manag. Rev.* **2010**, *12*, 85–105. [[CrossRef](#)]
13. Zadek, S. The Path to Corporate Responsibility. *Harv. Bus. Rev.* **2004**, *10*, 159–172.
14. Costanza, R.; D’Arge, R.; De Groot, R.; Farber, S. The value of the world’s ecosystem services and natural capital. *Nature* **1997**, *6630*, 253–260. [[CrossRef](#)]
15. Jackson, T. *Prosperity without Growth: Economics for a Finite Planet*; Earthscan: London, UK, 2009.

16. Lantos, G.P. The boundaries of strategic corporate social responsibility. *J. Consum. Mark.* **2001**, *18*, 595–632. [CrossRef]
17. Aguinis, H.; Glavas, A. What We Know and Don't Know About Corporate Social Responsibility. *J. Manag.* **2012**, *38*, 932–968. [CrossRef]
18. Scherer, A.G.; Palazzo, G. The New Political Role of Business in a Globalized World—A Review of a New Perspective on CSR and Its Implications for the Firm, Governance, and Democracy. In *Nachhaltigkeit*; Gabler Verlag: Wiesbaden, Germany, 2012; pp. 15–50.
19. Laplume, A.O.; Sonpar, K.; Litz, R.A. Stakeholder theory: Reviewing a theory that moves us. *J. Manag.* **2008**, *34*, 1152–1189. [CrossRef]
20. Jamali, D.; Mirshak, R. Corporate Social Responsibility (CSR): Theory and Practice in a Developing Country Context. *J. Bus. Ethics* **2006**, *72*, 243–262. [CrossRef]
21. Pelantova, V.; Slaichova, E. The contribution to the integration of management system oriented to the sustainable and TQM. *AMF Econ.* **2017**, *19*, 951–965.
22. Lee, M.-D.P. A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. *Int. J. Manag. Rev.* **2008**, *10*, 53–73. [CrossRef]
23. Muijenheidi, H.S.C.A. Corporate social responsibility begins at University. *J. Bus. Ethics* **2004**, *53*, 235–246. [CrossRef]
24. McWilliams, A.; Siegel, D.S.; Wright, P.M. Corporate Social Responsibility: Strategic Implications. *J. Manag. Stud.* **2006**, *43*, 1–18. [CrossRef]
25. Valmohammadi, C. Impact of corporate social responsibility practices on organisational performance: An ISO 26000 perspective. *Soc. Responsab. J.* **2014**, *10*, 455–479. [CrossRef]
26. Hahn, R. ISO 26000 and the standardisation of strategic management processes for sustainability and corporate social responsibility. *Bus. Strategy Environ.* **2013**, *22*, 442–445. [CrossRef]
27. Hemphill, T. The ISO 26000 guidance on social responsibility international standard: What are the business governance implications? *Corp. Gov.* **2013**, *13*, 305–317. [CrossRef]
28. Schwartz, B.; Tilling, K. 'ISO-lating' corporate social responsibility in the organisational context: A dissenting interpretation of ISO 26000. *Corp. Soc. Responsab. Environ. Manag.* **2009**, *16*, 289–299. [CrossRef]
29. Hrnčiar, M.; Madžik, P. A 3D view of issues of quality in higher education. *Total Qual. Manag. Bus.* **2015**, *28*, 633–662. [CrossRef]
30. Allen, I.E.; Seaman, C.A. Likert scales and data analyses. *Qual. Prog.* **2007**, *40*, 64–65.
31. Formánková, S.; Stevik, K.; Kučerová, R. *Responsibility and Sustainability of Higher Education Institutions*; Pearson Education Ltd.: Essex, UK, 2017.
32. Stensaker, B.; Langfeldt, L.; Harvey, L.; Huisman, J.; Westerheijden, D. An in-depth study on the impact of external quality assurance. *Assess. Eval. High. Educ.* **2011**, *36*, 465–478. [CrossRef]
33. Hrnčiar, M.; Madžik, P. Improving the Quality of Higher Education in Central Europe: Approach Based on GAP Analysis. *High. Educ. Stud.* **2013**, *3*, 75–88. [CrossRef]
34. ENQA. *Standards and Guidelines for Quality Assurance in the European Higher Education*; EURASHE: Brussels, Belgium, 2015; Available online: [http://www.enqa.eu/wp-content/uploads/2015/11/ESG\\_2015.pdf](http://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf) (accessed on 9 April 2018).
35. Cardoso, S.; Tavares, O.; Sin, C. The quality of teaching staff: Higher education institutions' compliance with the European Standards and Guidelines for Quality Assurance—The case of Portugal. *Educ. Assess. Eval. Account.* **2015**, *27*, 205–222. [CrossRef]
36. Fonseca, L.M. From quality gurus and TQM to ISO 9001:2015: A review of several quality paths. *Int. J. Qual. Res.* **2015**, *9*, 167–180.
37. ISO. *ISO/IWA 2: Quality Management Systems—Guidelines for the Application of ISO 9001:2000 in Education*; ISO: Brussels, Belgium, 2007.
38. Hrnčiar, M. *Kvalita Služieb—Trojlá Výzva*; Žilinská Univerzita: Žilina, Slovakia, 2014.
39. Spellerberg, I.F.; Buchan, G.D.; Englefield, R. Need a university to adopt a formal environmental management system? Progress without an EMS at a small university. *Int. J. Sustain. High. Educ.* **2004**, *5*, 125–132. [CrossRef]
40. Čepelová, A.; Bernatík, W. The process management position in a transformation of a traditional organization into a knowledge-based organization. In *Vision 2020: Innovation, Development Sustainability, and Economic Growth*. In Proceedings of the 21st International Business Information Management Association Conference, IBIMA 2013, Vienna, Austria, 27–28 June 2013.



41. Leiber, T.; Stensaker, B.; Harvey, L. Impact evaluation of quality assurance in higher education: Methodology and causal designs. *Qual. High. Educ.* **2015**, *21*, 288–311. [[CrossRef](#)]
42. Daňková, A.; Droppa, M. The Impact of National Culture on Working Style of Slovak Managers. *Procedia Econ. Financ.* **2015**, *34*, 164–171. [[CrossRef](#)]
43. Bejan, S.A.; Janatuinen, T.; Jurvelin, J.; Klöpping, S.; Malinen, H.; Minke, B.; Vacareanu, R. Quality assurance and its impact from higher education institutions' perspectives: Methodological approaches, experiences and expectations. *Qual. High. Educ.* **2015**, *21*, 343–371. [[CrossRef](#)]
44. Fumasoli, T. The Roles of the University in Society. *High. Educ. Q.* **2016**, *70*, 106–107. [[CrossRef](#)]
45. Walker, M. Critical Capability Pedagogies and University Education. *Educ. Philos. Theory* **2010**, *42*, 898–917. [[CrossRef](#)]
46. Vasilescu, R.; Barna, C.; Epure, M.; Baicu, C. Developing university social responsibility: A model for the challenges of the new civil society. *Procedia Soc. Behav. Sci.* **2010**, *2*, 4177–4182. [[CrossRef](#)]
47. Alghamdi, A.; den Heijer, A.; de Jonge, H. Assessment tools' indicators for sustainability in universities: An analytical overview. *Int. J. Sustain. High. Educ.* **2017**, *18*, 84–115. [[CrossRef](#)]
48. Disterheft, A.; Ferreira da Silva Caeiro, S.S.; Ramos, M.R.; de Miranda Azeiteiro, U.M. Environmental Management Systems (EMS) implementation processes and practices in European higher education institutions—Top-down versus participatory approaches. *J. Clean. Prod.* **2012**, *31*, 80–90. [[CrossRef](#)]
49. Wright, T.S.A.; Wilton, H. Facilities management directors' conceptualizations of sustainability in higher education. *J. Clean. Prod.* **2012**, *31*, 118–125. [[CrossRef](#)]
50. Velazquez, L.; Munguia, N.; Platt, A.; Taddei, J. Sustainable University: What can be the matter? *J. Clean. Prod.* **2006**, *14*, 810–819. [[CrossRef](#)]
51. Krizek, K.J.; Newport, D.; White, J.; Townsend, A.R. Higher education's sustainability imperative: How to practically respond? *Int. J. Sustain. High. Educ.* **2012**, *13*, 19–33. [[CrossRef](#)]
52. Manlig, F.; Koblasa, F.; Šlaichová, E.; Pelantová, V.; Vavruka, J. Education company—An experience from the implementation of problem based learning. *Appl. Mech. Mater.* **2014**, *693*, 477–482. [[CrossRef](#)]
53. Rydvalová, P.; Žižka, M. Proposal of a system to evaluate projects from the point of view of their impact on the revitalisation of economically depressed areas. *E M Ekon. Manag.* **2007**, *10*, 33–46.
54. Lysá, L. Statistics- support tool in the decision-making process. *Forum Stat. Slovaca* **2015**, *11*, 60–66.
55. Prajogo, D.I.; McDermott, P. Examining competitive priorities and competitive advantage in service organisations using Importance-Performance Analysis matrix. *Manag. Serv. Qual.* **2011**, *21*, 465–483. [[CrossRef](#)]
56. Reed, M.S.; Graves, A.; Dandy, N.; Posthumus, H.; Hubacek, K.; Morris, J.; Prell, C.; Quinn, C.H.; Stringer, L.C. Who's in and why? A typology of stakeholder analysis methods for natural resource management. *J. Environ. Manag.* **2009**, *90*, 1933–1949. [[CrossRef](#)] [[PubMed](#)]
57. Brugha, R. Stakeholder analysis: A review. *Health Policy Plan.* **2000**, *15*, 239–246. [[CrossRef](#)] [[PubMed](#)]
58. Ho, W.; Xu, X.; Dey, P.K. Multi-criteria decision making approaches for supplier evaluation and selection: A literature review. *Eur. J. Oper. Res.* **2010**, *202*, 16–24. [[CrossRef](#)]
59. Benneworth, P.; Jongbloed, B.W. Who matters to universities? A stakeholder perspective on humanities, arts and social sciences valorisation. *High. Educ.* **2009**, *59*, 567–588. [[CrossRef](#)]
60. Miller, K.; McAdam, M.; McAdam, R. The changing university business model: A stakeholder perspective. *R D Manag.* **2014**, *44*, 265–287. [[CrossRef](#)]
61. Wibeck, V.; Johansson, M.; Larsson, A.; Öberg, G. Communicative aspects of environmental management by objectives: Examples from the Swedish context. *Environ. Manag.* **2006**, *37*, 461–469. [[CrossRef](#)] [[PubMed](#)]
62. Madzik, P.; Chocholáková, A. Structured transfer of customer's requirements into product quality attributes—A university case study. *Qual. Access Success* **2016**, *17*, 38–45.
63. Kondoh, S.; Masui, K.; Hattori, M.; Mishima, N.; Matsumoto, M. Total performance analysis of the product life cycle considering the deterioration and obsolescence of product value. *Int. J. Prod. Dev.* **2008**, *6*, 334–352. [[CrossRef](#)]
64. Lozano, R. A tool for a Graphical Assessment of Sustainability in Universities (GASU). *J. Clean. Prod.* **2006**, *14*, 963–972. [[CrossRef](#)]
65. Lidgren, A.; Rodhe, H.; Huisingh, D. A systemic approach to incorporate sustainability into university courses and curricula. *J. Clean. Prod.* **2006**, *14*, 797–809. [[CrossRef](#)]

66. Hrnčiar, M.; Madzík, P. A change in the conception of the factors, which form customer expectations. In Proceedings of the IDIMT 2016 Information Technology, Society and Economy Strategic Cross-Influences -24th Interdisciplinary Information Management Talks, Vysoka Skola Ekonomicka, Podebrady, Czech Republic, 7–9 September 2016.
67. Madzík, P.; Čarnogurský, K.; Diačiková, A. Consumer feedback—How relevant is it for quality improvement? In Proceedings of the International Scientific Conference on Marketing Identity-Digital Life, University of ss. Cyril and Methodius, Smolenice, Slovakia, 10–11 November 2015.
68. Madzík, P. Increasing the accuracy of the Kano model—A case study. *Total Qual. Manag. Bus. Excell.* **2018**, *29*, 387–409. [[CrossRef](#)]
69. Barth, M.; Godemann, J.; Rieckmann, M.; Stoltenberg, U. Developing key competencies for sustainable development in higher education. *Int. J. Sustain. High. Educ.* **2007**, *8*, 416–430. [[CrossRef](#)]
70. Wright, T. Definitions and frameworks for environmental sustainability in higher education. *High. Educ. Policy* **2002**, *15*, 105–120. [[CrossRef](#)]
71. Leal Filho, W. Dealing with misconceptions on the concept of sustainability. *Int. J. Sustain. High. Educ.* **2000**, *1*, 9–19. [[CrossRef](#)]
72. Sipos, Y.; Battisti, B.; Grimm, K. Achieving transformative sustainability learning: Engaging head, hands and heart. *Int. J. Sustain. High. Educ.* **2008**, *9*, 68–86. [[CrossRef](#)]
73. Stephens, J.C.; Hernandez, M.E.; Román, M.; Graham, A.C.; Scholz, R.W. Higher education as a change agent for sustainability in different cultures and contexts. *Int. J. Sustain. High. Educ.* **2008**, *9*, 317–338. [[CrossRef](#)]
74. Brundiers, K.; Wiek, A.; Redman, C.L. Real-world learning opportunities in sustainability: From classroom into the real world. *Int. J. Sustain. High. Educ.* **2010**, *11*, 308–324. [[CrossRef](#)]
75. Scott, J.C. The mission of the university: Medieval to postmodern transformations. *J. High. Educ.* **2006**, *77*, 1–39. [[CrossRef](#)]
76. Ferlie, E.; Musselin, C.; Andresani, G. The steering of higher education systems: A public management perspective. *High. Educ.* **2008**, *56*, 325–348. [[CrossRef](#)]
77. Obdržálek, Z.; Polák, J. *Aktuálne Otázky Školského Manažmentu*; UKF: Nitra, Slovakia, 2007.
78. Salzmann, O.; Ionescu-somers, A.; Steger, U. The Business Case for Corporate Sustainability. *Eur. Manag. J.* **2005**, *23*, 27–36. [[CrossRef](#)]
79. Korenova, D.; Cepelova, A. Factors influencing process management and the effective operation of public administration organisations. *Actual. Probl. Econ.* **2016**, *177*, 80–88.
80. Gardiner, L.; Lacy, P. Lead, respond, partner or ignore: The role of business schools on corporate responsibility. Corporate Governance. *Int. J. Bus. Soc.* **2005**, *5*, 174–185.
81. Peck, C.; Reitzug, U.C. How Existing Business Management Concepts Become School Leadership Fashions. *Educ. Adm. Q.* **2012**, *48*, 347–381. [[CrossRef](#)]
82. Poksinska, B. When does ISO 9000 lead to improvements? *Int. J. Prod. Qual. Manag.* **2010**, *5*, 124–135. [[CrossRef](#)]



© 2018 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).