Summary of the doctoral dissertation

by Monika Pietkiewicz

Development of a methodology for measuring and reporting the efficiency of sustainable development initiatives to stakeholders

The thesis encompasses issues related to the management and measurement of activities undertaken by companies in accordance with the principles of sustainable development (SD). The research topic has been formulated in response to the growing regulatory pressure related to SD, as well as the pressure from stakeholders.

The main objective of the research project was to develop a holistic model for measuring and reporting the efficiency of SD initiatives taking into account net financial, social and environmental benefits. Three research questions were formulated for the purposes of the project: 1) what are the organisational challenges of holistic measurement and reporting of SD? 2) what methods of measuring the financial, environmental and social efficiency of SD initiatives are proposed in both theory and practice, and 3) what are the expectations of various stakeholder groups with regard to SD measurement and reporting.

The objective of the study was reflected in the research hypotheses developed, which were tested through quantitative and qualitative research, as well as experimentally, through the assessment of the implementation potential and application of the model in the business practice of a specific company. The dissertation is application-oriented and focuses on the practical aspects of implementing the solution in the Apator Group, which is subjected to reporting obligations in the area of SD.

The set of research hypotheses is as follows:

- H1 it is possible to identify and quantify the expenditures and results associated with SD initiatives
- H2 it is possible to determine the efficiency of SD initiatives, taking into account the net financial, social and environmental benefits
- H3 measuring and reporting the efficiency of SD initiatives improves the usefulness of information for stakeholders
- H4 the use of business visualisation standards has a positive impact on the perceived usefulness of disclosures for stakeholders

The structure of the dissertation has been subordinated to the execution of the main objective, the formulation of answers to the research questions and the verification of the proposed research hypotheses. The dissertation consists of 5 chapters, preceded by an introduction and concluded with a

summary. The first 3 chapters are devoted to theoretical analysis, while the last 2 are methodological and empirical in nature.

Chapter 1 presents considerations on the conceptualisation of the idea of SD, discusses the issues of SD management and accounting, and outlines methods of measuring the efficiency of SD activities. Chapter 2 presents the main theories driving SD reporting, regulatory frameworks, and SD reporting standards. It also identifies the determinants and barriers to reporting. Chapter 3 focuses on defining the quality criteria for SD reporting. The expectations of various stakeholder groups with regard to SD reporting were also presented.

The empirical part of the thesis, which begins in Chapter 4, focused on presenting the assumptions of a model for measuring the efficiency of SD initiatives in financial and economic terms, assessing its usefulness from the perspective of company stakeholders, and then on the experimental measurement of the efficiency of sample initiatives undertaken in the Apator Group.

Chapter 5 discusses the results of a post-implementation study in which key stakeholders were confronted with the methodology, the results of the efficiency assessment, and various ways of graphical presentation of selected initiatives. The conclusions drawn formed the basis for developing recommendations and good practices concerning the SD management and reporting process, including the measurement of initiative efficiency.

The research process made it possible to achieve the research objective, answer the research questions and test the hypotheses. The results obtained indicate that it is possible to link inputs and outputs in relation to specific SD initiatives and assess their efficiency in financial and economic terms. At the same time, methodological limitations were identified, related, among other things, to the identification and monetisation of certain types of costs and effects. The research results confirmed that the proposed method of measuring initiatives may be useful both from the perspective of external stakeholders and for management accounting purposes.