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Scoping phase comparison of development opportunities by making use of publicly available sustainability information

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Abstract

With sustainable business strategies and sustainability reporting now a norm, the public domain has in recent years been flooded with sustainable development information from a wide range of organizations. Although this information is generally retrospective in nature, an opportunity exists to make use of this information to compare the impact of different development opportunities prospectively, based on the performance of similar industries elsewhere. This paper therefore evaluates the potential of using publicly available sustainability information to enhance scoping phase decision-making by policymakers in order to prioritize projects that have the most potential for creating sustainable outcomes. The paper outlines a concept model for using sustainability information to compare development opportunities, followed by an analysis of five prominent international sustainability reporting frameworks at the hand of specific criteria to establish which framework would be most suitable to serve as basis for such a model.

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1. Introduction

Policymakers are often faced with the difficult decision of where to focus limited resources regarding the development of new industries in countries where such industries are lacking. Such decisions are further complicated by the demands of sustainable development which necessitate the assessment of development potential not only in terms of economic aspects, but also taking the social- and environmental aspects into account.

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It is therefore not surprising that feasibility studies are recognized to be an important part of the pre-investment phase of development projects [1]. Due to the considerable complexity of aspects to be taken into account and the substantial amount of time, effort and funding typically involved in feasibility studies, the feasibility study process has evolved to a point where it is generally an iterative, multiphase process. Feasibility studies generally consist of three phases, namely the conceptual or scoping phase, followed by the preliminary or prefeasibility phase and concluded by the final or definitive phase. The focus of the feasibility study narrows and the resources invested as well as the value created by the study increases with each consecutive phase [2].

The scoping phase is of particular relevance to the present investigation. Being the first stage in the feasibility assessment process, the scoping phase generally aims to “define the potential of a project, eliminate those options that are unlikely to become optimal, and determine if there is sufficient opportunity to justify the investment required for further studies” [3]. It is therefore desirable that the scoping phase be concluded quickly and without considerable resource investment, yet reaches an accurate and transparent conclusion as to which opportunities hold the most potential for sustainable growth. Benefit measurement modeling approaches, including comparative models, scoring approaches, traditional economic models and group decision techniques [4], are typically used to reach such conclusions. However, the use of such models are laborious, time consuming and expensive [5], often as a result of the data requirements of these models [4]. These methods can therefore not be readily used in the scoping phase and typically only form part of latter, more detailed feasibility studies.

Sustainable business strategies and sustainability reporting has become a norm in recent years [6] and, subsequently, the public domain has been flooded with sustainable development information from a wide range of organizations, from almost all industries. This has produced an opportunity to develop models that make use of this easily accessible information to assess the feasibility and potential impact of different development opportunities, based on the performance of similar industries elsewhere. This may be especially useful if a model can be developed that makes use of sustainability information as presented in sustainability reports, thereby greatly simplifying and speeding up the process of data collection. Although many different sustainability reporting frameworks and guidelines are used in the preparation of sustainability reports, some prominent international frameworks, such as the Global Reporting Initiative (GRI) G4 Reporting Framework, are very widely used. It is therefore sensible to develop a model that makes use of the information disclosed according to the guidelines provided by such prominent frameworks.

A model of this kind would typically be useful in the scoping phase of the feasibility assessment process, as the aim of such a model is the rapid evaluation of different development opportunities and the conclusions may therefore not necessarily exhibit a sufficiently high level of accuracy as required for detailed feasibility assessments.

This paper ultimately aims to evaluate the potential of using organizational sustainability information available in the public domain to enhance the efficiency of scoping phase decision-making by policymakers in order to rapidly prioritize projects that are most likely to produce better sustainability outcomes. This paper therefore starts by discussing a concept structure for a model that makes use of sustainability data typically reported in sustainability reports. Requirements for the framework on which such a model can be based are then outlined. Finally, five prominent international sustainability reporting frameworks are analysed in terms of the previously defined requirements in order to identify those most suitable to serve as basis for the development of the abovementioned model.

2. Concept model structure

Sustainable development has traditionally been defined in terms of the Triple Bottom Line (TBL), a term coined by Elkington in 1994, referring to the equal importance of economic-, environmental- and social value creation in an organization [7]. It is therefore not surprising that with the advent of sustainability reporting and the subsequent development of some of the most prominent sustainability reporting frameworks, the triple bottom line was used as foundation [8]. Some more recent frameworks, like the International Integrated Reporting Council’s (IIRC) Integrated Reporting (<IR>) Framework, is based on the concept that sustainable development progress can be measured in terms

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