

## Explaining Dimension and Components of Sustainability Reporting, with a Fuzzy Delphi Approach<sup>1</sup>

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Research Paper

### INTRODUCTION

The sustainability report shows attention to the planet and people, along with making a profit. Environmental and social crises in the world have drawn the attention of stakeholders to the sustainability report. The theories that provide a better view of the organization's relationship with society and the environment are legitimacy, stakeholders, and institutional. Considering the state economy, and the lack of an accountability institution in Iran, it seems that the stakeholder theory justifies the need for comparability, reliability, standard, transparent, and timely sustainability reporting. Several frameworks have been proposed for this need. Global standard frameworks such as the SDGS, UN, GRI, SASB, TCFD, and CDSB have been established.

The importance of this research is that on November 3, 2021, the International Reporting Standards Foundation established the International Sustainability Standards Board to respond to stakeholders' needs for quality reporting on climate and other environmental, governance, and social issues, as well as identifying risks. Brought opportunities related to sustainability with the help of capital market actors. International Financial Reporting Standards Foundation intends that organizations publish sustainability reports like financial reports. This international requirement and Iran's effort to join these organizations double the necessity of conducting research.

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Iran is facing many environmental, social, and governance problems. The issue becomes complicated when we consider that, even though environmental protection and attention to social justice have a special place in Iran's laws and regulations, it has performed poorly in terms of sustainability reporting. The sustainability report in Iran is non-mandatory and scattered due to the non-acceptance of the international framework. Therefore, according to the importance of the subject, the present study aims to examine the different frameworks of sustainability reporting at the world level, and according to the experience of other countries and also seeking opinions from experts, reach a framework that is suitable for Iran's conditions and in line with international efforts.

## **MATERIALS AND METHODS**

This research is in terms of practical purpose, in terms of the method of collecting descriptive information with triangular fuzzy Delphi technique, in terms of field nature. Questionnaire questions are graded on a five-point Likert scale. The main components mentioned in the questionnaire are extracted from the four international frameworks of the International Organization's Global Compact, Sustainable Development Goals, the Global Report Initiative, and the Sustainability Accounting Standards Board. The members of the Fuzzy Delphi panel have been selected as a non-probability sampling among faculty members, professionals, and researchers with a doctorate in accounting. After counting the experts' points, the fuzzy Delphi numbers of Martinez and Connell (2011) were used for fuzzification, then we got the sum of the numbers in all three phases. Then, we get the average of the fuzzy numbers. Finally, we get the definite average.

## **RESULTS AND DISCUSSION**

Components whose dephasized definite average is higher than 0.7. Have been approved. The closer the value of these results is to one, the more important that component is. In the second stage, the questionnaire of the first stage of Delphi has been designed in a new questionnaire and provided to the experts. In this questionnaire, the nine components not agreed upon in the first round were sent to the experts again, for the experts to give their opinion regarding the cases that have not reached an agreement, according to the final average of the first stage. If the average difference is less than 0.1, an agreement is reached and the survey is stopped.

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According to the opinions of experts and the results of fuzzy Delphi, the framework recommended for reporting sustainability in the five dimensions of environment, social capital, human capital, business model, and innovation is in the form of a table (1). According to the table, the three frameworks of the Global Report Initiative, the International Organization's Global Compact, and the Sustainable Development Goals have overlapped in all accepted cases. The Sustainability Accounting Standards Board framework, which has been prepared according to the needs of different industries, has a lot in common with other frameworks.

**Table 5 of the final framework of the sustainability report**

<b>the environment</b>					
1	Energy Management	SDGs	UN	SASB	GRI
2	Water and wastewater management	SDGs	UN	SASB	GRI
3	Greenhouse gas and air pollution	SDGs	UN	SASB	GRI
4	Biodiversity and attention to the ecosystem and adaptation to the environment	SDGs	UN	SASB	GRI
5	air quality			SASB	
6	Flexibility against climate change			SASB	
7	Waste Management	SDGs	UN	SASB	GRI
8	Climate effects and environmental safety			SASB	
9	Flexibility in water supply			SASB	
<b>Social capital</b>					
10	Health and safety of customers	SDGs	UN	SASB	GRI
11	Security, human rights, indigenous people's rights and the interests of local communities	SDGs	UN	SASB	GRI
12	Customer Privacy	SDGs	UN	SASB	GRI
13	Non-discrimination	SDGs	UN		GRI
<b>Human Capital</b>					
14	Professional health and safety	SDGs	UN	SASB	GRI
15	Forced labor and unemployment	SDGs	UN		GRI
16	Working Children	SDGs	UN		GRI
17	Education	SDGs	UN		GRI
18	Labor and management relation	SDGs	UN		GRI
19	Management of critical incidents and operational safety, preparedness, and emergency response			SASB	
<b>Business models and innovation</b>					
20	Social and environmental effects in the supply chain	SDGs	UN	SASB	GRI
21	Social and environmental effects in the supply chain	SDGs	UN	SASB	GRI
22	Economic performance	SDGs	UN		GRI
23	Indirect economic effects	SDGs	UN		GRI
24	Integration of ESG factors in the product life cycle			SASB	
25	Product health			SASB	
26	Final consumption efficiency			SASB	
<b>leadership and governance</b>					
27	Systematic risk management			SASB	
28	Management of the legal and regulatory environment			SASB	
29	Ethics and honesty in Business and anti-corruption	SDGs	UN	SASB	GRI
30	Transparent information, labeling, and marketing	SDGs	UN	SASB	GRI

## CONCLUSION

Among the 39 main components of the sustainability report extracted from international frameworks, experts have agreed on 30 components. We explained these components in five dimensions in the form of sustainability report elements. Finally, we obtained the sustainability report framework suitable for Iran's conditions. Organizations that intend to publish a sustainability report can, in this framework, publish sustainability information in the form of a report for the users of the sustainability report.

**Keywords:** Sustainability Reporting Frameworks, Experts, Fuzzy Delphi.

**JEL Classification:** C65.

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