

УДК 33

DOI 10.21661/r-561516

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INDUSTRY 4.0 PRACTICES COMMUNICATION IN THE SUSTAINABILITY REPORTS

***Abstract:** this paper examines some of the theoretical issues regarding the publication of the Industry 4.0 practices as a voluntary disclosure in the process of business communication. The usage of such reporting is linked to the general process of Sustainable Development Goals achieving in different business and cultural environments. In such approach, a question about the possible role of Sustainability Reports as a communication modality in the global economy arises.*

***Keywords:** Industry 4.0, Sustainability Reports, Sustainable Development Goals, GRI standard.*

ИНДУСТРИЯ 4.0: ПРАКТИКОВАНИЕ КОММУНИКАЦИИ В ОТЧЕТАХ ОБ УСТОЙЧИВОМ РАЗВИТИИ

***Аннотация:** в статье рассматриваются некоторые теоретические вопросы, касающиеся публикации практик индустрии 4.0 в качестве добровольного раскрытия информации в процессе делового общения. Использование такой отчетности связано с общим процессом достижения целей устойчивого развития в различных деловых и культурных средах. При таком подходе возникает вопрос о возможной роли отчетов об устойчивом развитии как средства коммуникации в глобальной экономике.*

***Ключевые слова:** Индустрия 4.0, отчеты об устойчивом развитии, цели устойчивого развития, стандарт GRI.*

1. Introduction.

The present work examines some of the theoretical issues regarding the publication of Industry 4.0 practices as a voluntary disclosure in the process of business

communication. It is widely known that the usage of sustainability reporting is linked to the general process of disclosing information in certain business and cultural environments. Hence, a question about the possible role of the Sustainability Reports as a modality of communication in the global economy arises. In this work the reporting modalities according to Global Reporting Initiative format were analyzed. It showed that the sustainable reporting in general and the reporting on the Industry 4.0 practices in particular presented in the annual reports is an underdeveloped practice which should be deepened further.

2. Sustainable reporting

The concepts of Corporate Social Responsibility earlier [5] and Sustainable Development later [8] appeared and developed first in the countries with advanced economies but now it becomes more and more the significant part of emerging countries too. Here we present a brief overview of the state-of-the-art of this phenomenon in the developing economies.

As far as India is concerned [13] was perhaps the first research in emerging economies. The content of annual reports was analyzed and descriptive statistics regarding the extent of CSR and percentage of companies making social disclosures was provided. In [2] a CSR framework for Indian companies based on a longitudinal analysis of CSR practices in the Steel Authority of India Limited (SAIL) during 1984–85 to 1990–91 was proposed. The author observed inconsistencies in the Indian CSR practices arising from lack of uniformity in presentation and also due to lack of «conventions, postulates and axioms to guide social accountants in drafting accounts». In view of inconsistency of social reporting practices in India the study perceived the need for a suitable social reporting framework [3].

In Brazil the [11] analyzed the sample composed by the largest companies listed in the stock exchange of San Paulo. The top one hundred companies excluding the financial sector have been selected. Based on the proposed framework, each company was assigned a social and environmental disclosure index, which became the dependent variable in the regression model. The independent variables were associated with

11 hypotheses that were formulated on the basis of the existing literature regarding: sector, auditing firm, leverage, internationalization, stock issuing, ownership concentration, origin of control, profitability, corporate governance, size and corporate sustainability. The results show that seven variables are statistically relevant at the 10% significance level: size, profitability, leverage, sector, internationalization, origin of control, and sustainability. On the other hand, with the exception of leverage, all these variables have a positive association with the disclosure of social and environmental information. In addition, the model is able to explain 48% of social and environmental disclosure.

A study [6] found positive association between company size measured by sales and level of CSR. It was also found that industrial affiliation is an important determinant of CSR level. Besides, there are a number of empirical studies available on CSR practices in Bangladesh. The study [4] on green reporting practices in Bangladesh observed that only 3 of 50 companies (6%) edited environmental disclosures. The data year of this study was 1994/95. It found that although 27 (90%) companies out of 30 studied made environmental disclosures, the percentage of companies disclosing environmental information comes down to 20 only if disclosure related to expenditure on energy usage is excluded.

The conclusion that different researchers reach seems to affirm that Sustainability Development agenda in emerging economies is mainly driven by the «outside» forces noted above. There exists a real concern that such imposition from «outside» (ignoring the local context) will only encourage passive compliance without any effective change on the ground in terms of greater corporate accountability and transparency. In the process of advancing the emerging agenda of SD policy makers and researchers in emerging economies should immediately address this issue. More research is needed to explore whether SD in emerging economies became the Western fashion (an imposition from West economies) or an agenda tailored to the ground realities of emerging economies. In other words, it is necessary to examine the institutional factors driving the SD agenda in emerging economies.

As far as other emerging realities are concerned one could notice the researches [12] regarding Qatar, [9] in the Islamic banks, [1] for Malaysia and Singapore.

3. *Conclusions*

The situation created after the introduction of the Industry 4.0 concept and COVID pandemic made it necessary to move towards new national economic realities. The pandemic was a catalyst for a new way of thinking that has allowed to review all the traditional approaches to the economic system, adopting those new and more advanced based on the Industry 4.0 enabling technologies. Particular attention will be given to maintain jobs through, for example, the development of specific programs for the rehabilitation and vocational training for workers in sectors at risk of dismissal, which represents a serious contribution to the Sustainable Development Goals (like SDG 1 «No poverty»). The crisis is not a reason to give up long-term projects for the modernization of the country: in fact, this process will be intensified and accelerated. It also provides incentives to increase energy efficiency, investments in human capital (education and public health) and the realization of the necessary technological infrastructure.

In this new situation, the main drivers of growth must be represented by a shared economy, an economy based on modern thought, on the experience gained from more developed countries of the world and advanced business practices, which communication process and spread among the companies was analyzed in this work. The results support the validity of GRI standard as an international initiative. In fact, convergence towards a single model will enable companies and their consultants to develop the relevant expertise and help both domestic and foreign stakeholders to understand and interpret the reported information, as well as make inter-company comparisons. Finally, this paper wishes to contribute to the existing literature on the issue by presenting empirical evidence on different factors that explain voluntary information disclosure in a less developed country.

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