

CORPORATE SOCIAL RESPONSIBILITY PERFORMANCE EVALUATION OF CONSTRUCTION ORGANISATIONS IN SRI LANKA

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Abstract

Through considering social and environmental factors in organisational activities, the concept of Corporate Social Responsibility (CSR) is broadly defined as ensuring organisational effectiveness. In the construction industry in Sri Lanka, organisations are very excited to take part in CSR initiatives for sustainable business growth. The current research tends to investigate CSR performance indicators of Construction organisations and develops a CSR performance evaluation framework for construction organisations.

A comprehensive literature review was executed identifying CSR performance indicators for the construction industry. Literature review found that, CSR holds that three main dimensions as economic responsibility, social responsibility and environmental responsibility. Correspondingly, in literature review identified CSR performance indicators of those CSR dimension. Then a quantitative approach using questionnaire survey is adopted to investigate the research phenomena. Subsequently, Analytical Hierarchy Process (AHP) technique used to determine relative performance scores of each CSR dimension and CSR performance indicators. Finally, a CSR performance evaluation framework was developed for construction organisations in Sri Lanka.

Keywords: *Corporate Social Responsibility, Performance, Indicators, AHP*

1. Introduction

The construction industry involves a wide range of businesses, including contractors, customers, suppliers of materials, professional services and construction initiatives, which have a road impact on the general economy (Zaho, Zhao, Davidson, & Zuo, 2012). Nevertheless, the construction industry has a significant impact on the environment, political, financial, environmental and economic (Lim, Loosemore, Ling, & Zeng, 2008). Thus, the construction industry continuously improves social, economic and environmental indicators to improve sustainability (Ortiz, Castells, & Sonnemann, 2009).

According to Čarnogurský, Diačiková, Ďaňková and Lach (2015), with the changing business environment, the organisations use the principle of Corporate Social Responsibility (CSR) to strengthen relationships between business and other commercial sectors. Correspondingly, Zhang, Oo and Lim (2018), mentioned that in the construction industry, CSR has gained more prominence. The application of CSR takes into account the expectations of construction companies to gain competitive advantages and show their contribution to social responsibility. As stated by Zaho, Zhao, Davidson (2018) and Zuo (2012), as competition intensifies, construction organisations use CSR as a way to improve the company's background and gain competitive advantage.

As stated by Tilakasiri (2013), Sri Lankan corporate sectors have been concerned about the concept of CSR because of the serious economic situation in the country and people, organisations, clients and other different groups who are engaged in the administration and industrial sector to improvement of the social, environmental and economic livelihoods of the people. Correspondingly, Wijerathna and Gajanayaka (2014) mentioned that, organisations in Sri Lanka are pursuing CSR approaches. Similarly, Vijayaragunathan (2016) stated that, Sri Lankan construction industry is in the initial process of implementing CSR activities. Sri Lankan organisations have to reflect different application of CSR to watch at worldwide organisations (Tilakasiri, 2013). CSR creativities are not necessary for a company to adopt, but it should bring various social advantages (McWilliams & Siegel, 2001).

Finally, CSR creativities are about making a variation. Effective CSR creativities must have optimistic effects equally on society and organisations, and also is planned to benefit society and organisations (Coombs, Sherry, & Holladay, 2012). Authors further stated that, when the CSR creativity is active, its special effects can be assessed. However, the difficulties that occur when subjectively evaluating performance of CSR can lead to different outcome paths of outcomes (Giannarakis, Litinas, & Sariannidis, 2011). Further to authors, companies have a better opportunity to recognize their strengths and weaknesses through a positive evaluation of CSR performance while it will aid in modifying their strategies and identify opportunities for further improvements. As stated by Venturelli, Caputo, Leopizzi, Mastroleo and Mio (2017), It is difficult to assess whether an organisation embraces CSR or not, and it is also difficult to determine whether CSR continuity between one company and another company. Further to the authors, there is no ordinarily acknowledged technique for evaluating the performance of CSR. Hence, the purpose of this research is to introduce a proper mechanism for evaluating the performance of CSR of Sri Lankan construction organisations.

2. Literature Review

2.1. IMPORTANCE OF CSR FOR THE CONSTRUCTION ORGANISATIONS

The corporation is a corporate entity and its management must take into account the effect of any business decision and interference to promote the public interest and contribute to the cohesion and harmony of society. Costa and Menichini (2013) stated that, in an age of growing global needs for emergency and social justice, CSR may help organisations find ways to achieve truly sustainable business as they play a dynamic part in international financial and economic stability. According to Lock and Seele (2016), the amount of frequently published professional contact content on CSR highlights its vital role in everyday business and CSR is essential to an organisation's credibility. Moreover, findings of Książak (2017), stated that first benefit of CSR is improved relationship between companies and communities Correspondingly, Seele and Lock (2014), mentioned that CSR is focused on the management of perceptions of stakeholders through interaction and responsiveness. According to the authors, organisations can better to assess and manage potential risks by involving stakeholders.

Through planning, design and construction to use and removal, construction process has a significant effect on community, economy and climate (Murray & Dainty, 2008). In addition, construction tasks are typically labor intensive and have high levels of accidental exposure, making building workers less secure (Close & Loosemore, 2014). Xia, Olanipekun, Chen, Xie and Liu (2018), reported that the construction industry has some new social CSR activities, including social procurement, corporate volunteering, social enterprise, public service, social enterprise and indigenous reconciliation. Therefore, community procurement emphasizes the purchasing of products and services to benefit from increased social benefits and investment in the local communities where the project is located (Loosemore, 2016). Similarly, employers in the construction industry provide workers with any form of support for voluntary work and community objectives for corporate voluntary work (Loosemore & Bridgeman, 2017).

2.2. PERFORMANCE EVALUATION FOR CSR

The concept of CSR and CSR performance evaluation is getting more and more attention companies, business predictors, non-governmental organisations (NGOs) and other institutions (Grigoris, Nikolaos, & Nikolaos, 2011). According to Carroll (2000), CSR Performance evaluation is important for business enterprises and society. According to the author, in order to answer the question of whether CSR should be measured, it is pointed out that because CSR is an important topic of business and society, the importance and influence of social responsibility activities can be demonstrated by using measurement tool.

Grigoris, Nikolaos and Nikolaos (2011) stated that, subjective CSR performance assessment can lead to different results perceptions. According to the Sirgy (2002), by evaluating CSR

performance, organisations have the chance to distinguish their qualities and shortcomings, strength and weakness, adjust procedures and recognize opportunities for enhancement.

2.3 CSR INDEX OF THE CONSTRUCTION INDUSTRY

Based on stakeholder theory aspect of the construction industry and triple bottom line theory Jiang and Xue (2018), develop the CSR index for the construction industry. Further to authors, construction company stakeholders include owners, shareholders, communities, creditors, employees, subcontractors, governments, and the environment. Based on three bottom-line theories (Elkington, 2010), Jiang and Xue (2018), incorporate stakeholder responsibilities into three dimensions: economic responsibility, social responsibility, and environmental responsibility. These three detentions further classified into sub factors (refer figure 1).

In terms of economic factors, Return on Assets shows the total sum of productive capital relative to investment rate; Rate of information disclosure means the connection between information disclosure and equity costs is the fundamental interest of scholars and regulators; Rate of Assets to liabilities is the ratio of assets to liabilities, check how much of the assets of the company are made up of liabilities; Return on equity; Dividend is the return on investors as a result of the money invested in the purchase of a particular business's stock. Environment dimensions includes the sub-factors of Rate of social security coverage, Consumer satisfaction degree, Rate of staff and labour turnover, Rate of staff and labour casualty, Rate of tax to assets and tax paid, Rate of tax to assets and tax paid, Rate of timely project payment for subcontractors and Educational fund for employee whereas socio dimentions includes Investment rate on environment, Discharge rate of construction protection, Compliance rate of pollution garbage and Recycling rate of pollution.

Thus the forgoing literature revealed the Customer satisfaction can be considered as a goal or measurement tool for quality growth and customer satisfaction is an important factor in process development and customer relationships importance of CSR for construction industry and the CSR dimensions which can demine its performance. The impact of construction industry on economic, environmental and social dimensions were more important than other industries and it is good to implement a systematic method to ensure CSR. In terms of Sri Lanka, the currently the construction industry has risen with the development of the country. Further, there is a need to meet the realistic CSR performance assessment system. There were CSR indicator systems available in the world and they have implement in Sri Lankan construction organisation however those fail to evaluate CSR performance properly. Therefore, this research tends to provide proper mechanism to evaluate construction organisations CSR performance in Sri Lankan context.

3. Research Methodology

The research was conducted to build a framework to evaluate CSR performance of construction organisations in Sri Lanka. A quantitative approach using questionnaire survey was employed in this study. Based on convenience sampling, a sample of ten (10) professionals who have engaged in CSR projects of construction industry in Sri Lanka was chosen for the questionnaire survey. Considering the profile of respondents, 60% of the respondents were sustainable engineers whereas the rest are project managers. In terms of experience, 70% respondents have experience between 5-10 years and 30% have experience more than 10 years.

For relative weightage determination of the identified CSR performance, AHP analysis tool was used. The AHP provides a valuable method for evaluating the accuracy and consistency of the evaluations of the decision-maker, thus increasing the accuracy in the process of decision-making. The following steps were employed in using the AHP technique.

- Steps 1 – Ration scale: The respondents need some kind of scale in order to respond with the provided pair wise comparison.

- Step 2 - Pairwise comparison: Gathered data from the questionnaire survey was inserted into the pairwise comparison matrices. The averages of the responses and their reciprocals were recorded in the matrices and the sum of each column was calculated afterwards.
- Step 3 – Normalization of the comparison: Normalizing was carried out by dividing each element in the pairwise comparison table by the sum of each column. After normalization, the total sum of each column was determined to obtain the performance score or the relative weight of each CSR and CSR performance indicators. The performance scores can be compared to identify the important criteria as well as to give a relative weight.
- Step 4 – Consistency Ration (CR) calculation - When comparing the criteria, the respondents may supply answers with inconsistency. In the analysis of inconsistent information, wrong conclusions may be derived.

4. Data Analysis and Findings

The findings of the data collected through the questionnaire survey have been analysed using the AHP technique. CSR dimensions and CSR performance indicators of each dimension were illustrated in the hierarchy. In AHP pairwise comparison, maximum seven (7) variables will be used. AHP hierarchy of CSR dimensions and CSR performance indicators of each dimension was shown in following figure 1.

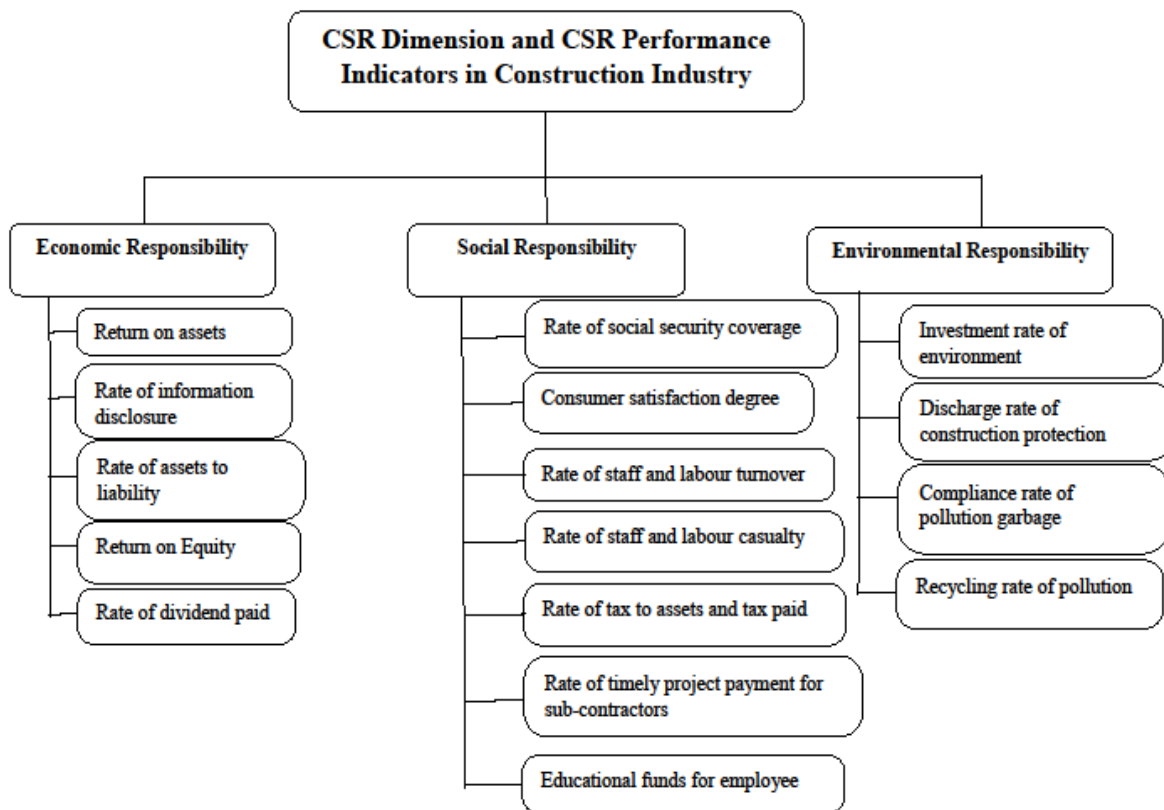


Figure 1: AHP Hierarchy

4.1. RANKINGS OF CSR DIMENSIONS

There are three CSR dimensions were identified through literature review. The main intention of this section is to analyse the relative weights (performance scores) of these dimensions. AHP technique was used to analyse these relative weights. Table 1 demonstrated ranks of the CSR dimensions by performance score. The total number of performance scores is equal to one (1) in CSR dimensions.

Table 1: CSR dimensions ranking

CSR dimensions	Performance Score	Rank
Economic Responsibility	0.7394	1
Environmental Responsibility	0.1789	2
Social Responsibility	0.0817	3

Economic responsibility has achieved a significant high performance score than other dimensions. The second and third ranked were respectively achieved by environmental responsibility and social responsibility dimensions.

4.2. RANKINGS OF ECONOMIC RESPONSIBILITY CSR PERFORMANCE INDICATORS

According to Table 2, there are five economic responsibility CSR performance indicators were identified in the literature. Table 2 illustrated ranks of CSR performance indicators of economic responsibility based on performance scores. Performance scores of CSR performance indicators for economic responsibility are equal to one (1).

Table 2: Rankings of economic responsibility CSR performance indicators

CSR performance indicators of economic responsibility	Performance Score	Rank
Return on Equity	0.5045	1
Rate of assets to liability	0.2326	2
Return on assets	0.1750	3
Rate of information disclosure	0.0473	4
Rate of dividend paid	0.0406	5

When analysing the Table 2, ‘return on equity’ indicator received the highest performance score which is 0.5045 and it indicates the highest relative importance. The second, third and fourth places were achieved respectively by ‘rate of assets to liability’ (0.2326), ‘return on assets’ (0.1750), ‘rate of information disclosure’ (0.0473) indicators. Least importance was identified for ‘rate of dividend paid’ indicator with a performance score of 0.0406. It can be identified that ‘return on equity’ indicator is approximately two (2) times relatively important than ‘rate of assets to liability’, which is the secondly ranked indicator. Also, ‘return on equity’ is approximately two (3) times relatively important than ‘return on assets’ which is the indicator ranked in the third place. Correspondingly, ‘return on equity’ is approximately two (10) times relatively important than ‘rate of information disclosure’ which is the indicator ranked in the fourth place. ‘Rate of dividend paid’ was ranked at the fifth place. There is no significant difference between the fourth and fifth ranks.

4.3. RANKINGS OF SOCIAL RESPONSIBILITY CSR PERFORMANCE INDICATORS

In literature, there are seven social responsibility CSR performance indicators were identified. Table 3 demonstrated ranks of the CSR performance indicators of social responsibility dimension. The total number of performance scores is equal to one (1) in social responsibility CSR performance indicators.

Table 3: Rankings of social responsibility CSR performance indicators

CSR performance indicators of social responsibility	Performance Score	Rank
Rate of staff and labour casualty	0.4816	1
Rate of timely project payment for sub-contractors	0.1334	2
Rate of social security coverage	0.1288	3
Rate of staff and labour turnover	0.1112	4

Consumer satisfaction degree	0.0702	5
Rate of tax to assets and tax paid	0.0522	6
Educational funds for employee	0.0226	7

The highest performance score was achieved by the 'rate of staff and labour casualty' (0.4816) indicator. The least relative weight was for 'educational funds for employee' indicator which the performances score was 0.0226. The firstly ranked indicator performance score was approximately three (21) times than the least performance score. Hence, there is a significant deviation of the relative performance scores can be recognized among the firstly ranked and the last ranked indicator. The second, third and fourth places were achieved respectively by 'rate of timely project payment for sub-contractors' (0.1334), 'rate of social security coverage' (0.1288) and 'rate of staff and labour turnover' (0.1112) indicators. There is no significant deviation can be identified between second, third and fourth ranked indicators performance scores. The fifth and sixth places were achieved respectively by 'consumer satisfaction degree' (0.0702) and 'rate of tax to assets and tax paid' (0.0522). It can be identified fifth ranked indicator approximately (1.5) times importance than sixth ranked indicator. Correspondingly, sixth ranked indicator was approximately (2) times importance than last ranked indicator. When considering the CSR performance indicators of social responsibility dimension, it can be identified that rate of staff and labour casualty have a major effect on the performance of the CSR.

4.4. RANKINGS OF ENVIRONMENTAL RESPONSIBILITY CSR PERFORMANCE INDICATORS

There are four environmental responsibility CSR performance indicators were identified through literature review. Table 4 revealed ratings of CSR performance indicators for environmental responsibility in conjunction with the performance scores. Performance scores of CSR performance indicators for environmental responsibility are equal to one (1).

Table 4: Rankings of environmental responsibility CSR performance indicators

CSR performance indicators of environmental responsibility	Performance Score	Rank
Compliance rate of pollution garbage	0.4841	1
Recycling rate of pollution	0.2478	2
Investment rate of environment	0.1714	3
Discharge rate of construction protection	0.0967	4

In the analysis of Table 4, the highest performance score was gained by the indicator 'compliance rate of pollution garbage' (0.4841). 'Recycling rate of pollution' indicator (0.2478) was ranked at second place. Ranked one indicator is approximately two (2) times important than secondly ranked indicator. Thirdly ranked indicator was 'investment rate of environment' with the performance score of 0.1714. Ranked two indicator is approximately 1.5 times important than the thirdly ranked indicator. 'Discharge rate of construction protection' indicator obtained the least performance score which is 0.0967. It can be identified first ranked indicator is approximately five (5) time important than last ranked indicator. When considering the CSR performance indicators of environmental responsibility dimension, it can be identified that 'compliance rate of pollution garbage' indicator have a major effect on the performance of CSR.

4.5. CSR PERFORMANCE EVALUATION FRAMEWORK

Evaluation score of the CSR performance indicators of the CSR dimensions were demonstrated in the Table 5.

Table 5: Evaluation scores of the CSR performance indicators

Rank	CSR dimensions and CSR performance indicators	Evaluation score
1	Economic Responsibility	73.94

1	Return on Equity	50.45
2	Rate of assets to liability	23.26
3	Return on assets	17.50
4	Rate of information disclosure	4.73
5	Rate of dividend paid	4.06
2	Environmental Responsibility	17.89
1	Compliance rate of pollution garbage	48.41
2	Recycling rate of pollution	24.78
3	Investment rate of environment	17.14
4	Discharge rate of construction protection	9.67
3	Social Responsibility	8.17
1	Rate of staff and labour casualty	48.16
2	Rate of timely project payment for sub-contractors	13.34
3	Rate of social security coverage	12.88
4	Rate of staff and labour turnover	11.12
5	Consumer satisfaction degree	7.02
6	Rate of tax to assets and tax paid	5.22
7	Educational funds for employee	2.26

The key contribution of this research for existing knowledge is the development of the above CSR performance of Sri Lankan construction organisation. Using the above framework, any construction organisation in Sri Lanka can calculate its CSR performance.

5. Conclusions and Recommendations

CSR performance evaluation is getting more and more attention amongst the all organisations including construction sector. Since the construction industry's economic, environmental and social impacts are more important than other industries, it is important to adopt a systematic approach to evaluate the CSR performance of Sri Lankan construction organisations. Further, no proper mechanism for evaluate performance of CSR in construction organisations in Sri Lanka. Hence, the research aimed to develop a CSR performance evaluation framework for construction organisations in Sri Lanka.

Literature review emphasized the importance of CSR for the construction organisation and also benefits of CSR have been identified. Most importantly literature review has addressed the CSR performance indicators for construction organisations. Economic, environmental and social responsibilities were recognised as the main CSR dimensions.

AHP tool used to analyse the collected data from questionnaire survey and obtained to relative weights for identified CSR dimensions and CSR performance indicators AHP calculation were carried out. Economic responsibility has achieved a significant high performance score than other dimensions. The second and third ranked were respectively achieved by environmental responsibility and social responsibility dimensions. Then, CSR performance model was developed for Sri Lankan construction organisation after the evaluation scores resultant from the AHP analysis. The main contribution of this research for the existing knowledge is the CSR performance evaluation framework of Sri Lankan construction organisation.

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