What Metrics and Frameworks Best Calculate the ROI of Corporate Social Responsibility Activities in the Services Industry?

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Abstract
Studies suggest that investment in CSR activities can increase product and company credibility, improve employee retention and attraction, and help cultivate customer relationships. Multiple measurement tools and scorecards have been developed to capture how corporate citizenship differentiates a firm economically. To explain which qualitative variables should be quantified, the methodologies of three metrics and frameworks are compared to assess which metrics provide the most accurate cost-benefit analysis on CSR activities.

Keywords
metrics, big data, return on investment, CSR, corporate social responsibility, service industry, analytics, HR, human resources

Comments
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EXECUTIVE SUMMARY

Final Question
What metrics and frameworks best calculate the ROI of corporate social responsibility activities in the services industry?

Introduction

Studies suggest that investment in CSR activities can increase product and company credibility, improve employee retention and attraction, and help cultivate customer relationships. Multiple measurement tools and scorecards have been developed to capture how corporate citizenship differentiates a firm economically. To explain which qualitative variables should be quantified, the methodologies of three metrics and frameworks are compared to assess which metrics provide the most accurate cost-benefit analysis on CSR activities.

CSR Metrics and Frameworks

The following three models were selected based on (a) what CSR variables were being measured, (b) what empirical or theoretical methods were used to measure, and (c) the variables’ relevancy to the services industry.

Kanji-Chopra Corporate Social Responsibility Model (KCCSRM) This model measures how a firm’s organizational strategic planning systems affect a firm’s CSR components and how those components impact a firm’s CSR index.

a. Variables Measured. Organizational strategic planning systems refer to the quality of a corporation’s ability to manage CSR components depends on its planning systems. The efficiency and efficacy of planning systems are then assessed through the following four CSR components:
   i. Social accountability and social investment. Social accountability holds businesses responsible for the “improvement of workplaces and communities” and focuses on the protection of human rights. Social investment includes CSR activities that establish and sustainably develop a community’s social infrastructure through the “transfer of technology, skills, and education.”
   ii. Environmental protection and sustainability. This CSR component focuses on business’s direct and indirect moral responsibility to the natural environment.
   iii. Corporate governance and economic responsibility. A business should fulfill four economic responsibilities for its investors, customers, and employees:
      1. Profitability – a firm’s value creation
      2. Transparency – information about operations
      3. Non-discrimination – equal application of financial criteria to customers, suppliers, and employees
   iv. Ethics and human resources. Human capital policies and procedures and ethics should be quantified and included in the KCCSRM.

After the measurement of CSR components, then the relationship between the firm’s operations and CSR is mapped conceptually and regressed in an empirical model. See Appendix 1a.

b. Methods Used. KCCSRM obtains scores from questionnaires and converts the scores into indicators to be inserted into multivariate equation. See Appendix 1b.

c. Variables’ Relevancy. Linking CSR activities to the CSR index does not initially calculate the return on investment from CSR activities but, rather, the potential CSR image the company could project.

Corporate Identity Management (CIM) model Corporate identity concerns an organization’s image presented to its stakeholders. The CIM model gauges the firm’s CSR image—the stakeholder perceptions of the firm—in order to quantify future stakeholder investments into the company. Hence, the CIM model calculations imply a link between CSR activities, CSR image, and a firm’s profitability. For publically traded firms, CSR activities can maximize a firm’s market value.

a. Variables Measured. The CIM model categorized six variables into two groups: CIM (internal) and CSR image (external).
i. **CIM (internal) variables** examined how (1) *mission and value dissemination* (organizational studies), (2) *visual identity implementation* (graphic designs), and (3) *consistent image implementation* (marketing perspectives) impacts CIM.

ii. **CSR image (external) variables** analyzed how (1) *corporate image attractiveness* and (2) *stakeholder-company identification* related to a company's financial performance and competitive advantage.

b. **Methods Used.** The CIM model correlated relationships between CSR image (corporate image attractiveness and stakeholder-company identification) and market outcomes (financial performance and competitive advantage). The correlations generate scores that either confirm or reject hypotheses. See Appendix 2.

c. **Variables' Relevancy.** The CIM model quantifies the indirect relationship between CSR activities, CSR image, and a firm's financial performance. Thus, calculating ROI from CSR activities is possible.

### CSR Demand-Supply Model

Unlike the KCCSR and CIM models, the CSR demand-supply model uses a theoretical formula to evaluate the relationship between managerial investments in CSR activities and firm market value under various demand-supply conditions. Depending on the supply and demand for CSR investments, CSR activities may or may not (1) maximize the net present value of future cash flows and (2) increase firm market value.

a. **Variables Measured.** The CSR demand-supply model measures the following:

i. Firm characteristics

ii. Social initiative characteristics

iii. Investor characteristics

iv. Stock price.

b. **Methods Used.** The model is a theoretical approach that measures the relationship between CSR activities and a firm's stock price under the following demand-supply conditions:

i. Demand > Supply

ii. Supply > Demand

iii. Supply = Demand

According to the CSR demand-supply equation, the proportion of investment funds from socially conscious investors (demand) over the number of socially responsible firms (supply) is equal to the proportion of investment funds from profit-maximizing investors (demand) over the number of profit-maximizing firms (supply). See Appendix 3a, 3b, 3c, 3d, 3e.

c. **Variables’ Relevancy.** Controlling for future financial performance based on their market price signals to stakeholders an organization's profitability and value creation. In addition, financial performance and CSR activities depend on economic market conditions of demand and supply.

### Analysis and Commentary

It is important to use of market-based and stakeholder measures when defining a business’s financial performance. This is because accounting-based measures only reflect a company’s historical financial performance and can be tampered by firm managers. Accounting practices vary per firm due to the characteristics of different industries. In addition, the company in question fell under the services industry. Calculating CSR activities’ impact on financial performance for service sector firms differ from manufacturing firms. Hence, an emphasis was placed on utilizing stock market-based measures to capture companies’ future economic earnings.

### Conclusion

The Kanji-Chopra model, Corporate Identity Management model, and CSR demand-supply model best assess the ROI from CSR activities. The company in question should measure (1) the impact of CSR activities on the company’s image, (2) how the image enhances brand value perceptions among key stakeholders, and (3) whether the company image maximizes shareholder value. Therefore, the most accurate cost-benefit analyses to use for calculating CSR activities are listed respectively: the CIM model, the KCCSR model, and CSR Demand-Supply model.
REFERENCES


APPENDICES

Appendix 1a. Kanji-Chopra model.
Appendix 1b. Example of questionnaire measuring

<table>
<thead>
<tr>
<th>Serial no.</th>
<th>Criteria</th>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very much</th>
</tr>
</thead>
</table>

(a) **Organisational strategic planning systems (OSPS)**
The extent to which the organisation has policies and procedures to 

1. Identify, measure, monitor and control the company’s ethical and human resources strategy  
2. Evaluate socio-economic trends and social aspects of the company  
3. Provide the required level of governance and economic responsibility  
4. Implement a proper internal reporting system to monitor and control social accountability and social investment  
5. Provide environment protection and sustainability  
6. Respect the human rights of its employees and general public at large

(b) **Social accountability and social investment (SASI)**
The extent to which the organisation has provided 

1. Transparency and openness regarding its business activities  
2. A system for preventing corruption, financial irresponsibility and underhand dealings  
3. Arrangements to produce an overall positive impact for a better society  
4. Facilities for socially responsible investment for education, healthcare, etc.  
5. Social accountability to meet public expectations that society has of business  
6. Social awareness and education of holding businesses responsible for their actions and products

(c) **Ethics and human resources (HER)**
The extent to which the company has managed to implement 

1. Ethical training inside the corporation to help employees make appropriate ethical decisions  
2. Ethical consumerism to meet the rising environmental and ethical concerns of consumers  
3. A transparent system to examine the company’s own labour practices such as normal working hours, steps against labour exploitation, harsh and inhumane workforce treatment and also of entire supply chain
Appendix 2. CIM model

Appendix 3a. CSR Demand-Supply Model

\[ P_{SR} = \frac{\omega mI}{\theta sN} = \frac{(1 - \omega)mI}{(1 - \theta)sN} = P_{PM} \]

Appendix 3b. CSR Demand-Supply Model: Supply of Socially Responsible Firms

\[ S_{SR} = \theta sN \]

Appendix 3c. CSR Demand-Supply Model: Demand for CSR Activities from Socially Conscious Investors

\[ D_{SR} = \omega mI \]

Appendix 3d. CSR Demand-Supply Model: Supply of Profit-Maximizing Firms

\[ S_{PM} = (1 - \theta)sN \]

Appendix 3e. CSR Demand-Supply Model: Demand for Profit-Maximizing Activities from Profit-Maximizing Investors

\[ D_{PM} = (1 - \omega)mI \]