Abstract—Without doubt, Corporate Social Responsibility (CSR) is vital to enhance corporate sustainability and competitiveness. In this study, Carroll's CSR pyramid and Carter & Rogers theoretical framework of sustainability for supply chain management (SSCM) were adopted to analyze the views on CSR and sustainability of logistics and shipping corporates and industry in Hong Kong. Eight elements are adopted as internal and external elements. Five interviewees who have been working in the industry were interviewed to express what they thought on CSR and sustainability of their companies and the industry. They provided valuable views and examples aligned with the revised model. The findings would be helpful for filling the literature gap and provides a foundation for further studies of CSR practices in other sectors / industries. The limitation of this research is that it only focuses on qualitative research (i.e. personal interview and case study). Future research should be applied with quantitative approach using a large sample of companies in order to generalize results.

Index Terms—Corporate social responsibility, shipping, logistics, Hong Kong.

I. INTRODUCTION

Governance mechanisms have been promoted to enhance good corporate governance by Hong Kong market regulators [1]. In corporate governance, concepts and elements of corporate social responsibility and sustainability are involved. Apart from complying rules and regulations, corporates which would like to further develop, maintain economic responsibility is not enough [2]. Moreover, corporate sustainability should be considered in corporate long term development. In addition to economic development, societal goals such as environmental protection, social equity and justice are better to take into consideration, which help corporate lower costs or even achieve competitive advantages [3].

To examine the views towards corporate social responsibility and sustainability from practitioners of logistics and shipping industry in Hong Kong, five interviewees who have been working in the industry were interviewed. The instrument is adopted those from Ko et al., [1] with modifications emphasized on corporate social responsibility and sustainability.

In this study, Carroll [4], [5] corporate social responsibility (CSR) pyramid and Carter & Rogers [6] theoretical framework of sustainability for supply chain management (SSCM) are adopted for analyzing internal and external elements on CSR and sustainability. Internal elements include strategy, organizational culture, risk management, and transparency; while external elements are philanthropic responsibility, ethical responsibility, legal responsibility, and economic responsibility.

II. LITERATURE REVIEW

A. Concept of CSR and Carroll’s 4-Domain CSR Model

Socially responsible behaviors can be traced, dating back to 5000 B.C. in ancient countries like Egypt, Greece, China etc. [7], including ‘giving back to society’ activities. Only until the mid-20th century did CSR has its formal literature [5], [8]. It was the CEOs, of their conscience, who orchestrated the ‘serving and giving back to society’ activities, without focusing too much on the resultant impact on profits [9]-[12].

Among the CSR debates, Carroll developed a model laying a sound foundation for the pro-CSR approach to business, and it will be used in this research.

Carroll’s [4], [5] 4-domain framework/model of total organizational CSR has generally been accepted in management and social research. Carroll [4] put forward the first conceptual model of corporate social performance (‘CSP’) and it has been considered as one of the most encompassing. In the CSP model, Carroll [4] operationalizes CSR by specifying it as consisting of four domains or faces of a corporate citizen (economic, legal, ethical, discretionary), showing the responsibilities that society expects businesses to assume.

The conceptual model [4] was in the form of a tall rectangle, then modified to a pyramid one [5], shown respectively at Fig. 1 and Fig. 2. The layers or domains or categories in the rectangle and pyramid are mutually non-exclusive, reflecting the respective responsibilities in decreasing order of implied attention, not importance. Carroll [4] considers these four domains neither cumulative nor additive; the different domain sizes in either rectangular or pyramidal shape reflect ‘relative magnitude’ and an order of evolution; any given responsibility or action of business could have economic, legal, ethical, or discretionary motives embodied in it. The dotted lines in the rectangle in Fig. 1 suggest the four responsibilities must be met simultaneously [4].

Carroll [5] considers a CSR firm, or for CSR to be accepted as legitimate, should strive to make a profit, obey the law, be ethical, and be a good corporate citizen. The
CSR pyramid enables managers to see that the different types of obligations are in a constant but dynamic tension with each other, thus helping them make decisions which fulfill all its components at the same time.

Carroll’s definitional CSR model/construct [4], [5] is generally accepted and is popular in the social issues field, notwithstanding the bulk and variety of definitions and concepts which have arisen so far [14]-[20].

B. Sustainable in Supply Chain Management

Achieving sustainability cannot just rely on the work of national governments nor NGOs at either local or international levels. Concerted participation and cooperation from business organizations have been recognized as indispensable. The areas involved, which could impart immense negative effects if left unattended, could include alternative energy sources, climate change, ecosystem deterioration, etc. Business organizations having their primary and secondary stakeholders can play an active role to this effect. Supply chain management can serve as an impetus and facilitator in deciding on locations, selecting and developing supplier, selecting modal and carrier, and choosing packaging means, etc.

According to Carter & Jennings [21], there has been little research in the context of supply chain management adopting a holistic CSR concept by integrating the interactions among areas, for example, ecosystem, natural environment, philanthropy, human rights, safety and diversity etc. What supply chain managers usually did have been in a standalone manner, without netting up the related areas or issues to create an overall sustainability position for their organizations. In fact, Carroll’s [4], [5], [18] CSR pyramid places the standalone supply chain management activities within the context of discretionary activities. Similarly, Murphy & Poist [22] have taken this standalone approach within the rubric of social responsibility, recognizing the need to “seek socially beneficial results along with economically beneficial ones.”

Carter & Rogers [6] develops a theoretical framework of sustainability for supply chain management, referred to as SSCM (Fig. 3). They suggest that engagement in sustainability is not discretionary, SSCM in particular, but a requirement. SSCM involves the long-run improvement of an organization’s economic bottom line and helps managers to answer the question of, “What is it that we need to do, not just to survive, but to thrive, and not just one year, three years, or five years from now, but in ten years, 20 years, and beyond?”

In Carroll’s [4], [5] model/framework, he defines CSR as the ways organizations can meet the economic, legal, ethical, and discretionary needs/expectations of their stakeholders in society. Carroll [13] refers these as the four faces (components) of a corporate citizen, suggesting that organizations which can be considered socially responsible must meet society’s needs as reflected through these four faces. Carroll [5] later changed the ‘discretionary’ responsibility to ‘philanthropic’ responsibility. There has been support of the view that CSR is a contingent construct influenced by circumstances and the actors involved [4], [5].
Their conceptualization of sustainability [6] is defined as: “the strategic, transparent integration and achievement of an organization’s social, environmental, and economic goals in the systemic coordination of key inter-organizational business processes for improving the long-term economic performance of the individual company and its supply chains…”

Carter & Rogers [6] identify four supporting facets, or facilitators of SSCM, in Figure 3:

1. strategy – holistically and purposefully identifying individual SSCM initiatives which align with and support the organization’s overall sustainability strategy;
2. risk management, including contingency planning for both the upstream and the downstream supply chain;
3. an organizational culture which is deeply ingrained and encompasses organizational citizenship, and which includes high ethical standards and expectations (a building block for SSCM) along with a respect for society (both within and outside of the organization) and the natural environment; and
4. transparency in terms of proactively engaging and communicating with key stakeholders and having traceability and visibility into upstream and downstream supply chain operations.

III. RESEARCH METHODOLOGY AND DATA COLLECTION

A. Research Methodology and Instrument

In this study, semi-structured interviews have been carried out to collect data from the respondents. The use of interviews for business research has the following advantages. First, interview is a practical and efficient way of collecting data which cannot be found in the published format, such as journal articles, books, magazines, newspapers, etc. In addition, reasons like study on people’s experience from their points of view, using interview as the method could gather specific and additional points which are insightful [23]-[27].

The instrument is mainly based on the study from Ko, et al [1], which was a rating instrument constructed with reference to the Principles of Corporate Governance [28] and the Report on the HKIoD Corporate Governance Scorecard [29]. In the study of Ko, et al [1], some questions were added on corporate governance mechanism which was not required in the regulations in order to examine the companies’ initiatives in practicing corporate governance. The instrument contains five aspects, which are (1) Rights of Shareholders; (2) Equitable Treatment of Shareholders; (3) Role of Stakeholders; (4) Disclosure and Transparency, and (5) Board Responsibilities.

The interview questions, which are reference to the study of Ko, et al [1], with some modifications which emphasized on corporate social responsibilities and sustainability. There are 28 questions in total, covering four areas, namely (1) Mission, Policy and Interest; (2) Stakeholders; (3) Management and CSR Practice, and (4) Strategy and Implementation.

In this study, combination of [6] theoretical framework of sustainability for supply chain management (SSCM) and Carroll’s [4], [5] CSR pyramid, will be adopted to analyze the views of the interviewees. In Carter & Rogers [6] theoretical framework, four supporting facilitators of SSCM are (i) Strategy (sustainability as part of an integrated strategy); (ii) organizational culture (deeply ingrained, organizational citizenship, values and ethics); (iii) risk management (contingency planning, supply disruptions, outbound supply chains), and (iv) transparency (stakeholder management, supplier operations). These four elements of the SSCM can be regarded as internal elements for corporate.

In Carroll’s [4], [5] CSR pyramid, four responsibilities for corporate include (i) philanthropic responsibilities; (ii) ethical responsibilities; (iii) legal responsibilities, and (iv) economic responsibilities. These four domains can be regarded as external elements for corporate.

Both internal and external elements are adopted from SSCM [6] and CSR pyramid [4], [5] to analyze how the interviewees viewed on corporate social responsibility and sustainability. This helps presenting a comprehensive view towards the two issues of corporate.

<table>
<thead>
<tr>
<th>SSCM’s 4 supporting facilitators (Carter &amp; Rogers, 2008)</th>
<th>Carroll’s CSR pyramid (Carroll, 1979 &amp; 1991a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy</td>
<td>Philanthropic responsibility</td>
</tr>
<tr>
<td>Organizational culture</td>
<td>Ethical responsibility</td>
</tr>
<tr>
<td>Risk management</td>
<td>Legal responsibility</td>
</tr>
<tr>
<td>Transparency</td>
<td>Economic responsibility</td>
</tr>
</tbody>
</table>

Fig. 4. Internal and external elements on corporate social responsibility and sustainability [4]-[6].

B. Data Collection

The semi-structured interviews were carried out between February and July 2016. Total of five interviewees were invited to share their views on corporate social responsibility and sustainability in logistics and shipping industry of Hong Kong. The interviewees, four of them were middle to senior management of the local listed companies in logistics and shipping industry. While one of them are experienced practitioner and chairman of one of the industrial associations in the industry, who is also a committee member of the advisory board of Hong Kong government in the logistics and shipping industry.
IV. FINDINGS AND ANALYSIS

A. Interviewees

As mentioned, five interviewees have been invited for interviews on their views towards corporate social responsibility and sustainability in logistics and shipping industry of Hong Kong. All of them are experienced practitioners in related field.

Interviewee A is a senior management of one of the well-known liner shipping company which is based on Hong Kong, which is also a listed company in Hong Kong. He has almost 20 years of experience in the industry. He is an active member in local industry association in shipping and logistics industry.

Interviewee B is a senior management of one of the listed companies in logistics and shipping industry in Hong Kong. He has been working in operation and management of freight forwarding and logistics fields more than 20 years. He has been elected as professional member and executive member in various professional associations in Hong Kong.

Interviewee C is a senior management of one of the industry associations, who has more than 20 years of experience in shipping, freight forwarding, mid-stream operations, and other transport and logistics services. He is an active member in various shipping and logistics committees of the Hong Kong Government, as well as professional member in various industry organizations of the shipping and logistics industry in Hong Kong.

Interviewee D is a middle management of one of the famous listed liner and ship management companies in Hong Kong. He has almost 20 years of experience in the industry. He is an active member in local industry association in shipping and logistics industry.

Interviewee E is a senior management of one of the leading air services provider which is based on Hong Kong, which is also a listed company in Hong Kong. He has more than 20 years of experience in air transport industry.

B. Findings

1) Internal elements

Internal elements include (i) strategy; (ii) organizational culture; (iii) risk management, and (iv) transparency, which are adopted from Carter & Rogers [6] theoretical framework of sustainability for supply chain management (SSCM). The Table I (in below) summarizes the major findings from interviewees.

2) External elements

External elements adopted from Carroll’s [4, 5] Corporate Social Responsibility pyramid, which consisted of four domains: (i) philanthropic responsibility; (ii) ethical responsibility; (iii) legal responsibility, and (iv) economic responsibility. The Table II (in below) summarizes the major findings from interviewees.

<table>
<thead>
<tr>
<th>Internal element</th>
<th>Interviewee A</th>
<th>Interviewee B</th>
<th>Interviewee C</th>
<th>Interviewee D</th>
<th>Interviewee E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy</td>
<td>Stated mission: “community responsibility” as core value</td>
<td>Not explicitly mentioned</td>
<td>CSR education</td>
<td>CSR engagement since 2011</td>
<td>CSR as part of the core business, company’s vision and mission</td>
</tr>
<tr>
<td></td>
<td>CSR and Safety and Security policies</td>
<td></td>
<td>Environmental protection (carbon reduction, usage of environmental friendly materials)</td>
<td>Adoption of environmental friendly materials</td>
<td>Environmental office for sustainability</td>
</tr>
<tr>
<td></td>
<td>Environmental strategy (emission reduction, fuel reduction, community engagement)</td>
<td></td>
<td>Lack of resources deployed on CSR</td>
<td>Safety committees for company units</td>
<td></td>
</tr>
<tr>
<td>Organizational culture</td>
<td>Investing in community and environmental friendly technology and practices</td>
<td>Employee involvement in voluntary services, “with time-off as motivation”</td>
<td>Fair trade companies have priority in procurement policy, it is relatively less in Hong Kong</td>
<td>Rooms for breast-feeding upon employees’ request.</td>
<td>Community services as a way of employee retention</td>
</tr>
<tr>
<td></td>
<td>Employee-friendly company, with equal opportunity and diversity for employees</td>
<td>Energy conservation</td>
<td>Hong Kong follows other countries on welfare policy, work-life balance, training, etc.</td>
<td>Volunteer team visits to elderly homes, and support to sailors’ families</td>
<td>Anti-discriminatio n policy on employment</td>
</tr>
<tr>
<td>Risk management</td>
<td>Priority on safety, security and environment</td>
<td>Environment conservation, training on occupation safety to staff</td>
<td>Not mentioned</td>
<td>Not mentioned</td>
<td>Self-set rules which are favorable to company</td>
</tr>
<tr>
<td>Transparency</td>
<td>Stakeholder analysis, stakeholder engagement</td>
<td>CSR information disclosure on company’s website and printed version</td>
<td>CSR disclosure only if required</td>
<td>Stakeholder information disclosed on reports and company websites</td>
<td>CSR covers all stakeholders</td>
</tr>
<tr>
<td></td>
<td>Sustainability reporting and update</td>
<td>CSR disclosure at customer level</td>
<td>CSR report individually and as part of the annual report</td>
<td>CSR information disclosure on company’s website</td>
<td></td>
</tr>
</tbody>
</table>
TABLE II: THE MAJOR FINDINGS FROM INTERVIEWEES IN EXTERNAL ELEMENT

<table>
<thead>
<tr>
<th>External element</th>
<th>Interviewee A</th>
<th>Interviewee B</th>
<th>Interviewee C</th>
<th>Interviewee D</th>
<th>Interviewee E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philanthropic responsibility</td>
<td>“Community responsibility” as a core value</td>
<td>Employees involvement in voluntary services (with time-off as motivation)</td>
<td>Not mentioned explicitly</td>
<td>Internship for the youth in 2010</td>
<td>Employees involvement in community programmes, e.g. “I can fly”, “English on Air”</td>
</tr>
<tr>
<td>Ethical responsibility</td>
<td>Suppliers’ code of conduct</td>
<td>Occupational training for staff</td>
<td>Fair trade in procurement policy</td>
<td>Review on employee benefits</td>
<td>Non-discrimination policy on employment</td>
</tr>
<tr>
<td>Legal responsibility</td>
<td>Strict adherence to IMO standard</td>
<td>Listing rules compliance</td>
<td>Compliance if required</td>
<td>Compliance</td>
<td>Non-discrimination policy on employment</td>
</tr>
<tr>
<td>Economic responsibility</td>
<td>Not mentioned explicitly</td>
<td>Highest focus on revenue</td>
<td>Profit maximization</td>
<td>Not mentioned explicitly</td>
<td>Not mentioned explicitly</td>
</tr>
</tbody>
</table>

V. IMPLICATION AND CONCLUSION

This study adopted Carroll’s [4], [5] CSR pyramid and Carter & Rogers [6] theoretical framework of sustainability for supply chain management (SSCM) to analyze the views on CSR and sustainability of logistics and shipping corporates and industry in Hong Kong. Eight elements are adopted as internal and external elements from the two models. Five interviewees who have been working in the industry were interviewed to express what they thought on CSR and sustainability of their companies and the industry.

The internal elements include strategy, organizational culture, risk management, and transparency, which are adopted from Carter & Rogers [6]. Interviewees’ views on respective elements have been summarized.

Strategy, which sustainability as part of an integrated strategy, has been considered by the companies. Most of the interviewees expressed that CSR and environmental friendly strategy are emphasized. Some of them even stated as “core value” of the companies. This is encouraging and demonstrate as a good start for the firms in the industry to follow.

Organizational culture is expressed in terms of community and voluntary services by employees, conserve the environment, which in turn shows that corporates have a positive image to the society. This is also a good demonstration. However, the interviewees served in the large corporates in the industry. For the small and medium sized enterprises (SMEs) in the industry, perhaps they lack resources to, especially motivating employees to commit in community services, to establish a better image to the society.

Risk management, in the findings, more concern in safety, security, and the environment. One of the interviewees expressed that it is better for setting rules to control the foreseeable risks to safeguard its interests in advance, rather than forced by government. This provides an insight for the industry. Management of corporate is better to review potential risks and suggest relevant ways to tackle any risks, instead of taking precaution after loss have incurred.

Transparency, as responded by interviewees, all of them expressed that stakeholders are informed on CSR and sustainability issues through company’s websites or printed version of related reports. Perhaps, in the long run, the relevant information is better disseminate to stakeholders proactively in various environmental friendly ways, such as email.

The external elements cover four domains, namely philanthropic responsibility, ethical responsibility, legal responsibility, and economic responsibility, which are adopted from Carroll’s [4], [5] CSR pyramid.

Philanthropic responsibility, from the views expressed from interviewees, involves employees in community and voluntary services. Some of the corporates carried out programmes such as internship, elderly home visits, English teaching to children, which are highly involve employees’ participation. They demonstrated innovative examples for other companies to follow. However, resources allocation needs to be considered when implementing these activities.

Ethical responsibility, from the views of interviewees, the corporates expressed this in terms of environmental protection, non-discrimination employment policy, etc. That is what should be done beyond the minimum requirements of the law and regulations. Education on this responsibility
should be promoted to small and medium sized companies in the industry, so that they can gradually improve the CSR level.

Legal responsibility, as emphasized by the interviewees, only concern about compliance. That is the minimum requirements by laws and regulation. Economic responsibility, need not to be mentioned, is the bottom line of corporate for survival.

To sum up, the eight elements help analyze internal and external of corporate on CSR and sustainability. Although the interviewees are from large corporates of the industry, their views may give insights for SMEs to carry out CSR and sustainability. Studies may be carried out to see whether the elements work on the SMEs in the logistics and shipping industry in Hong Kong.

CONFLICT OF INTEREST
The Authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS
Dr. Yuen and Dr. Ko conceived the research project. Dr. Yuen, Dr. Kan and Dr. Ko worked and implemented the project. All authors read and approved the final manuscript.

REFERENCE


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