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Corporate Social Entrepreneurship (CSE) Model for the Construction Industry of Sri Lanka

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Abstract: The construction industry is vital for Sri Lanka's economy and society, yet it poses environmental challenges with long-term impacts on both. To achieve social and economic development, sustainability is imperative. Corporate Social Responsibility (CSR) is widely acknowledged as an effective method for organizations to adopt sustainability within business operations. However, implementing CSR comes with various challenges. To overcome these hurdles and enhance CSR's impact, Corporate Social Entrepreneurship (CSE) has emerged as an effective approach, integrating entrepreneurial principles and innovation into CSR practices. A qualitative study with 17 semi-structured interviews conducted to understand prevailing CSE practices among Sri Lanka's construction business organisations and to develop a conceptual CSE model. Data analysis was based on transcribing, coding and categorizing. Prevailing CSE practices in construction businesses can be classified into five categories as: attitudinal perspective, innovative business strategies, awareness and commitment, stakeholder engagement, and research and development. To bridge the existing gaps in CSE, the proposed conceptual CSE model emphasise the importance of top management commitment, organisation-wide initiative actions required and effective monitoring and regulating. This model aims to promote CSE initiatives within construction organisations addressing micro level issues. Macro environmental gaps impend the sustenance of this CSE model. Thus, further studies are proposed to research on mitigating macro environmental gaps.

Keywords: sustainability, corporate social entrepreneurship, model, construction industry

1. Introduction

Construction business organisations continuously play a vibrant role in economic progression despite the criticisms and evidence of a wide range of irresponsible social and environmental business practices [1]. Corporate Social Responsibility (CSR) has appeared as a progressive approach in addressing the environmental and social impacts of business operations [1,2]. CSR goes beyond the legal obligations and incorporates ethically responsible business practices which are strategically executed to establish a sustainable business model [3,4]. Even though

CSR is widely acknowledged as a thriving concept, practical implementation encountered some shortcomings and challenges which affect the effective implementations of CSR. Cost involved in CSR activities, volunteerism in CSR approaches, selective focus of organisations when implementing CSR, non-reliable measurement and reporting methods, lack of integration to core business, insufficient stakeholder engagement, and incompetency in providing immediate benefits are among key challenges of CSR implementations which hinder the benefits of CSR [5]. Thus, an approach or model for wealth generation through

CSR practices to ensure the sustenance of CSR activities is required.

Corporate Social Entrepreneurship (CSE) concept has been identified as an effective approach to overcome the implementational challenges and shortcomings of CSR concept, by integrating entrepreneurial principles and innovation into the CSR implementations [6,7]. CSE is not another form of CSR, but rather a process that focused to expedite the CSR journey through strengthening and expanding the CSR developments [6,8]. CSE founded on the notion that an organisation can elevate its CSR by reshaping its operations encompassing key elements such as fostering an innovative and enabling environment, highlighting corporate values and purpose, and forgoing alliances to generate dual value [5,6,9].

While the presence of CSR endeavors within the Sri Lankan construction industry is apparent, it is notable that these initiatives exhibit characteristics of fragmentation, lack of organization, and absence of systematic integration, limiting their potential benefits [4]. CSE is a relatively new concept to Sri Lanka and thus it has not attracted significant research interest. Further, no records found on the research related to the CSE practices specifically in construction industry of Sri Lanka. Therefore, this paper aims to understand the prevailing CSE practices in the construction industry of Sri Lanka and to develop a CSE model to systematically guide the construction business organisations on value creation and wealth maximization through CSR implementations. The proposed conceptual CSE model will guide construction organizations in leveraged implementation of CSR, effectively and strategically, addressing the shortcomings and disparities in current CSR implementations.

2. Literature Review

2.1. Construction industry of Sri Lanka

The construction industry holds a vital importance in the Sri Lankan economy, serving the fourth largest sector. It has constantly contributed for 6-7% of the Gross Domestic Product (GDP) over the last decade with the industry encompassing a range of businesses including constructors, clients, material producers, professional services and construction enterprises, amongst others [10]. However, on the contrary, construction activities contribute for the adverse social and environmental impact in the forms of carbon emission, pollution (noise, air, water pollution) and generation of waste [10,11]. On account of aforementioned negative impacts, the pressure to adopt sustainable business practices has increased due to the rising need for sustainable development worldwide [12].

Furthermore, it confronts a multitude of distinctive challenges and complexities. The Sri Lankan construction sector is characterized by unique challenges such as political instability, rapid changes in the economic conditions, policies of the government, fluctuating workload, inequitable competition from foreign contractors, a dearth of skilled labor, and exorbitant costs associated

with skill development [11,13]. These issues have been identified as the primary obstacles impeding the progress of the industry. Thus, infusing sustainability to the construction industry of Sri Lanka is a must.

CSR has been identified as a revolutionary concept to promote sustainability in the construction industry through construction business organizations, while mitigating the negative externalities [1]. Integration of CSR practices is apparent in the Sri Lankan construction industry mainly in three categories as Business Process-Related, Business Environment-Related, and Philanthropic activities [14]. Even though CSR has been identified as a thriving concept, practical implementation of CSR encounter with many obstacles. Cost involved in CSR activities, volunteerism in CSR approaches and incompetency in providing immediate benefits are among key challenges of CSR implementations which hinder the benefits of CSR [15]. Furthermore, Fernando [16] reported that substantial number of small organizations in Sri Lanka do not see CSR as an important strategy.

On top of all these facts, for the sustenance of CSR in Sri Lankan construction industry, it is imperative to recognize the need for an approach or model that promote wealth creation through CSR initiatives.

2.2. Definition of CSE concept

Traditional business models of organisations, which prioritise profit, are challenged due to the continuously emerging social and environmental problems [17,18]. Consequently, an increasing number of organisations recognised their responsibility towards society and environment through their business practices. However, both these approaches have their limitations as they often prioritise either profit maximization or social value only. Means to accomplish the social mission and realise financial sustainability concurrently, has led the researchers and entrepreneurs to delve deeper [17,19]. CSE has been identified as a successful solution for creating a social and environmental value while maintaining profit [9,19].

CSE has been acknowledged as a significant process focused on empowering businesses to fruition their business practices towards more innovative and powerful forms of CSR [6,20]. Nikolov and Westergren [21], comprehend the CSE concept which offers innovative solutions for sustainability issues from business case to create shared value for both the organisation and society. This is where CSE goes beyond CSR, as it incorporates principles like innovation, entrepreneurial behavior, and risk taking [6,22,23]. Moreover, CSE has been identified as an approach which accelerates the CSR excursions aiming at financial and tangible gains while creating a social value [23,24]. According to Austin and Reficco [6] this concept has emerged and is built on three concepts: entrepreneurship, corporate entrepreneurship and social entrepreneurship. CSE is defined as:

...the process of extending the firm's domain of competence and corresponding opportunity set through innovative leveraging of resources, both within and outside

its direct control, aimed at the simultaneous creation of economic and social value [6].

Further to that Tasavori [25] defines CSE as “the process of discovering, defining and exploiting opportunities through corporate venturing (internal and external) and innovation as well as strategic renewal which result in social (and environmental) value creation” (p. 13). Dionisio and de Vargas [26] definition centers around the creation or advancement of new products, services, or market segments that cater to social needs, the innovation of processes or technologies with reduced harm, and the identification of business opportunities that lead to both profit and the resolution of social challenges. According to Schwab [27], CSE involves the conversion of socially responsible principles and ideas into tangible commercial value (p. 108). To accomplish this, forward-thinking organisations incorporate social entrepreneurship into their core operations by directing their research and development capabilities towards the creation of socially innovative products and services (p. 114). Thus, CSE is a concept focusing on integrating sustainability challenges into corporate strategies.

2.3. CSE dimensions

CSE involves multi-dimensional approach that extends beyond traditional business practice. These dimensions incorporate with various aspects reflecting the integration of social and environmental goals into the core business strategy. According to Zaefarian et al [22], these aspects considered as innovativeness, proactiveness, new-business venturing, or self-renewal together with social added value, empowerment, systemic change, or social innovation. In the study of Serai et al. [28], bring forwarded the concept of sustainable corporate entrepreneurship, which resonate closely with CSE, stated key dimensions as innovativeness, proactiveness and risk taking, competitive aggressiveness, autonomy and sustainability incorporating economic, environmental and social aspects. Nikolov and Westergren [21], further bring out key dimensions of CSE as maximizing positive impact, transformational innovation, integration to the core business, proactive approach, exploring new markets, stimulating entrepreneurial and innovative culture, meeting tomorrow’s challenges, stakeholder value, and culture of purpose. In the study of Urmanaviciene and Arachchi [29], identified the key dimensions of CSE as focus to create a positive social impact, use of innovative approaches, create sustainable solutions, financial viability, stakeholder engagement, and collaboration with other stakeholders to create a social value while maintaining financial viability and sustainability. Agrawal and Sahasranamam [9] stated that organisations take three key actions in their attempt to create CSE as resource commitments, creation of social innovation and new business models, and collaboration development with local stakeholders.

2.4. Benefits of CSE

CSE possesses a bundle of benefits. CSE encourages shared value creation while meeting societal and environmental sustainability demands and issues, making a positive social impact [30]. Since CSE involves proactive problem solving, it always addresses the root causes of problems in an innovative wealth creating manner [22]. CSE nurtures a culture of innovation, encouraging companies to develop new products, services, and business models that address social and environmental needs while remaining adaptable to changing market demands [22,29]. Demonstrating a dedication to social and environmental responsibility can bolster a company's reputation, leading to increased stakeholder trust and loyalty [31]. This commitment paves the way for them to differentiate themselves from the competitors and lead to enhanced brand reputation [32]. Studies illustrate that companies with a strong environmental and social focus demonstrate superior performance across various metrics, including productivity, innovation, market growth, return on investment, and overall profitability [33].

Globally, several CSE models and frameworks developed to guide the organisations towards thriving business approaches optimizing the profit and creating social values were found in literature, specifically in countries like India and Brazil [9,24]. Furthermore, innovative sustainable business models developed were observed in literature, encouraging organisations to integrate sustainable innovations into their business strategy [34]. Even though, CSE has been identified as an emerging concept in global context, the concept of CSE is less researched in Sri Lanka. The construction industry of Sri Lanka faces various social and environmental issues, including resource depletion, waste generation, pollution, and socio-economic disparities, through their business activities [35]. CSE can help to tackle these challenges by integrating sustainable practices, promoting responsible resource management, and addressing social needs while optimizing profitability and accelerating the CSR implementations [34]. Thus, this paper aims to study the prevailing CSE status of the construction industry of Sri Lanka and develop a CSE model leveraging the CSR practices and to guide the construction business organisations of Sri Lanka towards a profit maximizing and social value creating, and innovative business pathway.

3. Research Methodology

To develop a strategic CSE model for construction firms in Sri Lanka, a qualitative research method was utilized, specifically employing the grounded theory approach [36]. Since the study aimed to develop a CSE model through the exploration of existing practices and the best practices of CSE in construction firms of Sri Lanka, the unit of analysis was considered as the construction business organisations operate in the Sri Lankan construction industry. Out of all construction business organisations, sustainable entrepreneurs, building construction clients, consultants, contractors, and material manufacturers/suppliers were selected for the study. Sample selection was based on the purposeful sampling method, where the researcher selected

participants according to the needs of the survey [37]. Thereby, this study employed snowball sampling technique under purposive sampling techniques, as the deliberate sampling technique. The initial interviewees were selected by the researcher based on their involvement in CSR and CSE activities within the organisations operate in construction industry of Sri Lanka. Additionally their contribution to sustainable development initiatives also taken into consideration. These selected participants are then requested to recommend other individuals who also met the specific criteria for inclusion in the research. Consequently this approach facilitated to expand the participant pool up to 17 respondents.

The sample size of seventeen respondents were interviewed covering a range of small, medium, and large-scale organizations. A semi-structured interview guide was developed based on the literature to identify the elements of CSE practicing in the construction industry [4]. Interviews were terminated after data saturation [38]. The summarized profiles of the respondents can be found in Table 1.

Table 1
Respondents' Profile

Construction Business Organisation Category	Code	Number of Respondents	Designations
i. Sustainable Entrepreneur Organisations	SE	03	Owner, General Manager, Managing Director
ii. Client Organisation	CLI	02	Individual Clients
iii. Consultant Organisations	CNS	03	Managing Director, Chartered Architect, Consultant
iv. Contractor Organisations	CON	05	Assistant General Manager, Consultant Civil and Environmental, Project Manager, Director Engineering
v. Material Manufacturers / Suppliers (Sand, Cement, Electrical cables, Timber)	MS	04	Owner, Factory Production In-charge, General Manager, Assistant General Manager

The data collected from the interviews were analyzed using code-based content analysis to identify categories and themes. Then a conceptual CSE model was developed based on the identified categories.

4. Research Findings

4.1. Prevailing CSE status

The prevailing status of CSE among Sri Lankan construction organisations can be classified in to five key areas based on the transcription, coding and categorization of the collected data. The five key areas as: attitudinal perspective, innovative business strategies, awareness and commitment, stakeholder engagement, and research and development.

4.1.1. Attitudinal perspective

Attitudinal perspective refers to the attitudes, beliefs, opinions, values, viewpoints, responsible and ethical behaviour of organisations regarding CSE and its significant influential role in shaping the CSE driven business model among construction business organisations in Sri Lanka. Within the sample, mainly two attitudinal perspectives were identified as optimistic and pessimistic.

a) *Optimistic Attitude*

Economically established organisations, having a thriving culture along with committed top management, were shown an optimistic attitudinal perspective towards CSE implementations. CON_2, who is representing an economically established leading contractor organisation of the country, highlighted this view stating that: ‘...to thrive as an organisation, all the time a positive attitude, vision, mission and strategic leadership has to be maintained...’. This view has been validated by Austin and Reficco [6] stating that company values, vision, strategy, and top management leadership were considered as fundamentals in adopting entrepreneurial mindset and cultivating entrepreneurial environment. Effective leadership has seen as an essential factor for driving CSE within an organisation, as they play a crucial role in providing strategic direction, allocating resources, encouraging innovations, risk taking and creating collaboration among employees. CON_2 brought forward this fact elaborating that ‘...we have maximum management backup and freedom. They always keep trust in us (human resources). Therefore, we won’t fear to take risks...’. Once this fundamental entrepreneurial culture has been set, organisations seek to “bring down the castle walls” and shift towards a more open, inclusive, and collaborative environment [6]. It fosters a sense of belonging among employees who challenge the traditional boundaries of the organisation and lead towards more innovative and effective outcomes. Furthermore, this entrepreneurial culture fosters and nourishes Corporate Social Intrapreneurs, who are internal change makers, risk

takers and creators of innovative solutions within the business process [6]. Additionally, CON_2 confirmed that,

‘... as a result we have diversified our organisation to logistics industry. Now we have the South Asia’s largest warehouse. We have diversified to supply bottled water and renewable energy sector too. It helped us to survive in the recent economic recession. We have not terminated any employee of our organisation as a cost cutting strategy even though we hold the training and development budget and other welfare budgets, freeze recruitments etc....’.

Oladimeji and Udosen [39] externally verify this view, stating that business diversification is a strategic approach that organisations use to outperform competitors and to thrive in the market as it drives competitive advantage and synergetic market operations.

The study observed the incorporation of responsible and ethical behavior into the day-to-day operations of organizations. When analysing the waste management strategies employed by the organizations in the sample, CON_3, who is a medium scale contractor, discovered that they utilised solid waste materials such as concrete, bricks, and timber for backfilling purposes. Additionally, CON_5, who is a small scale contractor operating in construction industry, emphasised that wastewater treatment was an essential aspect of their operations. Interestingly, some of the organizations in the sample demonstrated a unique and innovative approach to waste management. For instance, one organization employed pigs to handle their food waste. This unconventional method was confirmed by CON_1, a large scale contractor, who humorously stated, “...we tried a new method for our food waste. We use pigs... (laughing)...”. CON_1 responded to the probing questions developed based on this statement and stated that ‘...we get these pigs from the pig farmers and we sell them back to these farmers once they grown. Interestingly, these pigs cause as a stress releasing mechanism for the employees who resides in the site during the project period...’ These initiations taken by the sample, well resonate with the key dimensions of CSE discussed by Urmanaviciene and Arachchi [29], as focus to create a positive social impact, use of innovative approaches, create sustainable solutions, financial viability, stakeholder engagement, and collaboration with other stakeholders to create a social value while maintaining financial viability and sustainability.

b) Pessimistic Attitude

Meanwhile, there were organisations bear a pessimistic approach when it comes to several CSE dimensions like risk taking, business diversification through entering new markets and developing new products, even though they are economically stable. CON_1, who is representing an economically established leading contractor organisation of the country, brought forward this view: ‘...our strategic diversification is very low, and we never take unnecessary

risk...’. When an organisation lacks strategic diversification and is reluctant to take risks, in other terms they rely heavily on traditional business only. Thus, they have limited capacity in business survival. According to Oladimeji and Udosen [39], business diversification is a win-win strategy that organisations use to survive and outperform competitors as it drives competitive advantage and synergetic market operations. CON_1 further stated that: ‘...we had to terminate 60% of employees due to this economic recession...’. When organisations are not tending to business diversification, they are compelled to implement cost cutting strategies with significant social implications, like employee termination, in order to endure challenging economic circumstances. Employee termination leads to adverse social impacts like unemployment, damaged mental and emotional well-being, social unrest, and discontent. According to MS_1, who is a sole sand supplier; ‘... I am engaged in the extraction of sand from riverbank areas as a mean to sustain my family's livelihood. I'm not really concerned about the environmental consequences. My main focus is on making money...’. SE_3, who is a small scale Eco Brick manufacturer and supplier stated that, ‘...We need to extract soil to obtain raw materials for Eco Bricks. But we are currently not conducting any evaluations regarding the sustainability of our soil suppliers...’. These statements highlight the restricted sense of moral obligation while conducting their business operations. The attitude of prioritising individual gains often leads to the neglect of sustainable practices or environmental wellbeing. This shortsighted approach undermine the long term health and sustainability of the planet. Mair and Noboa [40], externally verified that moral obligation is central to corporate social entrepreneurship social entrepreneurs are motivated by a need to be loyal to their own principles, socially responsible, and crave for the social and environmental justice.

Thus, it is evident that, construction organisations operate in construction industry of Sri Lanka, irrespective of their size, demonstrate varying optimistic and pessimistic behaviors in different situations.

4.1.2. Innovative business strategies

The organisations who are optimistic and proactive on self-renewal of their business were focused on different strategic approaches like business trend analysis, business diversification, partnership, and developing international relations. CON_3, who is a medium scale contractor, stated that: ‘...we know that we don’t have any local infrastructure projects for 10 years in the future due to the current political and economic conditions. We must face this reality...’. Being aware of the current challenges and accepting their true impact paves the path to seeking innovative solutions. CON_3 further stated that: ‘...to survive we must find out projects from overseas. So, we open design-wise, and consulting works and services for overseas projects, which is totally conducted through the online platform. Also, we have taken physical projects from three countries as Papua New Genia, Saudi Arabia, and

Maldives...'. These immediate strategic moves specially in an economic recession, that Sri Lanka face currently, results in ensuring the business survival and job safety. Heading to new markets always prioritize the job safety and thus organizations can foster a resilient and sustainable workforce, even in challenging economic circumstances while ensuring the business survival. Further, these approaches bring foreign currency to the country, leading to minimizing the trade balance, ensuring economic survival which will in turn have a direct impact on societal well-being and living standards. According to Austin and Reficco [6], collaborating with other organisations, civil societies and governments has been considered as a value generating strategy in CSE dimensions. It is also understood as a strategy that proactive organisations use to enter new markets and to develop new products. CON_2, who represent a large scale contractor organisation in the industry, highlighted that: '...we do business analysis domestically and globally to identify the potential investment opportunities. As a result, we diversified into the logistics sector and now we own the second largest warehouse in south Asia ...'. SE_1, who is a sole sustainable entrepreneur manufacturing cover blocks using plastic bottles, further stated that, '...due to the current economic crisis in the country, currently I have less amount of orders. As a coping up mechanism, I have started a YouTube channel to enhance the awareness of Sri Lankan construction clients. This has externally validated by Austin and Reficco [6], CSE expands the core purpose of corporations and their organisational values.

4.1.3. Awareness

Lack of awareness on the significance and the necessity of CSE evident within the sample. CON_1 stated that: '...finally, we decided to not to go forward. We shrunked our services in size, to survive...'. Unawareness along with reluctance to take risks, especially among top management, leads to lesser commitment of organisations towards to CSE. This is one of the main implementational barriers of CSE. For effective implementation of CSE, it is essential to have top management commitment to the social mission, foster entrepreneurial thinking among employees, align company structure and processes towards social value creation, and cultivate a robust value-based organizational culture [9]. Furthermore, since CSE implementations depend on the free choice of organisations, it serves as a voluntary stand up of organisations. According to Tamvada [41], responsible corporate behavior in the developing world cannot be left to the voluntary discretion of businesspeople and should be addressed through stricter regulation.

4.1.4. Stakeholder engagement

The genuine commitment and collaboration of internal and external stakeholders of the organisation plays a vital role in implementing CSE within the organisations. The statement of CNS_1: '...clients are reluctant to use recycled materials...' shows the pessimistic indication of clients encountering alternative materials for their projects. Clients play a significant role in the construction industry,

as they are the demand creators and investors in construction projects. Meanwhile, CLI_1 stated that: '...certain designers prioritize creating a masterpiece design without considering the necessary flexibility to meet our specific requirements. ...'. Professional negligence among the construction professionals in the industry heavily impacts the trust building among stakeholders. Jabłoński and Jabłoński [42], stated that trust is an essential factor in building up socially responsible innovative business models and it stabilizes the organisation and its business model. CNS_3 further mentioned: '...one key challenge in implementing sustainability concepts to construction industry is the tendency to diffuse responsibility by passing it to another...'. These statements show the poor collaboration among stakeholders. Passing the ball attitude is considered as a major threat in promoting and encouraging sustainable initiations into the construction industry [12]. The interdependent nature of the construction industry can hinder other stakeholders' sustainability initiatives if one stakeholder maintains a pessimistic attitude, thereby limiting the collective progress in implementing sustainability practices throughout the business process [4].

4.1.5. Research and development (R&D)

According to Austin and Reficco [6], entrepreneurship revolves around discovering innovative methods to generate value. R&D lays the foundation to discover innovative solutions for value generation while uplifting societal standards. Within the sample it was noted that economically established large-scale organisations actively engaged in R&D. According to the statement of CON_3, who is a medium scale contractor, '...not only a separate division for R&D, but we do also have R&D units in project level as well, which we termed as Circular Improvement Cycles (CIC), to generate innovative ideas within the project level...'. CON_2, who is a large scale contractor, also brought forward a similar practice through his statement: '...collaborating with engineering students at universities, we are carrying out industrial practical research. We have successfully conducted research on technical innovations, and we are currently practicing those in our projects...'. SE_1, who is a sole sustainable entrepreneur manufacturing cover blocks using plastic bottles, brought out that '...I myself carrying out many testing to enhance the quality of this cover block...'. According to De Massis et al. [44], organizations striving to develop innovative products and services must allocate time, resources, personnel, and capital to the endeavor. Within the same sample it was evident that small and medium-scale organisations who are struggling with economic conditions and who are in survival mode have not shown any commitment to or interest in R&D. Ortega-Argilés et al. [45] argues that SMEs can implement several strategies to contribute R&D like i) collaborate with established organisations and research institutions, ii) explore alternative sources of financing i.e. venture capital, angel investors, public funding programs, iii) focus on improving the innovation management practices, iv) target specific market segments where their R&D efforts can have

a significant impact. Supporting to that view, Athapaththu and Karunasena [12], highlighted the necessity of changing the mind-set of people to look at the whole life cycle cost rather than solely focusing on low cost upfront.

5. Discussion

Figure 1 presents the conceptual framework developed to promote CSE initiations within the construction business organisations based on expert opinions of Sri Lanka. The findings centered on transcribing, coding, and categorisation, revealed three areas to be addressed when developing the CSE framework: top management commitment, implementation stage and monitoring and regulating stage. The implementation stage was further divided into three sub-categories: organisational wide initiation actions, micro level, and macro level.

5.1. Top management commitment

Successful implementation of CSE is always based on genuine top management commitment, active involvement, and visionary leadership. Top management commitment to the CSE fosters an organisational environment that encourages innovative entrepreneurial thinking among employees. It aligns the company's structure and business processes towards the creation of social value and cultivates a robust, value-based organizational culture [9]. Furthermore, exemplar of top management behaviour reassures strategic decision-making, encourages risk-taking, and boosts employee motivation, leading to effective implementation and a solid ethical foundation throughout the organization [45]. Risk-taking has considered as a significant success factor in CSE moves of an organisation entails a willingness of top management to engage in bold actions, such as exploring unknown markets, dedicating significant resources to ventures with uncertain outcomes, and borrowing heavily to pursue opportunities [46]. The proactiveness of top management is another key determinant of CSE success stands for an opportunity-seeking and forward-looking perspective, characterized by the introduction of new products or services ahead of competitors [46]. It involves anticipating future demand, driving change, and shaping the environment to stay ahead in the market which requires strategical approaches. Once visionary top management commitment has established, it boosts up the employee motivation, and manure the ground for Corporate Social Intrapreneurs (CSI), the internal champions, persistently advocating for the incorporation of social and business value as a fundamental principle within the company.

Further to that, inculcating CSE to organisation's vision, mission and culture is essential for effective implementations, which cannot be done without having a strong voice of top management. Once CSE is integrated to the vision, mission and culture of the organisation, it plays a vital role in shaping up the organisations identity and long term direction. Further, this integration provides clarity regarding the purpose of the organisation's existence. A well-defined vision and mission act as guiding principles

for decision-making [24]. When CSE is aligned with the company's purpose, it becomes a central consideration in strategic choices, ensuring that sustainability and social responsibility are integrated into business practices in value creation. Moreover, CSE implementations require sustained efforts over time. A well-established vision, mission, and company culture help in maintaining a long-term commitment to sustainability and social responsibility, even during challenging periods. This develops a positive reputation and trustworthy brand image. CSE implementations often require innovative solutions and adaptation of business processes. A company culture that promotes creativity and a shared dedication to sustainability will adopt a reassuring environment for such initiatives [24,47]. Thus, well-established vision and mission provide the necessary direction, alignment, and motivation needed to embed sustainability and social responsibility into the core of the organization's operations and decision-making processes.

5.2. Implementation stage

The implementation stage demonstrates how construction business organizations can integrate CSE into their operational activities. A well-organized approach at this stage is crucial to ensure the seamless integration and successful operationalisation of CSE within the construction business organizations.

Enforcement of CSE involves formulating strategies, policies, guidelines, practices, and structures within an organization to ensure that social and environmental goals are integrated into the business strategy and operations. Standards and guidelines provide clear expectations and directions for employees and stakeholders regarding social entrepreneurship initiatives. Formulating a thorough long-term strategy that aligns the organization's social goals with its business objectives is necessary [21]. This may involve identifying key areas for impact, setting targets, and developing action plans. Having organizational wide policies, guidelines, practices, and structures in place reinforces the organization's values and mission by formalising its dedication to social and environmental goals. It ensures that CSE is not just a sporadic effort but an integral part of the company's identity and purpose. Policies and guidelines help in mitigating the potential risks associated with CSE initiatives [45]. They ensure that CSE projects undertaken by the organization are well-researched, comply with relevant laws and regulations, and consider potential negative impacts to avoid unintended consequences. Moreover, implementing standards and guidelines within the organization enhances transparency and accountability, leading to increased trust from stakeholders, including customers, investors, employees, and the community. When stakeholders see a commitment to responsible business practices, they are more likely to engage with the organization positively. CSE is most effective when integrated into the core business strategy. Policies and guidelines help to embed social responsibility into the organization's DNA, ensuring that it remains a

priority for the long term, regardless of changes in leadership.

A company value system is another crucial aspect for corporate social entrepreneurship implementations since it provides the foundational principles and beliefs that guide the organization's actions and decisions in the realm of social responsibility [47]. A value system sets the ethical framework for the organization, defining what is right and wrong in the context of social and environmental impact. It helps ensure that the company's social entrepreneurship initiatives are aligned with its core principles. A value system provides consistency and focuses on the organization's CSE efforts. It helps employees understand the purpose behind the initiatives and ensures that actions are coherent and harmonised with the overall mission. Moreover, it encourages a thriving culture of innovation and creativity, which paves the foundation for research and development in order to find out innovative solutions for business matters [6]. A clear value system build trust among stakeholders, which leads to better problem-solving, alignment and support to achieve organization's goals, and smooth relationships in implementing CSE initiations [48]. A value system that incorporates CSE helps the organization to navigate global challenges and expectations. In an interconnected world, companies are increasingly judged not only on their financial performance but also on their social and environmental contributions.

Apart from that, human capital development plays a role in the success of CSE initiations. Employees require strong set of knowledge, skills and understanding in order to involve with the CSE initiatives like new product development, transformational innovations, exploring new markets, create social innovations and new business models, and to develop collaboration with local stakeholders [25]. Thus, organizations must have properly designed human capital development programs align with the CSE strategy to enhance the employees' knowledge, skills and understanding along with creativity and innovations. Moreover, it enriches the development of intrapreneurs within the organization while creating a thriving CSE culture [6].

According to Agrawal and Sahasranamam [9] the evaluation of CSE outcomes goes beyond performance measures, necessitating a contextual understanding that considers both explicit and implicit impacts. Incorporating performance measurement indicators for both economic and social value generated is essential in ensuring the success of CSE initiatives. By quantifying the outcomes of the CSE initiatives, organizations can gauge their effectiveness and identify areas for improvement. Moreover, aligning the incentive and reward system with these indicators is instrumental in motivating employees and stakeholders to actively contribute to social impact. When individuals are recognized and rewarded for their efforts in generating positive economic and social value, it fosters a culture of purpose-driven work and enhances engagement. By coupling performance measurement indicators with

appropriate incentives, organizations can strengthen their commitment to social responsibility and drive sustainable change in both their financial performance and social contributions. This integrated approach empowers organizations to create a lasting and meaningful impact on society while maintaining a thriving business.

5.3. Monitoring and regulating stage

Monitoring and regulating corporate social entrepreneurship implementations are vital for responsible and effective business practices. They enable the organisation to assess its impact, improve its efforts, and demonstrate its commitment to social and environmental responsibility to stakeholders [6]. Monitoring and regulation help ensure that the organisation's CSE initiatives comply with relevant laws, regulations, and industry standards. This is crucial to avoid legal and reputational risks associated with non-compliance. Furthermore, revisiting the established policies, guidelines, practices established to promote CSE ensures the accountability and transparency of the organisation. Through regular monitoring, organisations can identify the areas for improvement, which allows organisations to action out on necessary adjustments, reallocate resources, or formulate and implement new strategies for improved effectiveness in implementation. Monitoring and regulating depicts the organisations responsible commitment to CSE and it strengthens the relationship with clients, consultants, contractors, material manufacturers/suppliers and sub-contractors.

The proposed CSE model in figure 1 focuses solely on the micro level concerns, specifically those that can be effectively resolved within the construction organizations. Overall, this model provides a framework for construction companies to integrate social and environmental considerations into their business strategies and operations. By focusing on micro level concerns that can be effectively resolved within the construction organizations, this model enables construction companies to make a positive impact on society and the environment while also driving business growth and competitiveness.

6. Challenges in Implementing the Proposed CSE Model

Successful implementation of the above proposed CSE model within the Sri Lankan construction industry can present various challenges.

The profit-making aspect has traditionally been the primary focus of construction organizations, often overshadowing social and environmental considerations. Since the above proposed CSE model represents a voluntary endeavor undertaken by construction organizations to address social and environmental issues while simultaneously pursuing their business objectives, the effective execution of the CSE model solely rests within the control of construction business organizations. Further, the adoption of the

proposed model may be hindered due to the limited awareness of the positive impacts of the CSE concept, which is still relatively less popular concept in the Sri Lankan construction industry. The construction industry in Sri Lanka is highly competitive, with organizations striving to complete projects within tight deadlines and limited budgets. This focus on efficiency and cost-effectiveness may make it difficult for organizations to allocate resources and time for CSE initiatives, unless they consider CSE as a strategic approach. The additional financial burden of implementing such initiatives can also be a restrictive for organizations, especially smaller ones with limited financial capabilities.

CSE in the construction industry of Sri Lanka requires a thoughtful and strategic approach that involves various institutional initiations. Institutional support and coordination were found to be essential for creating a conducive environment for CSE initiatives, with government involvement seen as a common success factor in other countries. However, the existing regulatory framework in the country may not provide the necessary support or encouragement for these initiatives to flourish. While all organizations complied with the established legal framework, challenges arose from scattered guidelines and outdated regulations, hindering effective CSE implementation. One of the major challenges faced by the construction industry in Sri Lanka is the absence of unambiguous guidelines or policies that promote socially responsible practices. Without clear directives from the government or regulatory bodies, companies may struggle to understand the expectations and requirements for implementing CSE initiatives. This lack of clarity can create confusion and uncertainty, discouraging companies from actively participating in such initiatives. Furthermore, the absence of appropriate regulations and incentives can also hinder companies from perceiving the benefits of investing in CSE initiatives. Without tangible rewards or recognition for their efforts, companies may view these initiatives as additional costs rather than opportunities for long-term sustainability and positive impact. This perception can discourage companies from allocating resources and efforts towards CSE initiatives, as they may prioritize other aspects of their business that offer more immediate returns. Additionally, the lack of support and encouragement from the regulatory framework can also lead to a lack of awareness and understanding among construction industry stakeholders. Without clear guidelines or policies, stakeholders may not fully comprehend the importance and potential benefits of CSE initiatives. This lack of awareness can further hinder the growth and adoption of socially responsible practices within the industry.

To address these challenges, it is crucial for the regulatory framework in Sri Lanka to provide clear and unambiguous guidelines and policies that promote and incentivize CSE initiatives. These guidelines should outline the expectations and requirements for construction organizations to engage in socially responsible practices, as well as provide incentives such as tax waive offs or recognition for their

efforts. Through that the regulatory framework can create a conducive environment for companies to invest in CSE initiatives and contribute to the overall sustainability and well-being of the construction industry in Sri Lanka.

7. Recommendations for Regulatory Framework Initiations

In order to accomplish a prosperous execution of CSE within the construction sector of Sri Lanka, a thoughtful and strategic approach along with multitude of pivotal measures and tactics that involves various institutional initiations requires.

First and foremost, the Sri Lankan government should play an essential dominant role in establishing regulations and incentives that encourage CSE practices in the construction industry. This can include creating supportive policies and regulations, tax incentives for socially responsible projects, preferential treatment in government contracts, and the establishment of a regulatory framework for CSE. Establish mechanisms for monitoring and reporting the social and environmental impact of CSE projects in construction is a must. Transparent reporting can help demonstrate the positive outcomes of these initiatives is equally important. Responsible institutions of construction industry needs to facilitate in encouraging construction companies to collaborate with one another, sharing resources, knowledge, and best practices. Building a network of CSE practitioners can drive innovation and scale up CSE efforts in the industry. Construction industry related governing institutions like Construction Industry Development Authority (CIDA), Green Building Council of Sri Lanka, Chamber of Construction Industry Sri Lanka and National Engineering Research & Development Centre (NERDC) needs to collaborate to create industry-specific initiations for CSE through establishing guidelines, best practices, offering training programs and creating a national platform sharing experience and knowledge. Furthermore, these institutions can develop industry-specific certifications or standards for CSE in construction. These can be used to measure and certify the social and environmental impact of construction projects, giving consumers and stakeholders' confidence in a company's commitment to CSE. Establish research centers or innovation hubs focused on sustainable and socially responsible construction practices is essential. These centers can facilitate research, development, and dissemination of cutting-edge technologies and methods for CSE in construction.

In addition to that, universities and technical colleges should incorporate CSE principles into their construction-related curricula. This will help prepare the next generation of professionals with the knowledge and skills needed for socially responsible construction practices. Apart from that, financial institutions and investors can support CSE initiatives by offering financial products and services tailored to socially responsible construction projects. This can include low-interest loans, venture capital for startups, and impact investing opportunities [49]. NGOs and social

enterprises focused on sustainable development and social impact should collaborate with construction companies. They can provide expertise, connections, and resources to help companies implement CSE projects. They can also create a bridge between construction companies and local communities, civil society organizations, and other stakeholders to raise awareness and promote the CSE concept in construction. Public support and buy-in are crucial for the success of CSE initiatives.

Implementing CSE in the construction industry of Sri Lanka requires a comprehensive and coordinated effort involving government, industry associations, educational institutions, financial institutions, and civil society. This approach can help to create an influential directive to create a supportive ecosystem that promotes responsible and sustainable construction practices while also delivering social and environmental benefits.

8. Conclusion

The study focused on the examining the status of CSE within the construction industry in Sri Lanka, and to develop a CSE model to guide the construction organisations on effective CSE implementations. The analysis involved data transcription, coding, and categorization, revealed two key areas that demand attention in the development of a conceptual CSE model for construction business organizations in Sri Lanka.

At the micro level, the study identified five sub-areas critical for CSE implementation: attitudinal perspective, innovative business strategies, awareness and commitment, stakeholder engagement, and research and development. The attitudinal perspective of organizations towards CSE was divided into optimistic and pessimistic, with economically established organizations displaying an optimistic outlook due to committed top management and an entrepreneurial culture. Conversely, some organizations demonstrated a pessimistic approach, avoiding risk-taking and limiting business diversification, which negatively impacted their ability to adapt and survive in challenging economic conditions.

Innovative business strategies were observed among proactive organizations, embracing business trend analysis, diversification, and international partnerships to ensure business survival and job security. Awareness emerged as a significant challenge, with some organizations lacking an understanding of the significance and necessity of CSE, particularly among top management. Stakeholder engagement highlighted the need for collaboration and commitment from both internal and external stakeholders to drive successful CSE implementation. However, reluctance among clients and professional negligence among construction professionals posed obstacles in achieving sustainable outcomes. Lastly, research and development played a crucial role in fostering innovation and value creation among economically established large-scale organizations but was lacking among smaller organizations struggling with economic conditions.

The conceptual model developed based on expert opinions addressing the micro level issues only, which can be solved within the construction organisations. The conceptual CSE model highlighted three key areas for promoting CSE initiatives within construction business organizations: top management commitment, implementation stage, and monitoring and regulating stage. Top management commitment playing a vital role in fostering an organizational environment that encourages innovation, risk-taking, and employee motivation, leading to effective CSE implementation. The implementation stage addressed integrating CSE into the organization's vision, mission, and culture, enforcing CSE policies, guidelines, and practices, and establishing a strong value system aligned with social responsibility. Lastly, the monitoring and regulating stage emphasized the importance of evaluating CSE outcomes beyond performance measures and aligning incentive and reward systems with economic and social value generated.

In conclusion, this study sheds light on the complexity of CSE implementation in the construction industry in Sri Lanka. It underscores the significance of addressing attitudinal perspectives, fostering innovative business strategies, creating awareness and commitment, promoting stakeholder engagement, and investing in research and development at the micro level. At the macro level, it emphasizes the need for an effective legal framework, institutional support, and economic well-being to drive successful CSE initiatives. The conceptual framework developed provides a comprehensive guide for construction business organizations to navigate the challenges while overcoming micro level issues and embrace opportunities in implementing CSE, fostering a culture of social responsibility and sustainable entrepreneurship within the industry. However, the adoption of this framework may face limitations due to the perceived absence of national level regulatory enforcement and the voluntary nature of CSE implementations. Hence, future research studies are proposed to develop guidelines to the government and related regulating institutes to establish a 'Strategic national platform' to ensure sustainability in construction industry of Sri Lanka. Moving forward, organizations and policymakers in Sri Lanka must collaborate to create an enabling environment that encourages CSE, ensuring the industry's long-term resilience and positive impact on society and the environment.

Ethical Statement

This study does not contain any studies with human or animal subjects performed by any of the authors.

Conflicts of Interest

The authors declare that they have no conflicts of interest to this work.

Data Availability Statement

Data available on request from the corresponding author upon reasonable request.

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Appendix

Figure 1
Conceptual CSE Model

