

Green Innovation and Corporate Social Responsibility: Pathways to Enhanced Firm Performance

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Abstract: In recent years, with people's concern for the environment, the intersection of green innovation, corporate social responsibility (CSR), and market competitiveness becomes more important in the minds of entrepreneurs and consumers. This study explores practices of green management and corporate social responsibility (CSR) and how they improve a company's competitiveness together, with a focus on the Amara Hotel in Singapore. The study use the research of mix methods approach, combining literature and case studies to analyze the relation between green action, CSR and business performance, with primary data from the Amara Hotel case study and management's survey, and secondary data from Statista and other real case. The findings confirm the positive correlation between effective green management practices and enhanced CSR initiatives and firm performance. Such developments lead to a more permanent future for the company in the long term.

Keywords: Market Competitiveness, Corporate Social Responsibility (CSR), Firm performance, Green Innovation, Sustainability.

1. Introduction

A noticeable trend that can be sensed in recent years is that the world has begun an ecological awakening and sustainability has become mainstream as the consumption power of Generation Z has increased and the Internet age has evolved. In addition, a concern for the environment is becoming a core consumer value and more and more accountabilities will be demanded from brands [1]. Slogan like “degradable plastics”, “organic cotton”, and “eco-friendly” were marketing gold and every famous company or brand has carved out its own niche for sustainability signifying a brand’s commitment to environmental responsibility. As a result, entrepreneurs are responding to environmental, social and governance (ESG) standards and their consumers by adding the fulfillment of social responsibility and green development to the development strategies of enterprises. The implementation of ESG not only has important strategic significance for themselves, but also has a positive impact on society and the environment, which can improve the comprehensive competitiveness of enterprises and contribute to the global sustainable development.

This page is aims to discuss the impact of green innovation and corporate social responsibility (CSR) implementation by enterprises on their performance and market competitiveness, to understand the strategies for green governance and sustainability and the advantages brought to the company. And provide entrepreneurs with detailed academic study by providing case studies and

theories to analyze how corporate social responsibility can be implemented as a strategy to improve company performance.

Study on corporate greening and CSR for firm performance can diversify the existing operation and strategy theories and enhance the practicality and reliability of the theories through cases and analyses. This kind of research can provide enterprises with good decision-making support and give entrepreneurs some content to refer to align CSR with their business models, which can better help long-term development and benefit society.

2. Overview of CSR

Many existing research explain the importance of CSR, the link between green innovation and business development. In fact, entrepreneurs have been aware of the need for CSR from a very early stage, and the state has enacted relevant regulations. For example, proposed UK legislation would require that all publicly traded companies show information about ethical, social, and environmental risks in their annual report [2]. These pressures are a clear indication of the demand society places on corporate CSR and highlight the enormous risks that can be faced by companies whose behavior is deemed unacceptable. At the same time, research has also shown that CSR has a positive correlation with business performance and that it is difficult for entrepreneurs to share the value of responsibilities, such as green governance, with society, because of the need to integrate CSR into the core frameworks within which it guides its business strategy [2-3].

2.1. Green Innovation

Green Innovation refers to the development and implementation of new products and technologies that significantly reduce environmental impacts or enhance sustainability [4]. It focuses on achieving economic growth and development while reducing pollution, and mitigating climate change. Green innovation including sustainability technologies, Eco-friendly products, renewable energy etc.

2.2. Corporate Social Responsibility (CSR) and relation to green innovation

Corporate Social Responsibility (CSR) refers to the idea that businesses should operate based on principles and policies that positively impact society and the environment. Traditionally, CSR has been divided into four categories: environmental, philanthropic, ethical, and economic responsibility [5]. Research explored CSR influences green innovation and some suggests a positive relationship, CSR can promote green innovation by approaches firms make sustainable strategies and exploring eco-friend technologies [4-6].

2.3. Firm performance

Company performance is more than just cash flow status. Lebars and Euske provided a framework to explain company performance, which highlighting performance is a both set of financial and nonfinancial indicators that offer information on the level of accomplishment of objectives and results, as well as performance is dynamic that need judgment and interpretation [7]. And therefore we can understand, CSR and green development can potentially be very helpful for company performance, such as operational efficiency, cost savings, risk management and enhancement of long-term growth.

3. Case study-Amara Hotels & Resorts

3.1. Amara Hotels & Resorts

Amara Holdings is a hotel and property group based in Singapore, originally part of the Teo Teck Huat Group founded in the 1930s. It opened Amara Hotel in 1986, aiming to attract business travelers, and has since expanded to include hotels like Amara Sanctuary Resort Sentosa. The group emphasizes sustainability and corporate social responsibility (CSR), integrate these values into its hotel to stand out in the market [8].

3.2. Strategies

3.2.1. Green Shop

Minibar items are often priced higher than those sold outside, and savvy shoppers tend to realize this. The Group found that by dismantling the minibar at Amara Singapore, it was possible to reduce the number of staff by one and lighten the workload of two other employees. The savings amounted to about US\$20,073 in annual salary [8]. As a result, the Group decided to remove the minibar provided by the hotel and replace it with a green store in the lobby, which also serves as a souvenir store selling local specialty products made from recycled materials. The green store will also offer more eco-friendly options for products, such as replacing mini-drinks with half-bottle drinks. Thus the green innovation of this move is in the removal of the minibar, the discontinuation of the related products OR raw materials, and the promotion of products made from recycled materials.

3.2.2. Changes for Energy-saving

The Group employs an eco-digestion system that converts food waste into liquid nutrients for landscaping and plant growth, thereby avoiding the use of chemical fertilizers and significantly reducing carbon footprint and waste emissions. And since 2017, the Group has adopted a zero-inventory business model and launched a recycling green initiative with several suppliers to minimize waste.

In addition, in terms of energy consumption, the hotel minimizes daily energy consumption through measures such as installing lighting and escalator sensors and equipping air conditioners and elevators with sleep modes. In addition, the Group replaced a large number of chillers with 1.0 energy efficiency rating and replaced them with new chillers with 0.65 energy efficiency rating. Following the replacement, daily water consumption was reduced by 10% [8].

3.2.3. Corporate Social Responsibility activities

Amara holding had been doing many charities. The Group donates to overseas orphanages and provide meal to Sunshine Welfare Action Mission (SWAMI), a local elderly home in Singapore. They also engage their staff in private sector volunteering activities and organize hotel experiences for the handicapped during covid-19. Teo's main principle in developing these CSR programs was to make use of the hotel's assets, including its personnel's time, talents, and equipment, in addition to financial donations [8].

3.3. Analysis

Incorporating sustainable development into a company's core strategy, rather than treating it as an add-on, improves business performance that includes intangible processes that interact with

competitiveness, efficiency and effectiveness [9]. The same is true for predicting the intangible benefits of Amara development.

In the context of increasing environmental awareness, by implementing measures such as LED lights, more energy efficient cooling towers, and automated systems, Amara Hotels & Resorts demonstrated its commitment to the environment as a way of attracting eco-conscious consumers, thus enhancing the brand image. Secondly in terms of market differentiation, Amara Hotels gained a competitive advantage by reducing energy consumption and carbon emissions, thereby increasing market share and customer loyalty and further strengthening their market competitiveness. In terms of efficiency, companies can save resources and operational costs through green governance, such as Amara Hotels' automated air conditioning system and water management, as well as implementing tools such as zero inventory management and waste recycling management to improve operational efficiency. However, these need to be considered in terms of upfront investment and planning risks. In terms of effectiveness, the development of CSR will undoubtedly improve staff cohesion and customer satisfaction. Offering guests the option of whether or not to conserve energy not only improves the customer experience, but also communicates the company's social responsibility. Companies and brands that aim for sustainability and CSR can invest in sustainability-related technology and infrastructure upfront and engage employees and customers through training and incentives.

4. Challenges and Barriers

The potential challenges are also huge. On the one hand, the initial cost of implementing it is huge. The implementation of green technologies and practices requires significant upfront investment. The key to the difficulty is convincing stakeholders that the long-term benefits can far outweigh the short-term costs, which may be unacceptable to entrepreneurs who just want to scratch the surface. On the other hand, marketing education and promotion are also important factors, and the company needs guests to be aware of the sustainable practices featured and make sure they recognize the initiatives. This is not difficult in today's climate, but there are a lot of details to implementing it, such as Amara needing to overcome any inconvenience guests may experience when they don't have traditional amenities like minibars.

4.1. High Initial Investments

The upfront costs of green technologies are often high, for example, the cost of renewable energy systems (such as solar panels or wind turbines), as well as, upgrading production processes to reduce emissions or implementing a waste management system will also require significant funding.

While the initial costs can be daunting, a thorough cost-benefit analysis brings considerable long-term benefits. Companies that invest in sustainable systems typically see a reduction in variable costs over time, along with improving operational efficiency. Top groups such as Siemens, Ikea, Tesla, and many others that have developed sustainability are cases in point, illustrating the value of long-term gains with further capitalization [10].

4.2. Resistance

Within a business, employees and management may resist change because of concerns about occupational safety, increased workloads or unfamiliarity with new technologies. Companies may face resistance from employees who are used to traditional practices. Therefore, relevant training is required for employees to ensure successful completion of tasks. Externally, investors, customers and other external stakeholders may also resist green initiatives. Investors may be concerned about the

short-term impact on profitability, and customers may be skeptical of higher prices for sustainable products, a problem that every company undergoing any form of change encounters.

For example, in 2014, Unilever launched its Sustainable Living brand, which includes well-known brands such as Dove, Herman's and Dometic. In the early days of the brand launch, the market was skeptical. However, as the brands have been running, the current brands have proved the viability of sustainability through actual profitability results and profitability to the business [11]. Over the past four years, these brands have grown 46% faster than the rest of the business and accounted for 70% of Unilever's turnover growth [12].

4.3. Region differences and Market Conditions

Attitudes towards the environment vary considerably from country to country, depending on the culture of the country in which they are embedded, and there are different regulations and standards for both the environment and corporate social responsibility (CSR). Although cultural differences may influence people's views on CSR and green initiatives, a larger proportion of the world's countries are currently more focused on economic growth than on environmental management. In more environmentally conscious regions, it may be easier for companies to market sustainable products. Conversely, in markets that are more price-sensitive, it may be difficult for companies to justify a premium for green products.

4.4. Technological Challenges

The technologies required for sustainable development require a high level of technical support for their development and upfront use, and such technologies are usually in the hands of large corporations, making cutting-edge green technologies not readily available to all companies. For small and medium-sized enterprises (SMEs), advanced waste management systems or renewable energy technologies are out of reach. In a 2020 survey of EU SMEs, 27% of participants reported a lack of capital, 23% reported a lack of awareness of integrating sustainability into their business model, and 15% reported a lack of skills [13].

In addition, the integration of new technologies with existing systems is difficult and the process can be both complex and disruptive. Replacing old manufacturing plants with new energy-efficient machinery requires careful planning and execution to avoid operational disruption.

5. Future Trends and Predictions

Growing environmental concerns in recent years have led to a growing acceptance of topics such as green, with concepts such as ESG and the green economy being linked to the lives of every ordinary person.

The development of emerging technologies, including Artificial Intelligence (AI), the Internet of Things (IoT) and Blockchain, continues to expand the scope of their application in sustainability, such as AI to optimize resource management, and IoT devices to monitor environmental impact in real time. And these new technologies provide companies with easier and greener channels and ways to deliver from production to delivery. In terms of new energy development, the optimization of energy storage systems has led to the gradual replacement of fuel vehicles with new energy vehicles, thereby reducing reliance on traditional energy sources and carbon emissions, in addition to reducing the reliance on fossil fuels for industrial and agricultural farms.

Society's focus on sustainability is also making it mandatory for companies to provide their social responsibility reports and increase transparency of information. Companies need to disclose their environmental, social and governance performance in order to provide stakeholders with insight into their sustainability efforts.

6. Conclusion

Green innovation is characterized by the development of eco-friendly products and sustainability. As businesses adopt green practices, they are expected to reduce energy consumption, waste production, and overall environmental footprint. Companies such as Amara Hotels, through the implementation of measures such as energy-efficient systems and zero-inventory models, exemplify how sustainability can be perfectly integrated into business operations, resulting in tangible benefits.

The integration of green innovation and corporate social responsibility (CSR) into business core strategies is no longer only an option, but a necessity for companies striving to improve performance and competitiveness in marketplace. This study demonstrates through literature reviews and case studies such as Amara Hotels that green initiatives can significantly increase operational efficiencies, cost savings, and improved brand image.

The limited scope of this study, which focuses on the Singapore region and the hotel industry, may not be fully representative of trends in the global hotel industry. Future research could cover different regions and industries to verify the generalizability of the findings. In addition, more quantitative research methods are recommended to enhance the empirical basis of the findings.

References

- [1] Statista, *Consumer trends 2023: Sustainability edition*, <https://www.statista.com/study/125082/consumer-trends-2023-sustainability-edition/>
- [2] Porter, Michael E., and Mark R. Kramer. "The link between competitive advantage and corporate social responsibility." *Harvard business review* 84.12 (2006): 78-92.
- [3] Martinez-Conesa, I., Soto-Acosta, P., & Palacios-Manzano, M. (2017). Corporate social responsibility and its effect on innovation and firm performance: An empirical research in SMEs. *Journal of cleaner production*, 142, 2374-2383.
- [4] Wan, J.; Jin, Y.; Ji, H. Corporate Social Responsibility and Green Innovation: The Moderating Roles of Unabsorbed Slack Resources and Media Evaluation. *Sustainability* 2023, 15, 4743. <https://doi.org/10.3390/su15064743>
- [5] Stobierski, T. (2021). What is corporate social responsibility? 4 types. *Harvard Business School*, April, 8.
- [6] Le, T. T., Tran, P. Q., Lam, N. P., Tra, M. N. L., & Uyen, P. H. P. (2024). Corporate social responsibility, green innovation, environment strategy and corporate sustainable development. *Operations Management Research*, 17(1), 114-134.
- [7] Lebas, M., & Euske, K. (2002). A conceptual and operational delineation of performance. *Business performance measurement: Theory and practice*, 65, 79.
- [8] Amara Holdings. (2021). How Amara Hotels Builds Its Competitive Advantage. [PDF] Available at: [URL] (Accessed: Date).
- [9] Verboncu, I., & Zalman, M. (2005). *Management and performance*. Editura Universitară.
- [10] Taouab, O., & Issor, Z. (2019). Firm performance: Definition and measurement models. *European Scientific Journal*, 15(1), 93-106.
- [11] Kusuma, E., Barus, I., & Pranawukir, I. (2024). The Strategy of Unilever'S Corporate Social Responsibility 6.0 in Building Corporate Personal Branding. *Moestopo International Review on Social, Humanities, and Sciences*, 4(1), 55-66.
- [12] Siddique, F. B., & Sultana, I. (2018). *Unilever Sustainable Living Plan: A Critical Analysis*.
- [13] Raihan, A. (2024). A review of the digitalization of the small and medium enterprises (SMEs) toward sustainability. *Global Sustainability Research*, 3(2), 1-16.