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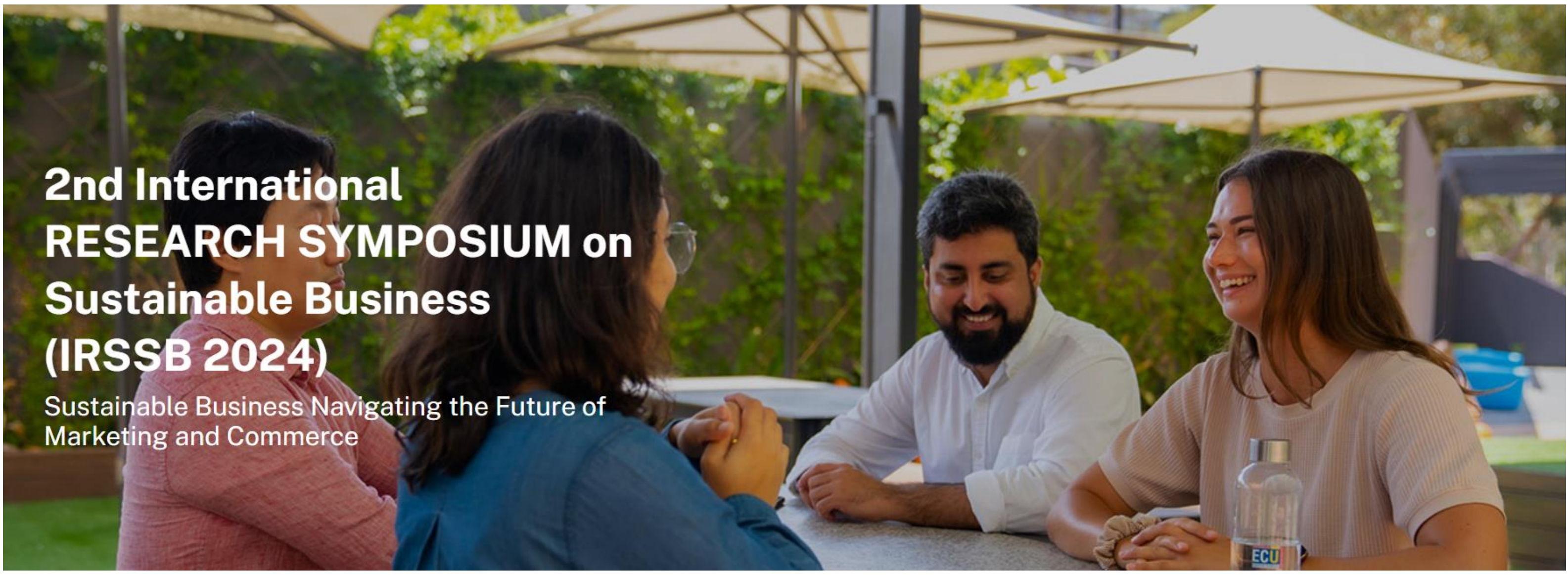

CONFERENCE PROCEEDINGS

2nd October 2024

Message from the General Manager

Dear Distinguished Participants and Guests,

It is with great enthusiasm that I welcome you to the 2nd International Research Symposium on Sustainable Business (IRSSB2024) at Edith Cowan University, Sri Lanka. This event represents an essential milestone in our ongoing journey towards fostering innovation, sustainability, and collaboration between academia and industry.

At ECU Sri Lanka, we believe in the transformative power of research to drive real-world solutions. This symposium is a reflection of our commitment to advancing sustainable business practices, a mission that resonates across every track presented here today. The diversity of submissions—from innovative student research to contributions from seasoned professionals—shows the depth of thought and passion within our community.

I am particularly excited about the opportunities this symposium creates for meaningful connections and collaborations. As you engage in discussions, exchange ideas, and present your work, I encourage you to think boldly and creatively about how we can collectively shape a more sustainable future.

Thank you to all the participants, organizers, and keynote speakers for your hard work and dedication. I am confident that IRSSB2024 will spark the inspiration and action needed to address the global sustainability challenges we face.

Best regards,

Professor Helen Klaebe
General Manager, Edith Cowan University Sri Lanka

Message from the Chair

Dear Conference Participants and Honoured Guests,

It is with great pride that I extend a warm welcome to each of you attending the 2nd International Research Symposium on Sustainable Business (IRSSB2024) at Edith Cowan University, Sri Lanka. This symposium represents not just an academic event but a vital contribution to the evolving discourse on sustainable business practices. Our goal at ECU Sri Lanka is to foster a research culture that empowers our students, faculty, and industry professionals to tackle the most pressing sustainability challenges of our time.

The quality and diversity of the submissions this year speak volumes about the commitment to sustainable innovation and responsible leadership within our academic community. I am particularly proud of the participation of our students, whose work demonstrates both academic rigor and a passion for creating a sustainable future.

This symposium also provides an opportunity to build bridges between academia and industry, sparking collaborations that will extend far beyond today. As you engage with the remarkable research presented, I encourage you to seize this moment to exchange ideas, challenge assumptions, and envision solutions that can make a tangible difference to our world.

Thank you for your commitment to sustainability, and I look forward to the fruitful discussions that will unfold during this symposium.

Warm regards,

Dr. Sajani Dias
Dean of Academic Programs
Edith Cowan University, Sri Lanka

Message from Co-Chair

Dear Esteemed Participants,

It is my honour and privilege to welcome you to the 2nd International Research Symposium on Sustainable Business (IRSSB2024). This year, we are building on the success of our inaugural symposium, expanding our focus to explore critical areas like sustainable marketing, digital transformation, and the socio-economic impact of sustainable practices.

Our goal as co-chairs is to provide a platform where innovative research can flourish, sparking meaningful conversations that drive positive change. The contributions in this year's proceedings showcase the creativity, depth, and determination of both students and academics in advancing sustainability.

I would like to express my deepest gratitude to all the authors, presenters, General Manger Professor Helen Klaebe and our keynote speaker, Professor Denise Jackson, for their dedication. A special thanks to my fellow co-chair, Ms. Thilini, and chair, Dr. Sajani for their outstanding efforts in making this event possible. May this symposium inspire you to push the boundaries of sustainable business and explore new avenues for collaboration.

Best regards,

Dr. Madura Thivanka Pathirana
Co-Chair, IRSSB2024

Message from Co-Chair

Dear Participants and Contributors,

On behalf of the IRSSB2024 organizing committee, I extend my warmest greetings to all of you. This symposium is not just a conference but a testament to our shared commitment to advancing the cause of sustainability in business. The response to our call for submissions has been inspiring, with research covering key topics such as corporate social responsibility, environmental sustainability, and innovations in supply chain management.

I am particularly proud of the role that students have played in this symposium. Their enthusiasm and fresh perspectives have brought new energy to the academic conversations on sustainable business practices. These proceedings highlight the innovative ideas that will shape the future of sustainable commerce, and I am eager to see the impact of these contributions in the wider business community.

Thank you to everyone who has worked tirelessly to bring this symposium to life. Let us use this opportunity to build partnerships and forge solutions that can drive sustainable transformation in business.

Best regards,

Thilini Vimukthika
Co-Chair, IRSSB2024

ECU Sri Lanka PRESS

This book contains the abstracts, full papers, working papers, and posters of papers presented at the 2nd International Research Symposium on Sustainable Business in Edith Cowan University Sri Lanka held on the October 2nd,2024.

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Keynote Speaker

Professor Denise Jackson

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TRACK 2: Corporate Social Responsibility and Business Ethics - Dr Upuli Warnakula

TRACK 3: Environmental Sustainability in Commerce - Dr Anuradha Senadheera

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TRACK 6: Socio-Economic Impact of Sustainable Practices - Dr Thivanka Pathirana

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We express our deepest gratitude to all those who contributed to the successful completion of the 2nd International Research Symposium on Sustainable Business (IRSSB2024). First and foremost, we are immensely thankful to Professor Helen Klaebe, General Manager of Edith Cowan University Sri Lanka, for her continuous support and guidance throughout the planning and execution of the symposium.

We are equally appreciative of Dr. Sajani Dias, Dean of Academic Programs, Ms. Thilini Vimukthika, Dr. Madura Thivanka Pathirana Co-Chairs of IRSSB2024, for their tireless efforts in co-organizing this event. Special thanks go to Professor Denise Jackson, our keynote speaker, for sharing invaluable insights on sustainability.

Our heartfelt appreciation extends to the authors, presenters, panellists, and participants who contributed thought-provoking research and engaged in meaningful discussions. We are also grateful for the unwavering support from the staff members of ECU Sri Lanka who volunteered their time and efforts, as well as the ECU Sri Lanka student ambassadors and students whose enthusiasm and dedication enriched the symposium.

Special thanks to the university academics and industry partners who helped bridge academia and real-world business, making the discussions even more impactful. Our colleagues from ECU Perth have been instrumental in sharing their expertise and providing valuable support throughout the event.

To everyone who played a role in bringing this symposium to life, your commitment to fostering sustainable business practices is deeply appreciated. We look forward to continuing our collective efforts in shaping a more sustainable future.

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FULL PAPERS

ENABLERS AND CHALLENGES FOR SUSTAINABILITY PRACTICE ADOPTION IN THE HOSPITALITY INDUSTRY: A PRACTITIONER PERSPECTIVE

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Abstract

The Sri Lankan hospitality sector has been earmarked to play a crucial role in achieving the country's tourism industry's strategic focus of creating an inclusive and sustainable tourism industry. Despite the growing concern about adopting sustainability practices within the mainstream hospitality industry in Sri Lanka, there has been a paucity of hospitality-specific studies evaluating the enablers and challenges surrounding sustainability adoption in the current scholarship. This research aimed to uncover practitioner perspectives on factors enabling and challenging sustainability practice adoption in the hospitality industry through case study research. The primary data for the study was collected through a series of semi-structured interviews conducted with eleven senior managerial employees at hotels in Kandy, Sri Lanka. The findings uncovered that obtaining quality standards and certifications, management enthusiasm, achieving cost efficiencies, and sustainable marketing are the main enabling factors incentivising the adoption of sustainability practices in local hotels. The research further uncovered that lack of sustainability knowledge, government support and negative employee attitudes towards sustainability remained the most crucial challenges the industry must overcome in transitioning to a more sustainable trajectory. The research implied the need for comprehensive sustainability education, additional institutional support, and the introduction of non-conventional sustainability practices to uplift further the overall sustainability commitment of the local hospitality industry.

Keywords: Sustainability, Sustainable practices, Sustainable Hospitality, Enablers, Challenges

Introduction

Since the inception of the sustainability concept within hospitality several decades ago, the sector has witnessed significant growth in the awareness and emphasis levels among hoteliers regarding the adoption of sustainability practices within hotel operations (Goldstein & Primlani, 2012). The concept of sustainability from a hospitality perspective primarily focuses on conducting a hospitality business while managing resources and considering the economic, social and environmental costs and benefits to meet the needs of present generations while protecting and enhancing opportunities for future generations (Legrand, Chen, & Laeis, 2022). Correspondingly, hospitality practitioners worldwide have commenced embedding sustainable practices across all facets of the sector and have gradually become an exemplary industry showcasing why running a sustainable business is crucial for long-term business success (Bader, 2005; Kyriakidis & O'Hanlon, 2011). Despite the increasing concern towards sustainability, destinations worldwide continue to be burdened by numerous challenges when adopting sustainable practices (Melissen et al., 2016). Moreover, the prevailing knowledge on what motivates and enables hospitality practitioners to adopt sustainable practices remains limited (Shereni, Saarinen, & Rogerson, 2023).

As a developing destination attempting to transition towards a sustainable trajectory, the Sri Lankan hospitality sector's sustainability efforts continue to face scepticism from multiple studies. For instance, Sriyani (2022) argues that Sri Lankan hospitality practitioners primarily aim for economic sustainability while neglecting environmental and social sustainability. Correspondingly, Wijesundara (2017) states that local hoteliers focus on achieving economic and social sustainability, whereas their commitment to environmental sustainability is questionable. Rauf et al. (2019) Claims that tourism has not reduced socio-economic disparities in Sri Lanka and that economic rewards from tourism have not systematically trickled down to the local communities. Moreover, Wijesundara (2022) further states that hoteliers and tourism sector service providers have hidden motives to engage in sustainability, including their personal beliefs and values, enhancing property reputation, and achieving cost savings.

Despite these claims, little to no research has been conducted to specifically explore the enablers and challenges for the adoption of sustainability practices in the hospitality industry from a Sri Lankan perspective. Hence, this research broadly aims to address two underlying objectives. First, this research intends to identify and evaluate factors enabling sustainability practice adoption in the Sri Lankan hospitality industry context. Secondly, this study intends to identify and evaluate the challenges Sri Lankan hospitality industry practitioners face in implementing sustainability practices. Ultimately, the findings of this empirical study hope to provide an overview of how the industry could optimise its sustainable practice implementation enablers while overcoming the existing challenges hindering sustainable practice adoption.

Literature review

Enablers of sustainability practice adoption

The current hospitality-related scholarship suggests that various driving forces encourage accommodation providers to embrace sustainable practices at an organisational level. For instance, several studies postulate that adhering to government regulations is a primary motivating factor for hotels to adopt sustainability practices. A study by Min (2011) observed that government laws and regulations directly impacted the extent of adoption of sustainable practices among hotels in China. This study claimed that stringent environment-related regulations and mandatory guidelines enforced by the Chinese government on sustainability aspects such as waste management had directly influenced local hoteliers' willingness to adopt sustainability practices (Min, 2011). Moreover, a study by Shereni, Saarinen and Rogerson (2023) identified regulatory compliance as a significant driver of the adoption of sustainability practices among Zimbabwean hotels. The external pressure from the regulatory forces to comply with the sustainability laws and avoid potential non-compliance-related lawsuits was identified as a notable motivator for adopting sustainability practices among hoteliers in Zimbabwe. Moreover, a study drew comparisons of sustainability practice engagement between the hospitality sectors of the USA and Mexico and claimed that Mexican hoteliers were less engaged in sustainability due to a lack of stringency in enforcing sustainability regulations in Mexico (Berezan, Millar, & Raab, 2014). Further, a study by Chan and Wong (2006) on Chinese hoteliers' motivation to adopt ISO standards showcased that government encouragement through regulatory compliance positively influenced their willingness to engage in environmentally friendly practices.

Furthermore, existing research further highlights the possibility of achieving financial gains through sustainability practices as a key enabling factor motivating sustainability practice adoption among hoteliers. For instance, Min (2011) states that the opportunity to reduce hotel operational costs has played a pivotal role in adopting sustainability practices among Chinese hotels. Moreover, a study by Agyeiwaah (2019) among small and medium-sector accommodation providers in Ghana highlighted that hospitality practitioners are particularly concerned about the initial and ongoing financial costs of adopting sustainable practices, and the availability of public sector incentives can substantially impact hoteliers' efforts to embrace sustainable practices. The study even claimed that small businesses were motivated more by financial rewards and cost-saving opportunities through the adoption of sustainability practices than by their contribution to addressing environmental concerns (Agyeiwaah, 2019). Similarly, Mzembe, Melissen and Novakovic (2019) claimed that firms with significant financial resources were more likely to take risks and invest in sustainability approaches than organisations with insufficient financial resources.

Furthermore, when allocating resources for sustainability, organisational principles and the personal values of owners and managers can play a crucial influence in adopting sustainable practices (Melissen et al., 2016). Moreover, Hernández et al. (2021) highlight that the presence of qualified and motivated employees is a significant driver that pressurises sustainable innovations in the hospitality sector. Hence, given the inherent people-centric backing required for sustainable practice adoption, it is believed that geographical factors and historical factors play a crucial role in determining the extent of the sustainability efforts of a given hospitality organisation (Mzembe, Melissen, & Novakovic, 2019).

Further studies claimed an array of enabling factors motivating hospitality practitioners to adopt sustainable practices in their operations. For instance, a study by Mzembe, Melissen and Novakovic (2019) that drew comparisons between local and international hotel chains' motivating factors for the adoption of sustainability practices in Malawi claimed that hotels belonging to international chains adopted sustainability practices in line with their global sustainability agendas, whereas local hotel chains were more focused on fulfilling community expectations. Fostering effective public relations and marketing strategies was identified as another underlying motivator for hotels to implement sustainability practices (Chan & Wong, 2006). Additionally, hotels were also identified to be motivated to develop new sustainability practices to gain eco-labels, prizes, and accreditations (Melissen et al., 2016). Berezan, Millar and Raab (2014) also suggest that environmental sustainability strategies are often adopted to satisfy customer expectations, boost employee loyalty, and project a favourable image.

Challenges for sustainability practice adoption

Several academic studies have addressed the challenges hospitality businesses may encounter when considering implementing sustainable practices into their operations. Although the hotel sector adheres to the concept of sustainability, concerns remain regarding the practicality and the implementation of sustainability practices. A primary barrier that the hospitality sector faces is the lack of a clear and commonly recognised definition of sustainable practices (Butler, 1999; Liu, 2003).

Furthermore, Chan, Okumus and Chan (2020) claim that hotel managers encounter difficulties incorporating sustainability practices into their hotel operations without compromising their guest experience. Furthermore, a study by Shereni, Saarinen and Rogerson (2023) claims that the adoption of sustainable practices in hospitality can affect a company's ability to meet customer expectations, potentially conflicting with some guests' expectations of luxury and comfort. Hence, hoteliers are sometimes required to decide whether to exceed visitor expectations while ignoring environmental impacts or vice versa.

Additionally, the hospitality industry faces challenges in sourcing qualified contractors, landscapers, suppliers, engineers, housekeepers, and managers who understand ecologically sustainable property design. Furthermore, monopolised after-sale service in environmental technology suppliers has increased maintenance costs and uncertainty in relying on one service provider, as the service may negatively impact the guest experience. Consequently, hotels are reluctant to adapt to environmental technologies (Chan, Okumus, & Chan, 2020). Several scholars have stated that the higher expenses associated with implementing environmentally friendly technologies are another concern that prevents the hotel sector from implementing sustainable practices (Chan, Okumus, & Chan, 2020; Idahosa & Ebhuoma, 2020; Shereni, Saarinen, & Rogerson, 2023). Besides the implementation cost, Chan, Okumus, and Chan (2020) identified the environmental feasibility of implementing sustainability projects as the most influential barrier to preventing the adoption of certain sustainable technologies in hotels.

The hospitality sector, including both large companies and smaller businesses, encounters difficulties due to a lack of cooperation among stakeholders, a lack of government funding, a lack of enthusiasm and a lack of resources for implementing sustainable practices (Mzembe, Melissen, & Novakovic, 2019). Similarly, Kaur (2021) identified that weak legislation and a lack of regular environmental inspections restrain the hotels from engaging in environmentally sustainable initiatives. Furthermore, Shereni, Saarinen and Rogerson (2023) identified the lack of employee knowledge, skills, attitudes, and measurable targets for implementing sustainable practices as a significant challenge. Moreover, hospitality managers' inadequacy of green knowledge can also directly impact the hotel's decision-making regarding adopting new sustainable technology (Chan, Okumus, & Chan, 2020). Another challenge that constrains the implementation of sustainability in the hotel sector is that practising sustainability has been limited for some establishments that belong to a specific chain or group of hotels. These properties are obliged to adhere to the hotel policies and certain decisions taken by the group, which restrict the adoption of certain technologies (Idahosa & Ebhuoma, 2020). Furthermore, Shereni, Saarinen and Rogerson (2023) identified that only actions that directly benefit the organisation—such as cost-saving measures, public relations campaigns, or tokenistic side projects—are included in hospitality firms' sustainable strategies.

Research gap

Despite the plurality of studies discussing prospective enablers and challenges for adopting sustainability practices, little to no research has attempted to uncover enablers and challenges Sri Lankan hospitality practitioners face in adopting sustainable practices. Hence, this research focuses on uncovering practitioner perspectives on enabling and challenging factors influencing adopting sustainability practices in Sri Lanka.

Methodology

The study was undertaken through a case study of the hospitality providers in Kandy, Sri Lanka. Often considered one of Sri Lanka's top tourism hotspots, the Kandy district exhibits a high concentration of accommodation providers, with a total room inventory of 3,956, accounting for 7.4% of the country's room capacity (SLTDA, 2023). Furthermore, several leading local and international hospitality brands enhance Kandy's hospitality industry, setting a crucial contextual precedent for this study to be undertaken in Kandy, Sri Lanka.

This research adopted a qualitative methodology to uncover practitioner perspectives on the enablers and challenges of adopting sustainability practices. Semi-structured interviews were utilised as the primary data collection method. The interviewees were selected using a purposive sampling approach, and only senior managerial employees from a local or international hotel chain were selected for the study. Accordingly, eleven senior managerial employees were selected and interviewed during the data collection process. The collected qualitative data was analysed using a thematic analysis approach. An inductive coding approach was used during the analysis, where themes were derived from the collected data to identify destination-specific enablers and challenges for sustainable practice adoption (Fereday & Muir-Cochrane, 2006).

Findings

The thematic findings uncovered four enabling factors as central considerations for adopting sustainability practices in the hospitality industry in Kandy, Sri Lanka. Furthermore, the study results revealed three challenges currently hindering the adoption of sustainability practices among the hotels in Kandy, Sri Lanka. The subsequent section provides a comprehensive assessment of the research findings.

Enablers of sustainability practice adoption

Acquiring and maintaining quality standards and certifications

More than half of the sample respondents stated that quality standards and certifications tend to play a crucial role in maintaining their commitment to sustainability. From the respondent's perspective, certifications and standards set the benchmark for guidelines and best practices that they need to follow to be classified as a sustainable property. In some cases, hoteliers suggested that without acquiring these environment certificates, they could not acquire the hotel license to function as a registered accommodation provider in Sri Lanka.

"There are some certificates because when we are taking the hotel license, we need to take the environmental certificates. Otherwise, they do not provide us the hotel license." [Respondent 9]

Additionally, as these certifications and standards require regular audits and assessments, the respondents stated that they paved the way for continuous improvement in the hotel, leading to constant efforts to reduce and sustain its environmental and social impacts.

"We're enduring them because we want to continue the best practices that we have already commenced, and whatever the certifications we have obtained, we want to maintain them." [Respondent 6]

Further, it was evidenced that in many cases, these certifications were used for hotel marketing to gain a competitive advantage over their competitors and attract "eco-conscious" guests to their property.

"Yes, we have. As I said, we are certified as a carbon-conscious, waste-conscious, and water-conscious hotel. By a carbon consulting company and together with Sustainable Future. The certificates are all displayed at the property front." [Respondent 6]

Leveraging sustainability as a marketing tool

Supplementing to the idea of using sustainability certifications for marketing purposes, a majority of respondents stated that engaging in sustainability practices in general also enabled them to use it as a promotional tool to attract potential customers and retain their existing client base:

"Number one is the tourist attraction; when you practice sustainability, you can get a lot of tourist attractions because they like it. That is a promotion tool as well; when we say that we have sustainable practices, tourists want to see them." [Respondent 8]

A majority of the respondents further claimed that they had started incorporating sustainable-centric experience offerings such as arts and crafts classes and cooking classes while also providing direct tangible benefits to their respective local communities. However, several hotels undertook a more discreet approach to promoting their sustainability practices as a promotional tool. For instance, several respondents claimed that their hotels used bio-degradable alternatives for plastic usage in rooms and used signages to address energy efficiency and waste issues. This approach held hotels accountable for their sustainability commitments and ensured the continued progression of their long-term sustainability goals while indirectly involving their consumers in their sustainability efforts.

Management enthusiasm and willingness towards sustainability

Among the 11 hotel properties interviewed, a clear division of organisational commitment and the senior managerial personnel's personal views on sustainability was evidenced. For instance, several respondents showcased a high level of enthusiasm and willingness to adopt sustainability initiatives:

"…we have an environmental policy: being educated to all the new employees, and we have sustainability meetings every month, and we also have a sustainability group headed by our General Manager. And we also have sustainability members in this hotel." [Respondent 1]

Furthermore, a higher organisational willingness and support for sustainability efforts was seen to set the precedence for continuous commitment to sustainability practices within and beyond the respective hotels.

"We are actually conducting some routine training programmes. Through that, we are educating our people. And also, we do Shramadana campaigns as well. We are getting our people involved in things outside of this hotel property. And we are doing some CSR programs also" [Respondent 4]

Hence, this research uncovered that management enthusiasm and willingness are crucial motivators for practising sustainability, as leading by example sets the tone for the entire organisation. Moreover, it paves the way for employee engagement, resource allocation, and incorporation of sustainability objectives into the hotel's strategic planning.

Utilising sustainability to achieve cost efficiencies

Many respondents said they utilised sustainable practices as a cost-cutting tool in their hotel operations. Respondents expressed how this method reduces operational costs and helps maintain the hotel's long-term economic sustainability, ultimately contributing to the hotel's overall success and resilience.

"…And if I use other sources for the heating, especially if we use the solar heating system, we can cut off about 40% of the gas consumption. And we can reduce a significant amount of electricity also." [Respondent 4]

"…cost reductions from our greenhouse, sometimes we are getting more profits from our greenhouse." [Respondent 10]

"When it comes to STP, the water consumption is less, and we get a lower water bill…" [Respondent 11]

As evidenced, many respondents perceived sustainability practices, especially within the environmental pillar, such as renewable energy adoption, water, and waste recycling, as either a cost-cutting or cost-saving mechanism.

Challenges for practicing sustainability

Limited knowledge and awareness of the sustainability concept

The most commonly highlighted challenge for adopting sustainability practices among the respondents was the lack of a coherent understanding of the concept. When asked about their understanding of the concept of sustainability, many respondents failed to provide a comprehensive response due to their lack of knowledge. The respondents interpreted sustainability according to their personal opinions and viewpoints. While some consider sustainability to simply cater to the 'environmental pillar', as per the Triple Bottom Line concept, others consider sustainability to be 'how a hotel can sustain economically—profit wise'.

"Sustainability means that we are helping the country's economy and helping to maintain the economic benefits and to move along with the other resources to help the country's economy..." [Respondent 9]

Moreover, most hoteliers did not consider economic sustainability as a pillar of the Triple Bottom Line concept even though they had evident economic sustainability initiatives. The misinterpretation of the sustainability concept as an environmental initiative and negligence of the other two pillars emphasised the lack of theoretical knowledge among hoteliers.

Lack of cooperation and unfavourable attitudes of employees

The study findings uncovered unfavourable attitudes and a lack of employee cooperation, another major challenge for hotels adopting sustainable practices.

"Attitude is the main thing because in Sri Lanka, I see that the people here have a lot of negative attitudes..." [Respondent 5]

As sustainability initiatives require constant monitoring and implementation across all aspects of hotel operations, negative attitudes among employees can lead to low engagement and inconsistent implementation due to employees not adhering to property sustainability guidelines. Moreover, several respondents claimed that many of their employees had a negative attitude towards sustainability practices due to specific sustainability initiatives adding additional work burdens to their daily routines. Additionally, concerns such as 'brain drain' and 'talent poaching' emerged as significant challenges that constrain the continuation of sustainability practices.

"Basically, the staff now have big trouble with staffing because sometimes they are going abroad. They need only a few months of training from us, and then after six months or one year, when they are trained well, they leave the company. Now we do not have experienced people…" [Respondent 7]

Lack of government and institutional support

A majority of the respondents claimed that government support and intervention in sustainability implementation were relatively low in Kandy. The respondents further claimed that the limited government regulations and standards related to sustainability in the hospitality sector led to hotels lacking clear guidelines for sustainability practices, resulting in inconsistency and uncertainty in sustainability efforts.

"There is another issue regarding sustainability as the tourist board is not taking any initiatives to promote sustainability within the industry. So that is another challenge, all these we have to do it by ourselves..." [Respondent 8]

Furthermore, several respondents claimed that this lack of institutional support had led them to take the initiative to implement their own sustainable practices at an individual level without expecting cooperation from the government.

Conclusive Discussion

This research attempted to critically evaluate the enablers and challenges of adopting sustainability practices for hospitality practitioners using a case study of chain hotels in Kandy, Sri Lanka. The study findings broadly resonated with the current global sustainability practice adoption scholarship, with a majority of the enablers and challenges highlighted in previous studies being evident in the context of Sri Lanka. The study showcased that hospitality practitioners' commitment towards sustainability was influenced by the ability to obtain certifications and accreditations while providing a platform for new marketing avenues for hotels (Chan & Wong, 2006; Melissen et al., 2016). Employing sustainability as a promotional tool and effectively marketing sustainability will lead to hotels attracting eco-conscious travellers, leading to an increase in bookings, and ultimately contributing to a more sustainable and responsible travel industry. However, this research underpinned the importance of hotels not using sustainability practices as a mere marketing tool but rather engaging in such commitments with a genuine intention to impact the triple bottom line positively. This study further uncovered that management's enthusiasm and willingness are deciding factors for sustainable practice adoption. The research evidenced that stronger managerial enthusiasm towards sustainability resulted in higher resource allocation for sustainability initiatives (Melissen et al., 2016). Moreover, the study further postulated that achieving cost efficiencies could be a motivational factor in influencing hospitality practitioners to adopt sustainability practices. The findings suggest that regardless of a hotel's size or financial capability, any hospitality practitioner would be motivated to engage in sustainable practices in return for tangible economic benefits (Agyeiwaah, 2019; Mzembe, Melissen, & Novakovic, 2019).

On par with existing research, the lack of comprehensive sustainability knowledge among hoteliers emerged as a primary challenge in implementing sustainability practices in Kandy, Sri Lanka (Butler, 1999; Liu, 2003). Furthermore, this challenge is further aggravated by the negative attitude of employees towards sustainability practice adoption. Hence, it is postulated that managerial and operational level employees' sustainability knowledge and willingness play a pivotal role in deciding the overall sustainability commitment of the hospitality industry.

Recommendations

This study uncovered that most hoteliers in Kandy (out of the respondents) could not clearly interpret sustainability. Steiger and Desmet (2020) suggest that intensifying sustainability education by providing technical support, advisory services, and awareness is crucial for hotels to improve their sustainability efforts. Hence, this research proposes integrating sustainability development into company values and policies. Through this approach, hoteliers can shape employees' attitudes towards performing sustainable practices willingly rather than through regulation or mere incentivisation. Additionally, this research identified that government monitoring, regulation, and awareness-raising efforts are deficient in sustainability. Hence, state-led initiatives to standardise hotel sustainability procedures are becoming increasingly essential in the current Sri Lankan context (Morales-Contreras et al., 2019). Furthermore, the government should provide assistance and resources for implementing sustainability practices, especially for small and medium entrepreneurs (Agyeiwaah, 2019). Furthermore, based on the data presented, it is evident that hospitality practitioners perceive sustainability as a tool for operational cost savings. However, their current utilisation of sustainable technologies and processes is limited, primarily involving solar panels for solar energy conservation and Sewage Treatment Plants for water recycling. While these measures provide some cost-saving benefits, a broader range of long-term investments is necessary to reduce daily operational expenses significantly. For instance, hospitality practitioners could consider investing in technologies such as LED lights with motion detectors in low-traffic areas and utilising time-controlled and energy-saving optimised electronic devices in their day-to-day operations (Abdou, Hassan & El Dief, 2020).

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EXPLORATION OF HOW FOOD AFFORDABILITY AND NUTRITION STATUS HAS IMPACTED THE MENSTRUAL HEALTH IN SRI LANKAN WOMEN

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Abstract

Menstruation is a natural process that takes place in women after attaining puberty, which involves regular discharge of blood and mucosal tissue from the inner lining of the uterus through the vagina. This process starts from menarche, which is an important pubertal milestone in adolescence and helps balance functions of other bodily systems. Menstruation health requires health related to menstrual cycles, how to take care of the body and support and alleviate discomfort and associated disorders. Awareness regarding menstruation is importance as this is often considered taboo in many cultures and societies. Therefore, this lacks discussion and has become a topic that people are unaware of and reluctant to talk about. Many menstruation problems are also related to improper nutrition. As Sri Lanka faced an economic crisis in the near past, access and affordability of food has become an issue. Primary objective of this research is to undermine a correlation between how the financial crisis has affected the nutrition status and the potential effects of this phenomenon on the menstruation. To assess this BMI and frequency of menstrual disorders was used as indicators. A survey was conducted among a selected cohort of women in menstrual age between 13- 40 years and the results showed that there is an array of potential issues associated indicating a positive correlation between the people who have abnormal BMI (either obese/overweight or underweight) and the people who display symptoms of menstrual disorders. Future directions to this study could investigate solutions to these problems such as formulation affordable nutritious diet plans and expanding the access of appropriate healthcare to ensure menstrual well-being.

Keywords: BMI, Period poverty in Sri Lanka, Menstrual awareness

Introduction

World Health Organization (WHO) states that health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity as per the constitution of international Health conference which was signed on 1946. For women, menstrual health is an integral part of overall health between menarche and menopause. Menarche is defined as the first menstrual period in a female adolescent. This typically occurs between the ages of 10 and 16 with the average age of onset being 12.4 years. Menopause is the permanent cessation of menses for 12 months resulting from estrogen deficiency and is not associated with pathology. The median age of menopause is 51. Normal menstruation is defined as cyclic bleeding between menarche and menopause, and it can last from 2-7 days and can happen every 21-35 days. (Chen et al., 2020)

Menstrual Disorders

For many women, the menstrual cycle is a regular and predictable occurrence. However, for a substantial portion of the female population it can be accompanied by various menstrual problems such as irregular menstruation, abnormal vaginal bleeding, amenorrhea (absence of menses) and dysmenorrhea (painful menses). 75% of young women in both developed and developing countries have menstrual complications. A study carried out in China revealed common impacts of menstrual disorders which included, reduction in concentration ability, academic disturbance and changes in normal physical activities (Mao et al., 2021) Menstrual disorders led to restriction of activities, however only few sought medical helps while majority resorted to self-medication which could be dangerous. Studies in Uganda showed that 19.7% of participants from selected secondary schools, missed school at least once during their most recent menstrual period and those who used a menstrual diary reported 28% school absenteeism on period days compared to 7% on non-period days and that missing school was associated with symptoms like headache, stomach pain, back pain and with changing protection 4 or more times per 24-hour period. (Miiro et al., 2018) Menstrual disorders could start as early as menarche sets in, and this could continue beyond the teenage years when further stresses brought about by life challenges, academics and relationships further worsen the symptoms. In Sri Lanka also, there is a notable prevalence of menstrual issues. A sectional study conducted in 2010, in the Anuradhapura district with 539 pregnant women, showed that 137 (25.4%) of women had menstrual issues and only 68 (12.6%) of them sought medical care. 139 (25.7%) reported a menstrual blood loss of more than 80ml. Of the participants, 98 (18.2%) had used "old clothes" as a sanitary product during their lifetime, highlighting the lack of access to proper menstrual hygiene products. (Kandauda et al., 2020).

Period Poverty

Period poverty which affects millions of girls and women worldwide is a human rights concern that often misses the limelight. It refers to the lack of access to period products and proper education or awareness and sanitary facilities. Nearly 3.5 billion women experience monthly periods globally. According to the charitable organization "Days for Girls", nearly 25% of all menstruators are affected by period poverty (Jaafar, Suraya Yasmin Ismail and Amirah Azzeri, 2023) Period poverty has evolved to be a serious concern globally due to its consequences ranging from health issues to mental and emotional issues. Individuals lacking access to menstrual products generally use rags or other unhygienic means during their periods. Some even go to the extent of using the limited menstrual products they own for longer than intended. Such unhygienic practices are reported to be likely causing urogenital infections. Research conducted by Advocata Institute found that Sri Lanka's period poverty rate is 50% (Sacca et al., 2023) This means that 50% of households with women of menstruating age do not report spending any amount of money on sanitary napkins. Also, according to this research, period poverty of Sri Lanka comes in 2 layers. The first layer is lack of education and awareness in relation to basic sexual reproductive health. A study conducted in 2019 in the estate sector to learn more about education about menstrual hygiene found that only 20% of girls learnt about menstruation in schools, while 68.8% of girls learnt it from their mothers. The problem here is that the study also found that the level of 2 awareness among mothers was very low and was influenced by cultural norms and myths. The second layer of poverty is the lack of infrastructure and support in the workplace and schools. This includes a lack of toilets and disposing facilities. Sri Lanka for the past 2 decades and counting, still has less than 35% of women in the formal economy. One reason for this is that they do not create a conductive environment for women. (the high cost of menstrual hygiene product can also limit women in participation in the formal economy). (Brief, 2022) Due to high cost of sanitary napkins, girls and women tend to wear the same napkin for a prolonged period of time, predisposing them to other health related issues and bacterial and fungal infections. Whether it is pads or cloth rags, they must be changed every 4-6 hours depending on the flow of one's period. (Brief, 2022) (Pathirana et al., 2016) (Hettiarachchi et al., 2023)

Period stigma

Menstruation rooted in complex value systems is accompanied by various myths, taboos and stigmatizing. Across different cultures menstruation is stigmatized and conceptualized as something that is "dirty" or "impure" and that should be kept private. Consequently, women go through great efforts to conceal their menstruation status and prevent stigma related 'leakages'' from occurring. Menstruation stigma is further perpetuated by the media through, for example menstrual product advertisements which emphasize secrecy, avoidance of embarrassment and use of images (e.g.: flowers) and colors (blue rather than red) to euphemistically describe menstruation. The stigma surrounding menstruation can lead to negative consequences for women's physical and mental health. Due to the conversation around menstruation being suppressed, beliefs about people on their periods being unclean, women and girls are confined to their homes being excluded from public places. (van Lonkhuijzen, Garcia and Wagemakers, 2022) According to UNICEF 60% of parents in Sri Lanka do not allow their daughters to go to school during period. 80% of teachers think that bathing should be avoided during menstruation. (UNFPA Sri Lanka, 2018) According to Child Deprivation analysis 2020, 30% of girls in Afghanistan are absent during menstruation because schools do not have adequate water, sanitation and hygiene facilities. Evidence shows that girl's inability to properly manage their menstrual hygiene in schools, results in school absenteeism. Based on this factor, it is clear that they require proper education on menstruation. UNICEF together with government of Finland trained over 500 female teachers on menstrual hygiene management (MHM). (Parmar, 2016) Many women do not tend to seek medical advice for menstrual problems because they assume the symptoms are normal (because they experience it for so long), they prefer to manage the symptoms by themselves using painkillers, couldn't afford to get medication, being unaware of the treatment options available and feel embarrassed or afraid to seek care. (Chen, 2018)

BMI as an indicator of nutritional issues

BMI (Body Mass Index) is a measurement based on person's height and weight allows the classification of individuals into categories such as obese, overweight, underweight or normal weight. An individual's BMI is important in determining potential health issues. The equation used to calculate the BMI is given below. (Zierle-Ghosh and Jan, 2018).

Body Mass Index = Weight (in Kg)

Height2 (in m)

In the calculation of BMI height is squared to reduce the contribution of leg length in taller people as most body mass remains within the trunk. BMI can indicate the relative amount of body fat on an individual's frame but does not directly calculate body fat percentage. BMI tends to overestimate body fat in those with a lean body mass (e.g.: - athletes or bodybuilders) and underestimates body fat in those with an increased body mass. Individuals with abdominal (visceral) obesity are at greater risk of acquiring multiple pathological conditions and have a higher mortality rate. In the elderly population, being overweight is not associated with increased mortality risk, instead elders with BMI at low end of recommended range have increased mortality rate. So, it is important to immediately address any unexplained weight loss within the elderly population to identify diseases. World Health Organization (WHO) has designated BMI values that are normal and should be of concern (Nagi et al., 2024).

Sri Lanka which is a south Asian country with a population of 20 million, has been experiencing rapid and sometimes unplanned urbanization and infrastructure developments over the recent past with an estimated 30% of the population now living in urban and suburban areas. Furthermore, in Sri Lanka there is still a significant burden of underweight population especially among the rural population. A study showed that higher prevalence of obesity in the most educated group (above A/L). This could be due to the ongoing process of nutrition transition in Sri Lanka, here there is higher availability of energy dense food, with increasing sedentary behaviors specially among the 'white-collar' jobs (Somasundaram et al., 2019). Sri Lanka is currently facing the worst economic crisis since independence in 1948. According to the reports, the crisis started in 2019 because of several interrelated compounding events including national policy to switch to organic or biological farming, easter bombings and the covid 19 pandemic's effects in Sri Lanka. The economic crisis is pushing millions of people into poverty. The reduction in income and the rise in unemployment are widely recognized as immediate consequences of the financial crisis. Low socioeconomic status often leads to adoption of coping mechanisms such as increased purchase of cheap food with low nutritional value which has resulted in underweight and obese conditions (Jayawardena and Sooriyaarachchi, 2023)

In May 2022, the Sri Lankan government officially requested assistance effective immediately from Asian Development bank (ADB) fund to address the emergency. This was a request in response of the situation the country was facing to adequately appoint funds to import essential goods such as food and fuel. Food price has been increasing ever since reaching inflation levels at 75.8% in June 2022 The issues that are speculated to arise such as malnutrition due to low intake of foods and nutritional deficiencies caused by the intake of low nutritional food (Asian Development Bank (ADB), 2023).

Methodology

Survey data collection

The research design was structured using Saunder's Research Onion model which consists of layers representing different stages of research process. It includes research philosophy, research approach, research strategy and more (Melnikovas, 2018). Research philosophy for this study is grounded in interpretivism because it emphasizes subjective experiences and perspectives of individuals. The study employed a mixed – method approach which combines both quantitative and qualitative approach. An early step in research projects that involve humans consists of composing a clear and detailed definition of the study population. Clearly defining a study population early in the research process also helps assure the overall validity of the study results. (Eldredge, Weagel and Kroth, 2014) The target population for this survey consisted of women aged 14-40 years, and the researchers took effort in trying to include respondents from diverse backgrounds in terms of geographical regions, ethnicities and socioeconomic statuses. The research survey was done using a structured questionnaire made through google forms, designed to collect pertinent data. The survey was administered using a mixed method approach including the use of both qualitative and quantitative data. Participants were provided with clear instructions on how to complete the questionnaire. Data was collected over a specified period (2 weeks) ensuring a diverse representation of participants because a small sample size is considered due to limitations of acquiring a sizeable cohort. Survey responses will be anonymized to safeguard participant survey. The questions of the questionnaire were taken from a previously published survey and was modified with the guidance of the supervisor by ensuring no harm to original source. The questionnaire was a mixture of both open ended and closed ended questions. Participants have the freedom to ignore open-ended questions if they feel uncomfortable in responding.

Statistical data analysis

Data analysis was done by using the software packages MS Excel and Prism software (version 10.1.0). Nonparametric tests were used due to the relatively small sample size of the number of respondents and therefore the study cohort may not follow a pattern of normal distribution. The survey responses consisted of ordinal data and the possibility of the non-normality in the cohort was some of the factors behind the reasoning for proposing to use nonparametric tests for statistical analysis such as Mann-Whitney U test and The Kruskal-Wallis one-way ANOVA test. The statistical parameters were set at 95% confidence interval and level of significance at 0.05. The P values less than 0.05 was deemed significant. The study was conducted under the permission and regulations imposed for Asian Institute of Business and Science and has abided the Pearson ethical guidelines and regulations as the respective governing body.

Ethical consideration

The survey was conducted with a heightened importance to protecting anonymity of the participants of the survey conducted under this study. The study was conducted under the permission and regulations imposed for Asian Institute of Business and Science and has abided the Pearson ethical guidelines and regulations as the respective governing body. The study aimed to address any ethical issues that may arise during the project in a just and appropriate manner and no ethical concerns of note were raised or flagged during the study period.

Results

The statistical results showed that majority of the people who took place in the survey are within the age group 21-30 years and it also showed that most of the people had their first menstruation within the age 11-13 years. Although 80% of the participants say that they have regular periods, majority of them show signs of menstrual problems such as heavy menstrual bleeding for more than 4 days, containing clots when bleeding, spotting between periods and severe menstrual cramps. It was also seen that 46.2% of the participants get medication to ease the pain during menstruation by themselves and the most common type of medication used by them is painkillers such as paracetamol. According to the analysis performed more than 50% of the participants show some kind menstrual disorder symptom but still they don't seek for medical advice. The main reason why they don't seek advice is because they lack education about this topic. Most women think that having heavy menstrual bleeding and having severe menstrual cramps is normal. Once when the BMI of all the participants were calculated using their height and weight 52.3% of them had BMI within the normal range whereas 47.7% of them had abnormal BMI. 2 correlations were done to check if there is a relationship between

BMI and menstrual disorders. First correlation performed was between BMI and heavy bleeding. A 'r' value of 0.1027 and r2 of 0.01054 was obtained. Two tailed tests were performed and a P value of 0.4157, which is not significant was obtained. According to the results this is a very weak correlation. But as the value of r is positive, we can conclude saying that there is a slight direct proportionality between BMI and heavy bleeding. The second correlation performed was between BMI and the days of period. R value of 0.3202 and r2 of 0.1025 was obtained. Two tailed test was conducted and a P value of 0.0093, which is moderately significant was obtained. According to the values, this is a weak correlation. But because the r value is positive, it is clear that there is a slight direct proportionality between BMI and days of period.

Discussion

The study was conducted to determine the correlation between BMI and the menstrual problems in women aged 14 – 35. the overall idea revealed through the study was that many women face menstrual challenges often enduring discomfort and stress unknowingly. Menstrual problems range from irregular cycles to severe pain which significantly impact a women's health. Unfortunately, social stigmas, cultural taboos and lack of awareness contribute to reluctance to seek medical advice. Majority of the participants who took part in the study are in the age group 21-30 because the survey was primarily circulated among the students and staff at a private higher educational institute situated in the suburbs of Colombo in which majority are undergraduates. Menarche is defined as the first menstrual period in a female adolescent. This typically occurs between the ages of 10 and 16 and the average age is 12.4 years (Lacroix et al., 2022) According to the statistical analysis 20% of the participants had either early menarche or late menarche. Earlier onset of menstruation was seen in those surrounded by stressful family environments. (Kaltiala Heino, Kosunen and Rimpelä, 2003) Studies have shown that having an overweight or obese BMI is a risk factor for early menarche. (It showed those with early menarche were 1.7 times more likely to have an overweight or obese BMI) (Almuhlafi et al., 2018) Early menarche has been associated with physical and psychosocial problems including anxiety, depression, early sexual intercourse and suicide (Kaltiala-Heino, Kosunen and Rimpelä, 2003) Studies have demonstrated a 23% higher risk of developing breast cancer in patients with early menarche. (Stoll, Vatten and Kvinnsland, 1994) Late menarche can be seen in adolescents with very low body mass due to starvation or malabsorption. Menarche can be delayed in normally developing females due to abnormalities in genitourinary tract. Late menarche is positively associated with the risk of developing Alzheimer disease and decrease mineral density in the forearm, spine resulting in osteoporosis and increased risk of fractures in later life (Baker, 1985). The menstrual cycle is an observable indicator of female reproductive function. Abnormal uterine bleeding (AUB) is a broad term that describes irregularities in the menstrual cycle involving frequency, regularity, duration and volume of blood flow. A normal menstrual cycle has a frequency of 24-38 days and last to 2-7 days with 5-80 milliliters of blood loss. Variations in any of these 4 variations constitute abnormal uterine bleeding. Abnormal uterine bleeding can be acute or chronic (Davis and Sparzak, 2019) While 80% of participants have mean number of days for the period cycle which is 23-35 days another 20% had days which deviate from the mean number of days which is less than 23 and more than 35 days. Irregular and long menstrual cycles disrupt the hypothalamic pituitary activity increasing the risk of non-communicable diseases including ovarian cancer, coronary heart diseases and mental health problems (Wang et al., 2020). Another important aspect that was observed during data analysis is that the same percentage was obtained for deviations of menarche, deviations in period cycle and presence of blood clots during menstruation. 27 out of 65 participants have periods which last more than 7 days or less than 2 days. A period which lasts longer than 5-7 days is prolonged menstrual bleeding. According to the results, 45 out of 65 respondents have heavy menstrual bleeding. Presence of heavy menstrual bleeding and having periods which lasts for more than 5 days is interconnected and the medical term for excessively long or heavy periods is menorrhagia. Menorrhagia is defined as menstruation period lasting more than 7 days which can cause menstrual bleeding of more than 80 ml in each cycle. Although this condition is rarely life threatening, it still has significant effects on personal life. Menorrhagia is largely responsible for iron deficiency or anemia (Gokyildiz et al., 2013). 52 out of 65 participants observe blood clots during periods. Small blood clots are considered to be normal whereas large blood clots can be a part of heavy period, which can be a sign if serious medical issue. The main cause of blood clots during periods is polyps and fibroids. There are many types of benign fibroids but submucosal fibroids that grow inside the uterine cavity are most likely to cause heavy bleeding and large clotting. Uterine polyps that grow on the cervix or in the lining of the uterus can also be a factor for heavy clotting (Herman, Mol and Bongers, 2016).

Another menstrual issue is spotting between periods which happens outside of a normal period which may be heavier with a larger blood loss or may be very light blood loss. The majority of the participants said that they noticed blood spots in between periods. Bleeding between periods is common. Most women at some point during their lives face this but it is not normal to bleed frequently between periods for several months. Many things can cause spotting between periods such as changes in hormone levels, injury, polyps in uterus or cervix or it can be due to use of hormonal contraception as well. Stress and recent changes of diet can reduce estrogen levels which can also lead to this condition. Girls who have just started their periods and women who are going through menopause are more likely to have irregular periods, but it should not be confused with bleeding between periods. Absenteeism during periods is commonly seen among schoolgirls. 30 participants say that they miss school either with some periods or with every period. The most common reason for them to miss school is that the period being too painful or heavy blood flow. Painful menstruation is called dysmenorrhea which causes pain in the lower abdomen, extending to lower back or legs which can also accompany sweating, headache, nausea, vomiting and breast tenderness. While some women in their reproductive history have never experienced menstrual discomfort, approximately half of menstruating omen go through painful menstruation regularly. Absenteeism creates negative impacts on studies (Mesele et al., 2022) Period pain and cramps are often common and different females have this with varying intensities. Some women who have unbearable pain produce too much of prostaglandins in their womb, which makes them difficult to carry out their daily activities. Anti-inflammatory pain killers inhibit the production of prostaglandins and relieve period pain. These drugs are called as non- steroidal anti-inflammatory drugs (NSAIDs). But using a high dose of anti-inflammatory drugs can slow down period flow by 10-20%. (Rodreguiz et al., 2019) Ibuprofen is the most common NSAID and although most people take paracetamol as medication, it has been proven to be less efficient and has side effects like upset stomachs, vomiting, and nausea. Most of the participants have missed periods for more than 1 month but still they do not seek medical advice because some think that it is normal. One participant said, "missing one or 2 periods is normal as up to my knowledge, therefore I didn't seek for any medical advice". This shows the unawareness of them regarding menstrual issues. Other responses received were, "It's like one time situation", "It was back to normal by the next month", "Because I cause a lot of stress to my body and it's normal to miss period occasionally". Main reason for the participants to think that missing periods is normal is that they experience it frequently. Some participants assumed their symptoms to be normal because other women experienced the same symptoms such as missing periods. Menstruation should be encouraged to be recognized as key to being a healthy woman, and nothing to be ashamed of. It is emphatically not a weakness, but a distinctive female characteristic that signals the ability to bring forth offspring (Olson et al., 2022)

The correlation studies conducted between the participants who had abnormal BMI (overweight, underweight and obese) two factors were identified to assess the link between nutritional status and the menstrual issues: Heavy bleeding and number of days for the periods. Both the correlations deemed as positively correlated and this signifies the emphasis proper nutrition impacts the menstrual health. The impact of the economic crisis affecting the affordability of food has impacted nutrition status and the same has reiterated the indirect effect on menstruation and overall health and well-being. This emphasized the existence of a 'food gap' indicating the inadequacy of dietary energy in terms of food intakes of some key components such as iron, calcium and folic acid which are some of key micronutrients and a more pronounced dietary energy inadequacy. As a country it is vital to emphasize that in the current scenario undergoing a major burden of malnutrition and need to implement targeted interventions for nutrition and needs to strengthen programs designed to improve food security and adequate nutrition (Jayatissa and Marasingha, 2022)

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SUSTAINABLE BUSINESS MODELS FOR SRI LANKAN SURFING OPERATORS: BALANCING ECONOMICS, ENVIRONMENT, AND DIGITAL TOOLS

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Abstract

This research looks into the pressing call for the application of sustainable business models in the surfing business sector in Sri Lanka. The sector is presently in the middle of fast growth but it is faced with problems like financial insecurity, resource waste, and a drop in customer care quality. Using the Triple Bottom Line (TBL) and Business Model Canvas (BMC) frameworks, the research is focused on creating an all-in-one model that will combine economic viability, environmental stewardship, and social responsibility.

The low environmental consciousness but high interest in eco-friendly practices have been the focus of the study. Much of the trouble faced by these surfers is brought about by the following: their sluggish earnings due to outdated business models and non-renewable resource consumption which in turn disrupts the environment. The proposal for the use of digital technologies for business enhancement is the other point that is accentuated.

The projected model proposes that the best course of action is to diversify income streams to secure the company's profit, take advantage of low-cost production approaches, and go "green" and introduce digital tools. The execution will bring better financial results, decreasing the eco-footprint, as well as promoting service quality, thus Sri Lanka will stand to be among the leading choices for eco-conscious travellers as well as the sustainability tourism sector.

Keywords: Sustainable business models, Surfing

Introduction

Surfing in Sri Lanka is skyrocketing to date because more and more tourists are coming to the island to go surfing. Albeit, the industry is faced with thorny issues in that the business concept is not well-articulated and thus the business can't operate sustainably. The fact is that the acceptable banking models are already used in enriching the sharing about environment degradation and the economic profit it can bring (Perera et al., 2023).

The research of the dominant operators reveals that most of them wrestle with financial instability because their business models are not adjusted to thrive in the changing environment and to cater to diversified income streams (McGregor & Wills, 2017). Indeed, the cyclic impact of the financial situation on the business is forcing some operators to apply the money that they could have invested in the service and facilities to deal with tight times.

A variety of instances of inefficiency in resource usage are recorded with scarce operators who do not apply strategies for waste minimization or natural resource conversation (Manero & Mach, 2023). This process not only increases operational costs but also causes worsening of the environment.

The instance of a lack of sustainability due to disorder in the trading industry may lead to a decline in the quality of services provided. As a result, the tourist does not have an engaging experience that keeps him coming back, making it harder to win loyal patrons and only attracting positive comments (Sharafuddin et al., 2022). Kindly let me know what I should provide as Metric and Wholesale prices if changes in the prices may benefit Indian consumers in the long term.

One has an elementary human own aim to empower the birth of the sustainable business model. A relevant business strategy should combine prosperity business, social equity, and eco-responsibility. The study aspires to close this gap via the instrument that melts the very economic and environmental strategies to which the sustainability of the Suin South is assured in the long run.

Despite the notable increase in tourism and the growing popularity of surfing in Sri Lanka, many surfing operators are hampered by the absence of proper business models that integrate economic and environmental sustainability. This deficiency manifests in several ways. Firstly, without a robust business model, operators are unable to maximize their profits, often resulting in financial strain. Secondly, the lack of structured frameworks leads to inefficient management of resources, including the natural environment, which is crucial for the sustainability of the surfing industry. Lastly, the quality of services provided to tourists is adversely affected, diminishing the overall tourist experience and potentially deterring future visitors (Alrawadieh et al., 2019). Therefore, addressing the gap in sustainable business models is essential for the long-term success and viability of the surfing industry in Sri Lanka.

The aim of this study is to design a sustainable business model for surfing operators in Sri Lanka that effectively integrates economic viability with environmental stewardship within the context of the digital economy (Sriyani & Wedathanthirige). This dual focus ensures that the proposed model not only enhances profitability but also mitigates the environmental impact of surfing activities, thereby fostering a sustainable and resilient surfing industry.

The study aims to achieve several specific objectives. First, it seeks to assess the current business models used by surfing operators in Sri Lanka through a comprehensive analysis of existing practices, identifying strengths and weaknesses, and understanding the extent to which these models contribute to or hinder sustainable operations. Second, it aims to identify the challenges faced by surfing operators due to the lack of sustainable business models, focusing on issues such as financial instability, resource inefficiency, and environmental concerns, and examining how these challenges impact their operations and long-term sustainability. Third, the study aims to develop a framework for a sustainable business model that enhances competitiveness in the digital era. Based on the insights gained from the assessment and identification of challenges, the objective is to create a structured, adaptable business model that leverages digital tools and practices to improve operational efficiency, profitability, and environmental sustainability.

This research is the first of its kind in this area and has the tremendous potential to change the landscape of the economic sector for surfing advisers. The study identified the following major elements in the surf industry that need to change (Borne et al., 2015). For operators to launch and sustain a green or sustainable business model, they need to accomplish several key goals. Improved financial performance is essential; companies that expand revenue channels and control their costs will be more profitable and have less exposure to financial risks. Enhanced competitive edge is also vital; operators with sustainability-focused models can better compete due to increasing demand for eco-friendly practices among tourists. The study highlights the importance of reducing the carbon footprint of surfing operations and examines the environmental and economic advantages of innovative and creative eco-friendly processes (Wheaton, 2020).

Preservation of natural resources is another critical factor, as sustainability strategies must integrate with efforts to protect surf spots and marine ecosystems, which are essential for the industry's survival. Pollution reduction is equally important, as promoting responsible waste management and thoughtful disposal of litter will protect local wildlife and contribute to a cleaner environment. An additional valuable aspect of the company's performance is the tourist experience, particularly customer satisfaction. Companies that address societal concerns like wage inequality by offering sustainable products and services attract ethically conscious customers as well as those with limited affordability (Simon & Müller, 2022). Finally, market differentiation is another strong case for turning green. Sustainable operators stand out in a competitive market and attract tourists who seek finer environments dedicated to responsible, eco-friendly practices.

Literature Review

The extant literature on sustainable business models is predominantly concentrated on general tourism and a range of other industries (Towner & Milne, 2017). While there is a substantial body of work exploring sustainable tourism practices broadly, there is a discernible paucity of research specifically addressing the surfing industry, particularly within the Sri Lankan context. Surfing operators in Sri Lanka face unique challenges that are not fully addressed by studies focused on other types of tourism or industries. This gap is significant given the unique environmental, economic, and operational dynamics of surfing as a niche market. This research seeks to fill this gap by providing a focused examination of the sustainable business model requirements for surfing operators in Sri Lanka. By doing so, it aims to offer tailored solutions that cater to the specific needs and challenges faced by these operators, thereby contributing to the broader discourse on sustainable tourism practices (Deyshappriya & A. M. D. B., 2020).

Theoretical Framework

The theoretical framework for this research is grounded in two principal theories- the Triple Bottom Line (TBL) theory and the Business Model Canvas (BMC).

The Triple Bottom Line (TBL) theory, proposed by John Elkington in 1994, is a comprehensive framework that evaluates business performance on three dimensions- economic, environmental, and social sustainability. This theory is particularly relevant for this study as it underscores the importance of balancing profitability with environmental stewardship and social responsibility (Rashidi et al., 2020). The economic dimension focuses on financial performance and viability, the environmental dimension emphasizes sustainable practices that minimize ecological impact, and the social dimension considers the broader impact on society, including local communities and stakeholders.

The Business Model Canvas (BMC), developed by Alexander Osterwalder and Yves Pigneur, provides a systematic framework for designing, visualizing, and assessing business models. The BMC consists of nine building blocks- value proposition, customer segments, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. This model is highly adaptable and can be customized to incorporate sustainability considerations, making it an ideal tool for developing sustainable business models for surfing operators (Atif, 2023).

Importance of a Sustainable Business Model for Surfing Operators

The implementation of a sustainable business model is imperative for surfing operators, particularly in the context of Sri Lanka. Such models ensure long-term economic viability by optimizing resource use, reducing operational costs, and enhancing service quality. This, in turn, helps operators to remain competitive in an increasingly eco-conscious market.

A sustainable business model can also mitigate the environmental impact of surfing operations. By adopting eco-friendly practices, such as reducing waste, conserving water, and protecting marine ecosystems, operators can preserve the natural environments that are essential for their business (Towner & Orams, 2022). This not only benefits the environment but also enhances the attractiveness of Sri Lanka as a sustainable tourism destination.

Moreover, sustainable business models can improve the quality of services provided to tourists. By focusing on customer satisfaction and value creation, operators can attract more tourists, increase customer loyalty, and generate positive word-of-mouth marketing (Martin & Assenov, 2020). This holistic approach to business sustainability ultimately contributes to the resilience and long-term success of surfing operators.

Elements of a sustainable business model for surfing operators encompass economic, environmental, and digital integration strategies that aim to ensure long-term viability and ecological responsibility.

In terms of economic sustainability, surfing operators can diversify revenue streams beyond conventional surfing services by offering custom merchandise, shore excursions, or hosting surfing debates and parties to generate additional income. Effective cost management can be achieved through strategies such as budgeting, monitoring expenses, and adopting cost-saving technologies and practices (Buckley, 2021). Additionally, promoting efficient resource use through the education and implementation of energy-efficient equipment, water-saving technologies, and sustainable materials is essential for minimizing costs and environmental impact (Jaafar & Maideen, 2019).

Environmental sustainability focuses on the adoption of eco-friendly practices, such as using biodegradable products, avoiding plastics, and establishing a recycling plan for waste materials. Surf operators should implement comprehensive waste management systems that include waste separation technologies, recycling programs, and regular beach cleanups (Grilo Filipa, 2021). Furthermore, engaging in conservation efforts by working with local environmentalists to protect marine ecosystems and restore damaged habitats is vital for preserving the natural resources that sustain the surf industry.

Digital integration plays a crucial role in modern business models. Surf operators should utilize online marketing tools like Instagram, Twitter, and content marketing, optimizing their online presence through SEO strategies. Implementing booking systems that offer seamless online booking and mobile app integration, possibly linked to global hotel networks, enhances customer convenience (Verdecchia et al., 2022). Finally, offering multiple digital payment options, including digital wallets, credit cards, and online payment gateways, ensures ease of transaction for customers.

Based on Triple Bottom Line (TBL) and Business Model Canvas (BMC) theories, a theoretical framework can be developed to guide data collection, serving as the basis for preparing interview guides and surveys. This framework will explore current business practices among surfing operators, identify their challenges, and uncover opportunities for sustainable model development (Borne, 2023). Interview questions could delve into resource management practices, environmental initiatives, and the operators' views on the importance of sustainability.

By applying this framework, the research aims to collect detailed data that can lead to the creation of a robust, sustainable business model suited to the unique needs of surfing operators in Sri Lanka (Ruttenberg, 2023). This approach not only ensures the relevance and practical application of the research findings but also contributes to the global promotion of sustainable tourism practices.

Methodology

This study adopts a qualitative research design to explore and understand the perspectives of surfing operators, tourists, and other stakeholders regarding sustainable business models in Sri Lanka. The qualitative approach is chosen for its ability to provide rich, detailed insights into participants' experiences, attitudes, and practices (Chandralal & Fernando, 2022). In-depth interviews will be the primary data collection method, allowing for comprehensive exploration of the issues at hand.

Two distinct interview guides will be developed to tailor the questions to the specific groups of participants. The first guide will target surfing operators, focusing on their current business practices, challenges, and views on sustainability (Pathirana & Thivanka, 2020). Questions will explore areas such as financial management, resource utilization, environmental practices, and customer service strategies. The second guide will be for tourists and other stakeholders, such as government agents, accommodation providers, transport providers, and Destination Management Companies (DMCs). This guide will focus on their experiences and perceptions of surfing services, the importance of sustainability, and their expectations from surfing operators (Waas et al., 2020).

The study will focus on surfing operators in two prominent surfing destinations in Sri Lanka-Arugambay and Weligama. Using purposive sampling, a diverse sample of 15 surfing operators will be selected to ensure representation of different business sizes and types. Additionally, convenience sampling will be used to select a sample of 7 tourists and 8 stakeholders. This sampling method allows for the inclusion of participants who are readily available and willing to provide their insights, ensuring practical feasibility while capturing diverse viewpoints.

The interview data will be analyzed using thematic analysis, a method well-suited for identifying, analyzing, and reporting patterns (themes) within qualitative data. This technique involves familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. Thematic analysis will enable the identification of key themes and patterns related to the development of sustainable business models for surfing operators (Abeysinghe et al.). This method will provide a structured approach to interpret the complex data, ensuring that the analysis remains grounded in the participants' actual experiences and perspectives.

Results and Analysis

Results for Surfing Operators

Table 1: Theme- Awareness of Sustainable Business Models

Sub-theme	*Description*	*Findings*
Low Awareness	*Many operators have minimal understanding of sustainable business models.*	*Only 20% of operators could clearly define what constitutes a sustainable business model.*
High Interest	*Despite low awareness, there is significant interest in learning and adopting sustainable practices.*	*80% of operators expressed eagerness to participate in training programs on sustainable business models.*

Table 2: Theme- Knowledge and Practice

Sub-theme	*Description*	*Findings*
Limited Knowledge	*Operators have limited knowledge of sustainable practices.*	*70% of operators were unaware of eco-friendly certification programs.*
Practical Application	*Few operators currently implement sustainable practices.*	*Only 30% of operators have adopted any form of waste management or eco-friendly initiatives.*

Table 3: Theme- Competitive Advantage

Sub-theme	*Description*	*Findings*
Recognition of Competitive Loss	*Operators recognize that not having sustainable models is a disadvantage.*	*60% of operators noted a decline in tourist interest due to lack of sustainable practices.*
Potential for Improvement	*There is a belief that adopting sustainable practices could improve competitiveness.*	*75% of operators believe that integrating sustainable practices would enhance their market position.*

Results for Tourists and Stakeholders

Table 4: Theme- Competitiveness in the Digital Era

Sub-theme	*Description*	*Findings*
Outdated Practices	*Current business practices are seen as outdated and inadequate.*	*65% of tourists reported dissatisfaction with the lack of online booking and payment options.*
Need for Modernization	*Stakeholders emphasize the need for digital integration to stay competitive.*	*80% of stakeholders agree that digital tools are essential for business success in the modern tourism market.*

Table 5: Theme- Need for Proper Models

Sub-theme	*Description*	*Findings*
Consensus on Necessity	*There is a general agreement on the need for sustainable business models.*	*90% of stakeholders and tourists believe sustainable models are critical for future success.*
Support for Implementation	*Stakeholders are willing to support the development and implementation of sustainable models.*	*70% of stakeholders indicated willingness to collaborate on sustainability initiatives.*

Table 6: Theme- Economic Sustainability

Element	*Description*	*Findings*
Diversified Revenue Streams	*Developing multiple income sources to reduce dependency on single revenue streams.*	*Operators suggested adding merchandise sales, eco-tours, and workshops.*
Cost Management	*Effective management of costs to ensure profitability.*	*Identified need for financial training to improve cost management practices.*
Efficient Resource Use	*Optimal use of available resources to maximize efficiency and reduce waste.*	*Recommendations included adopting energy-efficient equipment and sustainable materials.*

Table 7: Theme- Environmental Sustainability

Element	*Description*	*Findings*
Eco-Friendly Practices	*Implementing practices that reduce environmental impact.*	*Examples include using biodegradable products, minimizing plastic use, and promoting recycling.*
Waste Management	*Effective systems for managing waste generated by business operations.*	*Establishing regular beach clean-up events and proper disposal methods.*
Conservation Efforts	*Initiatives aimed at preserving natural environments and resources.*	*Partnerships with local environmental organizations for conservation projects.*

Table 8: Theme- Digital Integration

Element	*Description*	*Findings*
Online Marketing	*Utilizing digital marketing strategies to reach a wider audience.*	*Increased presence on social media platforms, use of targeted advertising.*
Booking Systems	*Implementing online booking and reservation systems for convenience.*	*Adoption of user-friendly websites and mobile apps for booking surf lessons and equipment rentals.*
Digital Payment Options	*Providing various digital payment methods to enhance customer convenience.*	*Integration of digital wallets, credit card payments, and other online payment systems.*

Discussion

The findings of this study are well-aligned with the theoretical frameworks of the Triple Bottom Line (TBL) and the Business Model Canvas (BMC). These frameworks emphasize the importance of balancing economic, environmental, and social factors to achieve sustainable business practices.

The TBL theory highlights the necessity of integrating economic viability with environmental stewardship and social responsibility. The results demonstrate that the current lack of awareness and implementation of sustainable business practices among surfing operators in Sri Lanka negatively impacts their economic performance and competitive advantage. This aligns with the TBL framework, which posits that neglecting any one of these three dimensions can undermine overall sustainability. For instance, financial instability and inefficient resource use reported by operators reflect a neglect of the economic and environmental dimensions, respectively (. Silvestre, 2015).

The BMC framework provides a structured approach for designing comprehensive business models by focusing on key elements such as value proposition, customer segments, and revenue streams. The study's findings underscore the importance of these elements in developing a sustainable business model for surfing operators (Ghisellini et al., 2021). For example, the need for diversified revenue streams and efficient cost management directly corresponds to the 'Revenue Streams' and 'Cost Structure' components of the BMC. Similarly, the emphasis on digital integration through online marketing, booking systems, and digital payment options aligns with the BMC's focus on channels and customer relationships.

By addressing the gaps identified in this study, surfing operators can enhance their competitiveness and sustainability. Implementing a sustainable business model based on TBL and BMC principles can provide a structured approach to resource management, customer engagement, and digital integration (Berg et al., 2019). This holistic approach ensures that operators not only improve their financial performance but also contribute positively to environmental conservation and social well-being.

Recommendations

Based on the comprehensive examination and discoveries of this study, several recommendations are proposed to facilitate the sustainability and competitiveness of surfing operators in Sri Lanka. For economic sustainability, surfing operators should diversify their revenue streams. This can be done through merchandise sales by inventing and marketing branded merchandise, surf apparel, accessories, and equipment to generate additional income. Another option is offering eco-tours and workshops, providing guided eco-tours and surfing workshops that educate the public about the environment and sustainable aquatic lifestyles. Shore excursions and events can also be organized, such as beach parties and surfing competitions, to attract more tourists and generate income.

In terms of cost management, operators should receive financial training to enhance budgeting, expense monitoring, and the use of technology and sustainable practices to reduce costs (Fadda, 2020). Training programs should be carried out to instruct operators on better financial management practices (Bosquetti et al., 2021). Additionally, operators should adopt cost-saving technologies by investing in energy-efficient equipment, water-saving technologies, and sustainable materials to lower operational expenses. To promote efficient resource use, companies can optimize resources by using energy-efficient equipment and sustainable materials. Employee training is also essential, as staff should be educated on sustainable practices to ensure resource efficiency across the organization.

For environmental sustainability, surf operators should implement eco-friendly practices by using biodegradable products and avoiding single-use plastics to minimize environmental impact. Establishing recycling programs is crucial, including waste separation technologies and encouraging tourists to participate in eco-friendly practices (Grilo Filipa, 2021). Effective waste management should involve implementing waste separation and recycling systems, as well as organizing regular beach clean-ups. Partnerships with local waste management services can also enhance proper disposal and recycling. Operators should engage in conservation efforts by collaborating with local environmental organizations to support marine protection projects and restore damaged ecosystems. Additionally, environmental education initiatives can be implemented to educate tourists and the local community about sustainable practices and the importance of environmental conservation.

In the area of service quality, customer satisfaction can be improved by introducing feedback mechanisms that collect visitors' opinions and help improve service standards. Training programs should also be regularly provided to staff to maintain a high level of customer satisfaction and create a pleasant environment for visitors. Market differentiation can be achieved through the promotion of sustainable practices, encouraging operators to display their eco-friendly products at events aimed at attracting eco-conscious tourists. Offering sustainable solutions by integrating sustainability with diversified tourism offerings will create unique experiences for tourists, keeping them coming back. Promoting sustainable practices at various events can help increase the number of eco-conscious tourists. Additionally, providing enhanced experiences through unique, sustainable activities will set operators apart from competitors.

In terms of digital integration, a strong social media presence should be established on platforms such as Instagram, Facebook, and Twitter to showcase sustainable business activities. Content marketing and SEO are also vital for increasing visibility and attracting more tourists. Creating user-friendly websites with easy access to booking portals is essential for improving customer convenience. Developing mobile apps that allow customers to book surf lessons, rent equipment, and access other services will further enhance the user experience. To facilitate transactions, operators should integrate digital payment options, including digital wallets, credit card payments, and online payment gateways. Ensuring security measures like SSL encryption will help build customer confidence in online transactions.

Finally, stakeholder engagement is essential. Operators should collaborate with government agencies and NGOs to support sustainability initiatives and gain access to necessary resources. Engaging with local communities will raise awareness about sustainable practices and encourage participation in conservation projects. Organizing sustainability workshops and awareness campaigns for operators, staff, and stakeholders will help promote sustainable business models and educate tourists about the importance of responsible behavior. Through these collaborative efforts, the surf operators can contribute to the broader goal of promoting sustainable tourism practices while enhancing their competitiveness in the market.

Conclusion

Down there the study says what should be done to ensure surfers in Sri Lanka are business-as-usual for surfing. Although surfing as a tourist attraction is on the rise, many of the companies operating are faced with problems associated with finances, lack of efficient resource management, and diminishing service quality. There include barriers such as no structure in the form of environmentally and socially supported business practices that are economically viable in the context of economic viability.

Moreover, the hypotheses like Triple Bottom Line (TBL) and Business Model Canvas (BMC) can be a key stone to not only the development of these possible models but sustainable business models as well. TBL advocates the significance of the regulation of environmental institutional, economic and social components, whereas BMC is a roadmap for designing sustainable management. Our discovery is the same as the proponents of these constructs, in that, e.g., the more income sources there are, the easier it will be to manage expenses and to digitize the operation.

The Sri Lankan surfing market, by embracing the right practices and business models, can not only prosper financially but also keep impact on the environment at the level it is now. The comprehensive treatment of the environmental aspects has another, closely linked benefit, which is tourism that is both environmentally and economically sustainable. Sri Lanka will accomplish this by putting forward an example that others would want to follow and thus they will become a favoured destination for the tourists who are environmentally conscious. Besides that, as a result, there will be more travellers and the atmosphere will be cleaner.

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IMPACT OF ATTITUDE TOWARD ECO-FRIENDLY FASHION ON YOUNG CONSUMERS' PURCHASE INTENTIONS

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Abstract

The fashion industry has evolved significantly, transforming from a basic necessity to a multi-billion dollar enterprise. However, it is also a major contributor to environmental pollution, raising concerns about sustainability. These concerns have driven the creation of eco-friendly fashion, influencing consumer purchase intentions, particularly among young consumers. This study investigates the impact of attitudes toward eco-friendly fashion on the purchase intentions of university students. The foundation of this research is based on past observations that consumers' attitudes toward a brand's qualities and values affect their purchasing decisions. This study specifically examines eco-friendly fashion and its influence on consumers' attitudes, leading to purchase intentions. Data was collected via a self-administered questionnaire distributed to a sample of 300 university students. Statistical analysis was performed using correlation and regression tests on SPSS. The findings indicate that a positive attitude toward eco-friendly fashion significantly enhances consumers' purchasing intentions. Therefore, both the industry and consumers should focus on developing eco-friendly fashion, as it holds the potential to reshape the future of the fashion industry.

Keywords: Consumer purchase intentions, eco-friendly fashion, young consumers, sustainability

Introduction

Fashion has been extensively explored in research, with evolving concepts such as "ethical fashion" transforming traditional ideologies. Ethical fashion has been categorized into three main issues: fair trade, labor exploitation, and child labor (Pollari, 2016). Environmental concerns have also been significant, often studied alongside fair trade to understand the values of both consumers and suppliers. Recently, the focus has shifted to cruelty-free fashion, highlighting animal cruelty in the industry and the demand for cruelty-free products (Carrigan, Szmigin, & Wright, 2004; Pollari, 2016).

Research has shown that consumer purchase behavior is influenced by their perception of a business's environmental responsibility and fair labor practices (Shen, Richards, & Liu, 2021). Additionally, ensuring animal rights and using cruelty-free materials in fashion products motivates consumers to purchase these products (Sheehan & Lee, 2014). This study aims to understand the impact of eco-friendly practices in the fashion industry on consumers' purchase intentions, specifically focusing on young consumers, as they represent future market trends (Ma, Littrell, & Niehm, 2012).

Eco-friendly fashion is defined by the use of environmentally friendly materials and the alignment of product features with consumers' personal eco-friendly practices. This paper provides a brief introduction to the study, followed by a literature review, methodology, results, and conclusion.

Literature Review

This study utilizes Ajzen's Theory of Planned Behavior (TPB) to explore how attitudes towards eco-friendly fashion impact young consumers' purchase intentions. TPB posits that consumer purchase behavior is a result of their purchase intentions, which are influenced by their beliefs and attitudes (Ajzen, 1991). Previous research has applied TPB to examine the relationship between consumer behavior and ethical fashion, providing a foundational framework for this study (Shen, Wang, Lo, & Shum, 2012; Favier, 2013; Oh & Yoon, 2016; Pollari, 2016; Hegner, Fenko, & Teravest, 2017).

Fashion, as a concept, is multifaceted and difficult to define universally. According to Aspers and Godart (2013), fashion can be understood in two ways: as a change or as a dress. The former refers to fashion as an evolving concept, where new trends continually replace old ones. The latter view equates fashion with clothing. Fashion is closely tied to daily life and encompasses various sub-concepts such as clothing, trends, personal statements, and styles (Chan & Wong, 2012; Favier, 2013; Pollari, 2016).

The expansion of the fashion industry has introduced ethical considerations due to rising global concerns (Pollari, 2016). Ethical issues in fashion span the entire value chain, including environmental, social, and labor concerns involving manufacturers, wholesalers, retailers, and consumers (Niinimäki, Peters, Dahlbo, Perry, Rissanen, & Gwilt, 2020). Ethical fashion is defined as clothing produced under fair labor conditions and with minimal environmental impact (Henninger & Brydges, 2023). It emphasizes manufacturing practices that are eco-friendly and the use of non-sweatshop labor.

Eco-friendly clothing, a subset of ethical fashion, excludes harmful chemicals and materials, incorporating sustainable resources like recycled plastics, hemp, or bamboo (Sailer, Wilfing, & Straus, 2022). Ethical consumer behavior can manifest as either boycotting unethical brands or favoring those that are ethically produced. This behavior is often driven by a sense of moral responsibility and a commitment to ethical principles, even without personal gain (Pollari, 2016; Zollo, 2024). Sheehan and Lee (2014) highlight that ethical consumers base their purchasing decisions on their ethical commitments and values, integrating these considerations into their self-identity.

Methodology

The study focuses on undergraduate students from the Faculty of Management Studies and Commerce (FMSC) at the University of Sri Jayewardenepura (USJ), which has a population of 4,889 students. This demographic was chosen because, as noted by Joergens (2006), young consumers are poised to become the next generation of ethical consumers. Additionally, Mirza and Mirza (2020) highlights that this group shows greater interest in fashion compared to older consumers, positioning them as a key demographic capable of influencing retailers and brands to adopt more ethical practices.

To ensure representative sampling, a random sampling method was employed. According to Sekaran's (2012) guidelines on sample size, 357 undergraduates were selected from the population for quantitative analysis.

The research followed a structured empirical process consisting of questionnaire design, pilot testing, and data collection. The data collection instrument was a self-administered structured questionnaire. Respondents rated their agreement using a five-point Likert scale, where "1" indicated "strongly disagree" and "5" indicated "strongly agree."

A pilot test involving 35 participants was conducted to validate the questionnaire and ensure its effectiveness. The pilot test data were analyzed using reliability tests (Cronbach's alpha), correlation analysis, and regression tests. Results showed all internal reliability estimates exceeded 0.7, indicating high reliability and consistency of the research instrument.

Data collection was carried out via an online Google form, with the survey link distributed to the sample group. Upon receiving 357 completed responses, the survey was closed to further submissions.

Results and Discussion

The process of data analysis included numerous steps from data screening to regression analysis. Except for the background information, all other variables were tested through the following procedures. The screening of outliers, normality and multivariate assumptions techniques was done initially.

Multiple regression analysis was employed to evaluate the linear relationships between variables. Multicollinearity was assessed using tolerance values and the variance inflation factor (VIF), which is the inverse of the tolerance value. The tolerance values did not exceed the common cutoff point of 0.1, and the VIF values were below 5, indicating that multicollinearity was not an issue in this study.

Additionally, the analysis took into account six demographic factors to provide a comprehensive understanding of the respondents' profiles, as shown in Table 1.

Table 1: Respondents profile

Variable	*Category*	*Range*	*Frequency*	*Percentage*
BI1	*Gender*	*1. female* *2. Male*	*173* *137*	*55.8* *44.2*
BI2	*Age*	*1. 19-21* *2. 22-24* *3.25-27*	*61* *245* *4*	*19.7* *79* *1.3*
BI3	*Academic year*	*1. first-year* *2. second-year* *3. third-year*	*81* *79* *84*	*26.1* *25.5227.1* *21.3*

		4. fourth year	*66*	
BI4	*How do you get money to do fashion purchases?*	*1. self-earned* *2. from parents/caretakers* *3. other*	*98* *204* *8*	*31.6* *65.8* *2.6*
BI5	*How much do you spend on fashion purchases within a year? (LKR)*	*1. <5000* *2.5000-10000* *3.>10001*	*17* *165* *128*	*5.5* *53.2* *41.3*
BI6	*How often do you make fashion purchases within a year?*	*1. < 5 times* *2. 5-10 times* *3. >10 times*	*84* *163* *63*	*27.1* *52.6* *20.3*

Source: Compiled by the author based on data generated by SPSS version 23.0

Three main areas were focused on when obtaining descriptive statistics for the independent and dependent variables of the study. To measure the central tendency, mean and median values were considered. Dispersion of the data set was measured by maximum, minimum, range, variance and standard deviation values. Nature of the distribution was assessed through measures of skewness and kurtosis. Further, interquartile values were also considered. All the results for the aforementioned are presented in table 2 below.

Table 2: Descriptive statistics

Variable/ Dimension		*EF*		*CPI*	
		Statistic	*Std. error*	*Statistic*	*Std. error*
Mean		*4.2124*	*0.02342*	*4.2319*	*0.02231*
95% confidence interval for mean	*Lower bound*	*4.16663*		*4.1880*	
	Upper bound	*4.2585*		*4.2758*	
5% trimmed mean		*4.2413*		*4.2507*	
Median		*4.3333*		*4.3333*	
Variance		*0.170*		*0.154*	
Std. deviation		*0.41238*		*0.39274*	

Minimum	3.00		3.22	
Maximum	5.00		5.00	
Range	2.00		1.78	
Interquartile range	0.50		0.56	
Skewness	-0.847		-0.676	
Kurtosis	0.445		-0.199	

Source: Compiled by the author based on data generated by SPSS version 23.0

Since the independent variable ethical fashion and dependent variable consumer purchase intention showed a strong positive relationship, a regression analysis was conducted to examine the impact of the independent variable on the dependent variable. The following section elaborates its results.

Table 3: Model summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.682[a]	.461	.456	.292679	.461	83.870	3	306	.000	1.887

a. Predictors: (Constant), Eco-friendly fashion

b. Dependent Variable: Consumer Purchase Intention

Source: Data generated by SPSS version 23.0

According to the table 3, the value of R square is 0.461 meaning that 46.1% of the variation of the dependent variable (consumer purchase intention) can be explained by the independent variable; eco-friendly fashion.

Further, the Durbin – Watson test value is 1.887 which is closer to 2, thus indicating that there is no autocorrelation.

Table 4: ANOVA

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.502	3	7.167	83.840	.000[a]
	Residual	26.160	306	.085		
	Total	47.662	309			

a. Predictors: (Constant), Eco-friendly

b. Dependent Variable: Consumer Purchase Intention

Source: Data generated by SPSS version 23.0

The F value and p-value (sig.) shown in the above table 4, provides further ground to prove the impact of the independent variables on the dependent variable. The p-value is less than 0.001 and the F value is greater than the p-value. Thus, consumer purchase intention (dependent variable) depends on the independent variable (eco-friendly fashion).

Table 5: Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1.273	.194		6.548	.000	.890	1.655		
	Eco friendly	.365	.055	.384	6.695	.000	.258	.473	.546	1.831

a. Dependent Variable: Consumer Purchase Intention

Source: Data generated by SPSS version 23.0

As shown in table 5, the p- values for eco-friendly fashion is less than 0.05, indicating that those are significant predictors of consumer purchase intention.

Thus for every unit increase in beliefs and attitudes about eco-friendly fashion, consumer purchase intention of undergraduates will go up by 0.365.

The 95% confidence interval for eco-friendly variable is (0.258-0.473). The value of 0 does not fall within those intervals, again indicating that those are significant predictors.

Conclusion

The objective of this study was to examine the impact of eco-friendly fashion on consumer purchase intention. The analysis revealed a positive relationship between the independent variable, eco-friendly fashion (EF), and the dependent variable, consumer purchase intention (CI). Specifically, as beliefs and attitudes towards eco-friendly fashion increased, so did the purchase intentions among undergraduates. The correlation coefficient for EF was 0.599, with a p-value of less than 0.001, indicating a statistically significant positive relationship between eco-friendly fashion and consumer purchase intention.

Regression analysis further supported these findings, showing a beta value of 0.356 with a significance value (p-value) of 0.000, which is below the 0.05 threshold. This suggests that for every unit increase in beliefs and attitudes regarding eco-friendly fashion, the consumer purchase intention of undergraduates increases by 0.356, assuming that beliefs and attitudes towards fair trade fashion and cruelty-free fashion remain constant.

These results indicate that undergraduates are significantly influenced by eco-friendly factors in fashion. Their positive beliefs and attitudes towards eco-friendly fashion translate into increased purchase intentions, including willingness to pay a premium and preference for eco-friendly brands over conventional options.

This finding is consistent with previous studies, such as those by Abrar, Sibtain, and Shabbir (2021), Kozar and Connell (2013), and Gwozdz, Nielsen, and Müller (2017), which also identified a positive effect of eco-friendly fashion on consumer behavior. For instance, Yoon and Joung (2019) has stated that there is an importance of environmental knowledge education on purchasing eco-friendly fashion. Similarly, Kumar, Garg, and Singh (2022) has found that environmental concern to have an indirect effect on purchase intention in fashion.

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IMPACT OF ECONOMIC CRISIS ON OUT-OF-POCKET HEALTHCARE EXPENDITURES IN RURAL COMMUNITIES IN SRI LANKA

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Abstract

Out-of-pocket (OOP) expenditures significantly impact healthcare access and financial stability, especially in low- and middle-income countries like Sri Lanka. The ongoing economic crisis, marked by severe inflation, currency depreciation, and fiscal instability, has intensified these challenges, particularly affecting rural populations who already face healthcare access issues. This review aims to investigate the effects of Sri Lanka's economic crisis on OOP healthcare expenditures among rural citizens. The focus is on analyzing the financial burden of healthcare, understanding the exacerbated challenges related to access and affordability due to the crisis, and proposing informed policy interventions. A systematic literature review was conducted, analyzing peer-reviewed journal articles published from 2018 to 2023. Key databases including PubMed, Scopus, and Google Scholar were searched using keywords such as "Sri Lanka," "rural healthcare," "out-of-pocket expenditure," and "economic crisis." Selected studies were evaluated for their methodologies, findings, and relevance to the Sri Lankan context. The review reveals a dramatic increase in OOP expenditures in Sri Lanka, rising from 42% of total health expenditure in 2021 to 55% in 2023. This surge is driven by extreme inflation, currency devaluation, and significant cuts in public health funding. Rural populations are disproportionately affected, facing higher medical costs and reduced access to essential healthcare services. Medication shortages, increased reliance on costly private healthcare, and the deterioration of service quality further compound the financial strain. Recent studies indicate that high OOP costs result in delays in seeking care and avoidance of necessary treatments, exacerbating health outcomes. The economic crisis in Sri Lanka has exacerbated financial and access-related challenges in rural healthcare. The review underscores the urgent need for policy interventions, including increased public healthcare funding, subsidies for essential medicines, expanded health insurance coverage, and community-based healthcare initiatives. These measures are critical for mitigating the financial burden on rural populations and improving healthcare access amid ongoing economic difficulties.

Keywords: Out-of-pocket expenditure, healthcare access, economic crisis, rural healthcare, Sri Lanka, public health funding, inflation, medication shortages, health policy.

Introduction

Out-of-pocket (OOP) expenditures are a critical aspect of healthcare financing, particularly in low- and middle-income countries like Sri Lanka. These expenditures encompass direct payments made by individuals or households to healthcare providers at the time of service, covering costs not included in insurance or public health programs. Such payments often include consultations, medications, diagnostics, hospital stays, and other health-related services, but exclude reimbursements from insurance companies or other third-party payers

(McIntyre et al., 2006). High OOP costs can lead to significant financial hardship, especially among low-income populations, and may discourage necessary medical care (Leive & Xu, 2008).

Sri Lanka has been deeply affected by a severe economic crisis characterized by extreme inflation, currency depreciation, and fiscal instability (Central Bank of Sri Lanka, 2023). These economic challenges have markedly impacted various sectors, including healthcare. Rural populations, already disadvantaged in terms of healthcare access, are facing heightened financial strains due to increased OOP expenditures (Bandara, 2011). As of 2023, government health expenditure as a percentage of GDP in Sri Lanka has declined to approximately 1.3% - 1.5%, reflecting the constrained fiscal space and resultant cuts in public sector spending (World Bank, 2023). Concurrently, OOP expenditures have surged, now constituting around 45% - 50% of current health expenditure, indicating that individuals are shouldering a significantly larger share of healthcare costs due to reduced government funding (Central Bank of Sri Lanka, 2023).

The impact on health services is profound. Medication shortages are widespread in public hospitals, affecting the availability of treatments for chronic conditions such as diabetes, hypertension, and cardiovascular diseases (Govindaraj et al., 2014). Additionally, critical shortages of medical supplies and equipment have further strained the already beleaguered public healthcare system (Amarasinghe et al., 2013). These shortages have dire implications for health outcomes: life expectancy may experience stagnation or decline due to diminished access to healthcare services, with 2023 projections suggesting a potential increase in the infant mortality rate to around 8.0 per 1,000 live births (Department of Census and Statistics, 2023).

For the 81% of the population residing in rural areas, reduced healthcare funding has exacerbated access challenges. Many rural clinics and hospitals are underfunded, compelling patients to travel greater distances to urban centers, often incurring significant personal costs (Hipgrave & Hort, 2014). The rise in OOP expenditures has placed an immense financial burden on low-income families, many of whom are being pushed further into poverty as they struggle to meet medical costs (Brinda et al., 2014). This financial strain is particularly severe in rural areas where incomes are generally lower (McIntyre & Gilson, 2002).

The data from 2023 underscores the deteriorating state of Sri Lanka's public healthcare system, with government spending on health continuing to fall. The escalation of OOP costs and the weakening of public healthcare infrastructure are leading to severe health disparities, especially among the most vulnerable populations (Bock et al., 2014). This study is critical for understanding the extent of the economic crisis's impact on healthcare affordability and access for rural communities, drawing on recent peer-reviewed studies and current data to offer a comprehensive overview of the issues and where financial hardship often results in delayed or forgone medical care.

Aim/Objective

The aim of this review is to offer a thorough understanding of how the economic crisis affects healthcare financing in rural areas and to provide actionable recommendations to alleviate these challenges. Specifically, this review seeks to analyze the influence of the economic downturn on the financial burden of healthcare, identify the challenges related to access and affordability exacerbated by the crisis, and propose informed policy interventions based on recent research findings.

Methodology

This literature review involves a comprehensive analysis of peer-reviewed journal articles published between 2018 and 2023. A systematic search was conducted across key databases including PubMed, Scopus, and Google Scholar, utilizing keywords such as "Sri Lanka," "rural healthcare," "out-of-pocket expenditure," and "economic crisis." Selected studies were evaluated based on their methodologies, findings, and relevance to the Sri Lankan context. The review focuses on studies that address the financial impact of the economic crisis on healthcare expenditures and the resulting access issues, providing a broad view of the current situation and identifying gaps in the literature.

Results

Impact of the Economic Crisis on OOP Healthcare Expenditures

The economic crisis in Sri Lanka has had a profound effect on out-of-pocket (OOP) healthcare expenditures, significantly impacting household finances, particularly in rural areas. The Central Bank of Sri Lanka (2023) reports a dramatic surge in inflation, with consumer prices soaring by over 50% in 2023 compared to the previous year. This unprecedented rise in prices has directly translated into increased costs for healthcare services. As a result, OOP expenditures as a percentage of total health expenditure have escalated from 42% in 2021 to 55% in 2023, according to the Central Bank of Sri Lanka (2023).

Several factors contribute to this surge in OOP costs. Currency depreciation has significantly increased the cost of imported medical supplies and pharmaceuticals, making essential medicines and medical equipment substantially more expensive (Govindaraj et al., 2014). This depreciation has compounded the financial burden on households, particularly those in rural areas where access to affordable healthcare is already limited.

Furthermore, the Sri Lankan government's austerity measures have resulted in significant cuts to public health spending. This reduction in public health funding has forced many individuals to turn to private healthcare services, which are considerably more expensive than public options. The Central Bank of Sri Lanka (2023) highlights that the increased reliance on private providers has further strained household finances, as these services often come with higher out-of-pocket costs.

The financial impact of these developments is illustrated by several studies. Govindaraj et al. (2014) emphasize that the reduction in public health funding has led to a greater dependency on private healthcare, which exacerbates the financial strain on individuals. Additionally, the rising cost of essential medicines, as noted by the Central Bank of Sri Lanka (2023), has intensified the burden on households, making healthcare less affordable and accessible.

This dramatic increase in OOP expenditures is not merely a reflection of rising healthcare costs but also a broader indication of the economic challenges facing the country. Rural populations are disproportionately affected by these increases due to their lower average incomes and reduced access to affordable healthcare services. The combined effect of inflation, currency depreciation, and reduced public funding has created a precarious situation for many rural households, highlighting the urgent need for targeted policy interventions to alleviate the financial burden and improve healthcare access in these communities.

Financial and Access-Related Challenges Exacerbated by the Crisis

The economic downturn has led to a reduction in the availability and quality of public sector health services, pushing rural populations towards more expensive private healthcare providers (Bandara, 2011; Berendes et al., 2011). Data from the Institute of Policy Studies of Sri Lanka (2022) indicate that the average monthly OOP expenditure for rural households increased by approximately 30% from 2021 to 2023. This increase has resulted in a rise in catastrophic health expenditures, which now affect 22% of rural households (Department of Census and Statistics, 2023). The rise in catastrophic expenditures is a clear indicator of the increased financial burden on these households.

Barriers to accessing affordable healthcare have also intensified. Rural populations face higher transportation costs to reach healthcare facilities and often struggle with the inability to afford necessary treatments (Brailsford & De Silva, 2015). This is compounded by the fact that rural healthcare services are often underfunded and lack essential resources, leading to poorer service quality (Berendes et al., 2011). Vulnerable groups such as the elderly and children experience severe impacts, as the high cost of healthcare creates significant barriers to obtaining necessary care (Hwang et al., 2001; Bock et al., 2014).

Healthcare Service Shortages and Quality Decline

The ongoing economic crisis in Sri Lanka has precipitated severe shortages in healthcare services, significantly impacting the quality of care available, particularly in rural areas. The Central Bank of Sri Lanka (2023) highlights that public hospitals are facing widespread shortages of essential medicines, which are crucial for treating chronic conditions such as diabetes, hypertension, and cardiovascular diseases. These shortages are partly due to the devaluation of the Sri Lankan rupee, which has increased the cost of imported medical supplies and pharmaceuticals (Govindaraj et al., 2014).

Moreover, the crisis has led to a scarcity of medical supplies and equipment. Facilities struggle to obtain necessary diagnostic tools and medical equipment, which affects their ability to provide comprehensive care (Amarasinghe et al., 2013). This deficit in resources is exacerbated by the reduction in government health expenditure, which has diminished the capacity of public health facilities to maintain and upgrade their services (World Bank, 2023).

The decline in service quality is evident in several critical areas. With essential medicines in short supply, the continuity of treatment for chronic diseases is compromised, leading to poorer management of these conditions and exacerbating health issues (Hipgrave & Hort, 2014). The lack of medical supplies also affects the ability of healthcare providers to perform necessary diagnostic tests and medical procedures, leading to delays in diagnosis and treatment (Govindaraj et al., 2014).

These service shortages have adverse consequences on health outcomes. Reports suggest that life expectancy in Sri Lanka may stagnate or even decline as access to effective healthcare becomes increasingly limited (Department of Census and Statistics, 2023). The infant mortality rate, a key indicator of overall health system performance, is projected to rise because of inadequate prenatal and postnatal care due to service gaps (Bock et al., 2014).

Additionally, the quality of healthcare services is further diminished by a shortage of trained healthcare professionals, who are either leaving the country in search of better opportunities or facing increased workloads due to staff shortages (McIntyre et al., 2006). This situation creates a vicious cycle where the declining quality of care leads to worse health outcomes, which in turn exacerbates the financial strain on households as they seek alternative or more frequent healthcare services.

In summary, the economic crisis has led to a critical shortage of essential healthcare services in Sri Lanka, contributing to a decline in the overall quality of care. These shortages not only affect the immediate availability of necessary treatments and medical supplies but also have long-term repercussions on health outcomes, particularly for vulnerable rural populations. Addressing these issues requires urgent policy interventions to restore and enhance the capacity of the public healthcare system and ensure equitable access to quality care for all Sri Lankans.

Insights from Recent Studies

Recent research sheds light on the multifaceted challenges faced by rural populations due to increased out-of-pocket (OOP) expenditures. Atanasova et al. (2012) and Brown et al. (2014) provide compelling evidence that rising OOP costs create substantial barriers to accessing essential healthcare services. Their studies show that as the financial burden of healthcare increases, many individuals in rural areas struggle to afford necessary treatments, leading to diminished health outcomes.

Leive and Xu (2008) further illustrate how these financial burdens result in delays or avoidance of medical care. They emphasize that when faced with high OOP expenses, patients often postpone or forgo needed treatments, which can exacerbate existing health issues and lead to more severe conditions over time. This delay in seeking care often results in increased complications and higher long-term healthcare costs (Bock et al., 2014).

Malik and Syed (2012) and McIntyre et al. (2006) argue that the financial strain experienced by rural populations is not solely due to escalating healthcare costs but also reflects broader economic difficulties. Their research indicates that rising healthcare expenses are compounded by reductions in income and increases in overall living expenses, which exacerbate financial pressures on households. This broader economic context highlights how healthcare spending is intertwined with general economic conditions, making it a critical area of focus for policy interventions (McIntyre et al., 2002).

The insights from these recent studies underscore the significant impact of increased OOP expenditures on rural populations. The financial strain associated with healthcare costs contributes to delays in care, avoidance of necessary treatments, and exacerbates broader economic challenges. Addressing these issues requires comprehensive strategies that consider both the immediate financial impacts and the underlying economic conditions affecting rural communities.

Conclusion and Recommendations

The economic crisis in Sri Lanka has exacerbated the financial burden of healthcare on rural households, primarily due to inflation, currency depreciation, and reduced government health spending. The increased out-of-pocket expenditures and declining access to essential services underscore the urgent need for targeted policy interventions. Based on the findings of this review, several recommendations are proposed: Strengthening Public Healthcare: Increase government funding for public healthcare services in rural areas to reduce the dependency on costly private healthcare providers. Enhanced funding would improve the availability and quality of essential services. Implement subsidies for essential medicines to alleviate the financial burden on rural households. This would help make necessary treatments more affordable and accessible. Introduce or expand health insurance schemes targeting rural populations to provide a safety net against catastrophic health expenditures. Comprehensive insurance coverage would help mitigate the financial risks associated with healthcare costs. Invest in community-based healthcare initiatives, such as mobile clinics and telemedicine services, to improve access in remote areas. These initiatives would address accessibility issues and provide essential services to underserved populations.

The economic crisis has significantly impacted OOP healthcare expenditures in rural Sri Lanka, pushing vulnerable populations further into poverty. Rising costs, reduced access, and declining healthcare quality necessitate immediate policy interventions to mitigate the financial and healthcare burdens on rural citizens. By adopting these recommendations, it is possible to mitigate some of the financial pressures on rural citizens and improve their access to necessary healthcare services. Strengthening public healthcare, expanding insurance coverage, and providing targeted subsidies for essential medicines are essential strategies to improve healthcare access and financial protection in Sri Lanka's rural communities. Addressing these challenges is crucial for enhancing health equity and ensuring that rural populations can maintain their well-being despite the ongoing economic crisis.

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THE EVOLUTION OF CORPORATE GOVERNANCE IN SRI LANKA: A REVIEW OF THE BACKGROUND AND CODES

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Abstract

This paper investigates the emergence of corporate governance in Sri Lanka with special attention to the background, corporate governance regulations and codes. Finally, suggest areas for future research. The authors conducted an extensive review of literature focused on the regulations and codes related to Corporate Governance in Sri Lanka in chronological order before they pen the evolution of it. It is found that, the roots of corporate governance go back the colonial era in the island nation. The wasteland act in 1832 can be considered as the first regulation in the area of study. The British introduced several laws and regulations afterwards until the nation achieved its independence in 1948. The formalization of corporate governance activities started in 1996 when ICASL has set up a committee to make recommendations on issues related to the financial aspects of corporate governance. Chartered Accountants of Sri Lanka is playing a pivotal role to introduce and update corporate governance codes on Sri Lanka since then. The paper presents the evolution of corporate governance in Sri Lanka from colonial era to date. Suggest policy makers to consider contemporary developments of the field when they update the CG codes. the most recent version of best practices launched in 2017 and it is high time to review the existing code to reflect modern trends and global developments of the area of study. Literature suggests that corporate governance research linked to sustainability and technology are comparatively rare for Sri Lankan context. Hence, recommend conducting such studies in future.

Keywords: Corporate Governance, Colonial Era, Sustainability, Technology

Corporate Governance in Sri Lanka: The Background

The discussion on corporate governance reached a significant milestone in 1980's when the OECD implemented drastic political and economic reforms (OECD). A set of interactions between a company's management, board, shareholders, and other stakeholders is known as corporate governance (Jesover & Kirkpatrick, 2005). Corporate governance upholds and controls aspects such as human rights considerations, salary transparency, and the carbon footprints of businesses. The main goals of governance are to improve the decision-making process and the accountability level of a corporation (Orihara and Eshraghi, 2022). The OECD also points out that corporate governance offers the framework through which a company's goals are set, as well as the methods for achieving them and for evaluating performance (Jesover & Kirkpatrick, 2005).

What exactly is meant by "Corporate Governance"? Although there are numerous theories and concepts based on corporate governance, the term itself does not have a generally agreed-upon definition. Various theories present the term with varying dimensions and meanings. Consequently, it can be identified as one of the key problems in this field (Huillier, 2014).

Most researchers defined corporate governance using agency theory, which predominates the literature. In addition to the agency theory, theories like managerial hegemony, stakeholder theory, resource dependency theory, and stewardship theory were employed to comprehend the connotative meaning of the topic (Huillier, 2014).

However, the importance of Corporate Governance mechanisms to govern corporate firms is well established in the literature. Different countries and systems use various mechanisms to implement corporate governance practices in their respective organizations.

Following the transition from socialist to market-oriented policies with the implementation of open economic policies, the importance of corporate governance in Sri Lanka re-emerged again after 1977. By transferring controls from the government to the private business sector, the liberalization of the constitution in 1978 opened the doors to a free market and many economic reforms. The World Bank, the International Monetary Fund and the Asian Development Bank have sponsored large-scale development projects. The door for foreign direct investment and multinational companies was opened by a 'Free Trade Zone Scheme'. Imports and controls on foreign exchange have been relaxed and commercial enterprises have expanded. New export industries were promoted, such as the garment industry (Central Bank, 1998). A highly competitive atmosphere was created by the entry of a large number of new companies into the market, which rendered Sri Lanka attractive to foreign investors.

Since the economy was liberalized in 1977, Sri Lanka has seen improved performance and a rise in investor confidence in publicly traded companies, which has contributed to the growth of the capital markets. Organizations like the World Bank and International Monetary Fund (IMF) are promoting better governance for their member countries and wider networks to draw foreign direct investment. Due to the introduction of a voluntary code of best practice on issues relating to the financial aspects of corporate governance, initiatives for corporate governance in Sri Lanka started in 1997 (Heenetigala and Armstrong, 2011).

The ICASL established a committee in 2001 to review the current 1997 code and strengthen corporate governance practices in Sri Lanka in response to changes in the landscape of corporate governance around the world. This code is heavily influenced by the UK's Combined Code, 1998 (Hample Report).

Corporate governance requirements are thus covered by two main sections of the ICASL Code (2003): "The Company" and "Institutional Shareholders." The ICASL Code (2003) was created with consideration for international corporate governance initiatives, but it has not kept up with changes in corporate governance, particularly after the collapse of Enron in 2001. The provisions for non-executive directors, nomination committees, performance evaluation of boards, directors' training, shareholders, and corporate governance disclosures are where the ICASL Code's major flaws can be seen (Manawaduge, 2012). In Sri Lanka, the market's current structure is characterized by a high proportion of bank-led financing and concentrated ownership that resembles the traits of a relationship-based model (Senaratne, 2011). Additionally, they show that Sri Lanka, a former British colony, has embraced the Anglo-Saxon method of corporate governance. In Sri Lankan businesses, the most recent code of best practices for corporate governance, published in 2017, is widely used. Senaratne (2011) claims that the multiple regulations for compliance and the lack of unified guidance for listed companies in Sri Lanka are the system's main weaknesses.

The rest of this review paper is structured as follows. The colonial era of Sri Lanka, Corporate Governance codes and future directions for corporate governance regulations.

The Colonial Era

In Sri Lanka, corporate governance has its roots in the nearly 150 years the country spent under British control until gaining its independence in 1948. From the 18th century on, imperialism dominated Sri Lanka, having two effects on its feudal culture. The kingship became a colonial state in the first instance, and a plantation-based mercantile economy emerged in the second (2014 Rajendran).

Acemoglu (2012) noted that in dealing with the colonies, colonial economic policy had two strategic approaches. The mortality rate of colonizers, merchants and missionaries dictated which policy was to be acceptable for a specific colony. Therefore, if the mortality rate was low among them, then they moved to a colony and agreed to settle down. Among the colonies with higher mortality rates but natural endowments such as minerals, fertile land and crop weather, these endowed colonies were used to optimize exploitation for the growth of the parent country.

It is asserted that colonizers did not establish institutions in an extractive environment that encouraged the development of competitive markets because they believed that competitive markets might endanger the location of extraction. Sri Lanka and India were attractive from a geopolitical strategic standpoint. British naval forces could keep an eye on the entire Indian Ocean if they had natural harbors (Beck et al., 2003).

They consequently developed common law, though not entirely to the extent necessary for the development of a stock market (Acemoglu et al., 2012). Morgan (1958) claimed that Sri Lanka has been a prime example of a least developed capital market, constitutive processes, and wealth extraction.

The Waste Land Act of 1832

Large tracts of upcountry, uncultivated hill lands were purchased by the British government in the nineteenth century and sold to British planters. The colonists applied the Waste Land Act of 1832, and as a result, locals who could not make a claim for their land lost ownership of it, as shown by documentary evidence. These lands were later sold to British planters and government employees for less money (Ramaiya, 1935). Even though different nations' legal systems define and protect the right to land to varying degrees, this act created the legal framework for an individual or business to hold a legal title to the resource they own.

Civil Law Ordinance and the joint stock companies' ordinance

In the early days, companies were governed by English law, which was introduced to Sri Lanka in the Civil Law Ordinance No. 5 of 1852. The Joint Stock Companies Ordinance No. 4 of 1861 was the first company law passed specifically for Sri Lanka. With the expansion of the plantation market, cultivators have been experimenting with new methods of raising money for their business. They established neighborhood businesses and offered shares to the public (The Registrar of Companies, 2011).

Colombo Share Brokers Association

In 1896, the Colombo Share Brokers Association was established (CSE, 2004) in order to raise substantial funding for the plantation industry. Plant industry businesses were the most influential in the private sector of the economy until the middle of the 1970s in terms of creating employment opportunities and earning crucial foreign exchange earnings (Moore, 1997).

Corporate Governance Codes in Sri Lanka

The establishment of a committee to make recommendations on matters pertaining to the financial aspects of corporate governance by ICASL in 1996, with assistance from a number of other organizations, including the Institute of Directors in Sri Lanka, the Ceylon Chamber of Commerce, and the Securities and Exchange Commission, was the first step toward formalizing corporate governance activities.

As a result, the ICASL (currently known as CA Sri Lanka) published its first report on the Code of Best Practice on Matters Related to the Financial Aspects of Corporate Governance in 1997. Following this initial initiative, a large number of other governmental organizations, professional associations, and ICASL created later codes in accordance with the emergence of corporate governance codes globally, particularly in the United Kingdom. These codes, which are both optional and required, are designed to improve the operational governance of the companies listed on the CSE. They were all created based on codes that were established in the UK. These include the Turnbull Committee's recommendations, the Combined Code from 2003(Smith,2003), and the Hampel Committee's 1998 report (Stapledon, 1998).

Code of Best Practice 1997 (ICASL)

The first-ever Code of Best Practice for Corporate Governance, which covered the financial aspects of corporate governance of Sri Lanka's listed companies, was published by ICASL in 1997. Following an analysis of similar reports from other nations, this was determined. All listed businesses, unit trusts, fund management firms, financial institutions, banks, and voluntary insurance providers are now covered by the expanded scope of this code. Board of Directors and Audit are its two main subheadings, and they both deal with various aspects of corporate governance.

As a result of this code's Anglo-Saxon foundation, the responsibilities of the Board of Directors have received more attention. To increase the effectiveness of the Board members, Section 1 of the Code (The Board of Directors) lays out governance procedures. The Code's next subsection, "Audit," covers governance issues important to external audits. Protocols for ensuring the success of external audits are among them.

The Code only covered the financial facets of corporate governance and lacked detail. The ICASL Code of Best Practice on Corporate Governance replaced this Code in 2003 as a result.

Code of Best Practice 2003 (ICASL)

A committee was established by the ICASL in 2001 to update the 1997 code and enhance corporate governance practices in Sri Lanka as a result of changes in the global corporate governance environment. The 1998 Combined Code of the United Kingdom is the primary inspiration for this code (Stapledon,1998). Therefore, the "The Company" and "Institutional Shareholders" sections of the ICASL Code (2003) cover corporate governance criteria.

The Board of Directors' governance principles, specifically the board's meetings and procedures, are covered in Section One of the Code. The Code's section two addresses governance principles that apply to institutional and other investors in corporations, with a focus on the role of institutional shareholders in voting, evaluating the disclosure of governance, and influencing individual shareholders' decisions to invest or divest.

Corporate Governance Standards in Listing Rules (2007)

The ICASL and the SEC, in collaboration with the CSE, have undertaken a joint undertaking. The 2006 initiative to create corporate governance principles for mandatory enforcement of listed companies in the CSE. These requirements, which address the minimum number of non-executive and independent directors to be included on the board, the standards for determining the "independence" of non-executive directors, and the disclosures that listed companies must make regarding their directors, were established in light of changes in the corporate governance standards of the United Kingdom and the United States.

These requirements have been included in Section 6 of the 2007 CSE Listing Rules. Section 7.10 of the updated Listing Rules for 2009. Compliance with these regulations is mandatory for listed companies as of 1 April 2008. Failure to comply with the listing rules will result in penalties being levied.

Code of Best Practice 2008 (ICASL)

The Code of Best Practices on Corporate Governance (2008), which was created jointly by ICASL, the SEC, and the CSE, has since taken the place of the ICASL Code (2003). In accordance with the CSE Listing Rules' mandatory corporate governance requirements, the Joint Committee created the Code (2008) on the voluntary enforcement of listed companies.

The Company and Shareholders categories are where the Code makes its recommendations. This code's ability to support a Code of Business Conduct and Ethics for directors and senior management is yet another unique feature.

These regulations set out only the minimum requirements to be met by the listed organization and the ICASL Code (2008) is to be enforced on a voluntary basis in accordance with the mandatory rules. The introduction of mandatory rules for corporate governance listings is a major step towards strengthening the governance practices of listed companies in Sri Lanka.

Code of Best Practice on Corporate Governance 2013 (CA)

The previous edition of the Code of Best Practice was updated in 2013 by Chartered Accountants of Sri Lanka (CA, formerly ICASL) and SEC.

Their primary reviews included the 2010 editions of the UK Corporate Governance Code, the New York Stock Exchange Commission Corporate Governance Report, the Singapore Corporate Governance Code, the Australian Securities Exchange Corporate Governance Principles and Suggestions, the Malaysian Corporate Governance, and the Corporate Governance Voluntary Guidelines - India. After the initial draft of the Code was finished during the latter part of 2012, the Committee held additional meetings to revise it. The related global developments, practices, and newly emerging Sri Lankan problems were all taken into consideration in this revision, to the best of our ability. As part of their responsibility to discharge corporate governance, corporations are encouraged to abide by this Code.

Code of Best Practice on Corporate Governance 2017 (CA)

The 2017 release of CA Sri Lanka's most recent edition of the Code of Best Practice. The 2017 edition builds on the earlier Codes in order to strengthen best governance practices in light of developments abroad that are relevant to Sri Lanka, newly emerging governance issues, and difficulties that are more significant for the local capital market.

The below table summarized the CG codes in Sri Lanka since 1997.

Table 1: CG Codes in Sri Lanka

Year	*Code*	*Remarks*
1997	*Code of Best Practice*	*Emphasized on board of directors, audits and financial aspect of corporate governance.*
2003	*Code of Best Practice*	*Emphasized the criteria's of "The Company" and "Institutional Shareholders"*
2007	*Corporate Governance Standards in Listing Rules*	*Introduced mandatory rules to be followed by the listed companies at Colombo Stock Exchange.*
2008	*Code of Best Practice*	*This is a joint publication of Chartered Accountants and Colombo Stock Exchange for voluntary enforcement of listed companies in accordance with the mandatory corporate governance rules incorporated in the CSE Listing Rules.*
2013	*Code of Best Practice*	*Updated the previous code (2008) based the global developments in corporate governance. The committee reviewed contemporary codes of*

		UK, US, Australia, Singapore and Malaysia before fine tuning the latest version.
2017	*Code of Best Practice*	*Updated the code to reflect emerging issues of governance and challenges relevant to corporate governance practices*

Source: The authors' elaboration

It is evident that the update for the Corporate Governance Code in Sri Lanka is required to reflect the contemporary challenges, global developments of the field.

Future Directions

It is understood that the existing corporate governance code in Sri Lanka was not updated since 2017.The field of corporate governance remains relevant for the researchers in Accounting and Finance domain due to its importance for various aspects of the contemporary business world. Therefore, it is important to explore the recent global trends related to governance research.

The impact of CG on sustainability is a trending topic due to UN's sustainable development agenda 2030. Sustainability reporting developed as a prominent feature in financial reporting since 2018. Most of the elite companies in the world are reporting their sustainability performance with Environmental, Social and Governance (ESG) metrics (Grove and Clouse 2018). According to the Grove and Clouse (2018), companies with ESG reporting perform better than non-ESG reporting competitors. Further they suggest ESG reporting would strengthen the corporate governance. These findings provoke following questions. Does Corporate Governance complement Sustainability Reporting? Does Profitability concept complement the concept of Sustainability? If the answer is no, How the CG codes should modify to facilitate the concepts of profitability and sustainability in future? Though the studies based on CG and sustainability is increasing over last two decades (Naciti et al., 2021), such studies are acute in Sri Lankan context.

The Fintech has grown in importance globally for staying current with advancements and developments in the financial industry. A study looked at how Fintech has affected Saudi Arabia's financial industry and how it affects the relationship between corporate performance and the board of directors at Saudi financial firms listed on the stock market (Al-Matari et al., 2022). Financial technology's operational procedures corporate governance and information technology must be integrated because corporations are interconnected systems. This will improve sustainability performance (Mutamimah & Robiyanto, 2021). The impact of Fintech on corporate governance was rarely investigated as it is a new phenomenon. Especially acute in South Asian context.

Accordingly, the authors believe that researchers would focus on CG research coupled with the concepts such as sustainability, financial technology, blockchain technology etc. Findings of such studies should be considered when corporate governance codes /practices are updated by relevant authorities which in turn to provide better results to the corporate sector.

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SOCIAL MEDIA USAGE AND ONLINE CONSUMER BEHAVIOR ACROSS DIFFERENT CULTURES: A SYSTEMATIC LITERATURE REVIEW

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Abstract

This paper investigates the complex relationship between social media usage patterns and online consumer behavior across diverse cultural contexts. The study collectively contributes to a comprehensive understanding of this dynamic interplay, drawing insights from various theoretical frameworks and empirical studies. The research begins by establishing the theoretical groundwork, incorporating frameworks such as Social Identity Theory (SIT) and the Technology Acceptance Model (TAM) to elucidate how cultural factors moderate social media usage and consumer behaviors. It then investigates the empirical evidence with systematic literature-reviewed academic papers, highlighting cultural influences on digital interactions and purchasing decisions. Key concepts identified include the significant impact of social media usage patterns on consumer behavior, the connection between social media content types and engagement behaviors, the role of social media in spreading knowledge and influencing sustainable consumption, and the influence of cultural variations on digital entrepreneurship and e-commerce dynamics. Theoretical contributions underscore the importance of cultural sensitivity in designing effective social media strategies tailored to diverse audiences. Managerial implications extend to businesses, policymakers, and researchers, emphasizing the need for culturally meaningful content, localized communication styles, and responsible digital engagement practices.

Keywords: Cultures Online consumer behavior Social media usage

Introduction

Social media platforms have become foundational tools for communication, interaction, and commerce within today's interconnected digital landscape. (Dwivedi et al 2021; Appel et al., 2020). The rapid evolution of social media usage and its profound impact on consumer behavior has garnered significant attention from researchers across the globe, particularly concerning how these dynamics vary across diverse cultural contexts (Kapoor et al, 2018). Understanding the trends in social media usage and online consumer behavior across different cultures is crucial for businesses, marketers, policymakers, and researchers alike, as it provides insights into practical strategies for engaging global audiences and optimizing online consumer experiences. (Dwivedi et al., 2021; Appel et al., 2020).

Social media usage encompasses the extent and manner in which individuals interact with content, brands, and other users on social networking platforms. Activities include content consumption, participation in discussions, and interactions with advertisements and brand posts, which collectively influence consumer behaviors by facilitating information exchange and interaction about products and services (Zhao et al., 2023).

Online consumer behavior are actions that consumers undertake online, from information searching and product evaluation to the final purchase. This behavior is increasingly shaped by digital interactions and content exposure on social media platforms, which are integral to understanding the dynamics of e-commerce (Lemon and Verhoef 2016).

'Cultural Differences', represents the varied cultural norms, values, and practices across different regions. Cultural differences can significantly alter how social media impacts consumer behavior, affecting everything from product perception to purchase decisions (Zhao et al., 2023).

The current landscape of social media usage and online consumer behavior across diverse cultures presents a complex interplay of factors that shape individuals' digital interactions and purchasing decisions (Appel et al, 2020). This is based on theories such as social identity theory, which underscores the influence of social identity on behavior, and cultural dimensions theory, which highlights the impact of cultural dimensions like individualism-collectivism and power distance (Saad, Cleveland & Ho, 2015). The present researcher has delved into understanding how cultural contexts shape social media engagement and consumer behaviors.

Additionally, frameworks like the Technology Acceptance Model shed light on the role of perceived ease of use and usefulness of technology in driving actual usage patterns (Kelly & Palaniappan, 2023).

Existing research has shown that social media platforms play a crucial role in shaping consumer behaviors and engagement patterns. For instance, Dwivedi et al. (2021) illustrate how social media enhances consumer engagement by providing immediate, interactive, and personalized marketing communications, which are key drivers of consumer loyalty and purchase intentions. Similarly, Appel et al. (2020) demonstrate that social media platforms enable brands to deploy targeted advertising strategies that significantly influence consumer purchasing decisions by leveraging data-driven insights into consumer preferences and behaviors.

Furthermore, (Voorveld et al 2018) show that consumer engagement with social media can vary significantly across cultural boundaries, influencing the effectiveness of these platforms as marketing tools.

Further, Fernández-Bonilla, Gijón & De la Vega (2022) explore how disparities in internet access and digital literacy across different demographic and socioeconomic groups can lead to varying levels of consumer engagement and e-commerce activities.

Despite substantial research in this area, gaps persist. These gaps include a lack of in-depth exploration into specific cultural hints affecting social media trends and consumer behaviors, limited longitudinal studies tracking evolving social media dynamics and their impact on consumer choices across cultures, and the need for more integrated qualitative and quantitative approaches to provide comprehensive insights (Dwivedi et al., 2021). Bridging these gaps is crucial for developing nuanced strategies for cultural diversity in digital communication and consumer engagement strategies.

Research Questions

The study determined the trends in social media usage and online consumer behavior across different cultures. Specifically, it will answer the following questions:

RQ1 What forms of social media usage are observed across different cultures?

RQ2 What are the various forms of online consumer behaviors observed across different cultures?

RQ3 How do social media usage patterns relate to online consumer behavior across different cultures?

RQ4 How do different cultures influence social media usage patterns and online consumer behavior?

Methods

This research employs a systematic literature review to explore trends in social media usage and online consumer behavior across diverse cultural contexts (Zhao et al., 2023). The approach begins with a well-defined literature search strategy, identifying relevant search terms, databases, and theoretical frameworks. This initial step ensures a comprehensive gathering of pertinent scholarly materials within the specified timeframe and English language criteria (Popay et al., 2006).

The Risk Bias utilized in this study serves as a meticulous assessment tool, systematically evaluating potential biases across key study aspects involved in the systematic literature review. It assesses various aspects, including Selection Bias and Confounding, Performance Bias, Detection Bias, Attrition Bias, and Reporting Bias. This structured approach ensures a thorough examination of biases across key study aspects, promoting transparency and reliability in the assessment process (Shaheen et al., 2023). The Risk Bias process evaluates potential biases by categorizing them into low, moderate, and high risks, helping researchers critically appraise the quality and reliability of the reviewed literature. This critical appraisal is crucial for ensuring that the included studies provide valid and robust evidence for the research question (Salehi-Pourmehr et al., 2021; Chen et al., 2024). Analyzing bias levels in different aspects informs researchers about the strengths and limitations of the reviewed literature, guiding them in interpreting the findings cautiously, considering potential biases that could affect the study's conclusions. Addressing biases through critical appraisal enhances the validity of the present study's conclusions, ensuring that the findings are based on credible evidence, allowing researchers to draw meaningful insights and recommendations with confidence.

This study was conducted over five months, from February 2024 to June 2024. This timeframe includes the initial literature review, data collection and analysis, as well as thesis writing and revision. The thesis will draw on literature from online databases such as Google Scholar, ScienceDirect, and Elsevier. The data collection process involves systematically retrieving and organizing articles using the Publish or Perish platform. Figure 2 presents the steps in taking the articles for the Systematic Literature Review. The researcher searched on Sciencedirect.com to explore the trends and the relationship between social media usage and online purchase behavior, using search terms like "Social Media Usage Online Purchase" to retrieve relevant research articles. The focus was on research articles published between 2014 and 2024, emphasizing open-access articles and those from reputable journals listed in the ABS Journal Ranking 2021.

A systematic approach was employed, starting with gathering articles based on the search terms, then examining titles, reviewing abstracts and full papers, and applying strict inclusion criteria related to the relevance of the research title to social media usage and online consumer behavior. Exclusion criteria were also defined, excluding master's theses, doctoral dissertations, and non-English language articles. Despite initially finding a limited number of articles that strictly met the criteria, the search was expanded to include articles with related discussions, resulting in a final selection of 10 articles for a more comprehensive literature review (Pooja & Upadhyaya, 2022; Ngai et al., 2015).

Data extraction is then carried out using a structured form to systematically capture essential information from selected studies, including objectives, methodology, key findings, cultural contexts, and theoretical frameworks. The extracted data is then verified for accuracy and completeness, further enhancing the review's reliability (Xiao & Watson, 2019). Thematic analysis is employed during data synthesis and analysis to identify patterns, concepts, and trends related to social media usage and online consumer behavior across different cultures. This analytical focus aligns with the research questions: how social media usage patterns relate to online consumer behavior across different cultures, and how different cultures influence social media usage patterns and online consumer behavior. Various authors' responses or contentions have answered these questions, which may allow for a comprehensive understanding of the relationships between social media usage patterns and online consumer behavior within varied cultural contexts. Quality assessment is another critical aspect of the research method, involving evaluating study quality, methodological rigor, sample representativeness, and data analysis techniques. This assessment ensures the synthesized findings' credibility, reliability, and validity, adding robustness to the review.

In this systematic literature review, the researcher rigorously adhere to the PRISMA 2020 checklist to ensure a comprehensive and transparent investigation (Zhang et al., 2019; Dang et al., 2022). Further, the researcher detailed the eligibility criteria for selecting studies, including specific inclusion and exclusion criteria, ensuring a systematic approach to literature selection. The review comprehensively describes the information sources, including databases such as Google Scholar, ScienceDirect, and Elsevier, and provides a detailed search strategy with keywords and Boolean operators to ensure replicability. The dates of the final search will be explicitly stated to ensure transparency regarding the currency of the included literature (Astirbadi & Lockwood, 2022).

The researcher outlined the study selection process, which includes initial screening based on titles and abstracts, followed by full-text reviews, ensuring a rigorous selection procedure. A flow diagram, as per PRISMA guidelines, will be included to visually represent the study selection process from initial search results to the final included studies. A standardized data extraction form will collect relevant information from each included study, ensuring consistency and comprehensiveness in capturing study characteristics, participant details, interventions, outcomes, and results. To evaluate potential biases in the included studies, the researchers will use appropriate tools, such as the Cochrane Risk of Bias tool, detailing the assessment of selection bias, performance bias, detection bias, attrition bias, and reporting bias (Deawjaroen et al., 2022).

The methods describe the approach to data synthesis, including narrative synthesis for qualitative data, ensuring a structured analysis of the findings. The results section will present a detailed description of the included studies, including their characteristics and findings, ensuring transparency and allowing readers to assess the relevance and quality of the literature. A comprehensive assessment of the risk of bias across studies will categorize them into low, moderate, and high-risk levels, informing readers about the reliability of the findings (Shaheen et al., 2023; Dixley & Ball, 2022).

The individual study synthesized results are aligned with the relationship between social media usage and online consumer behavior and how cultural differences influence social media usage patterns and online consumer behavior. The discussion summarize the review's main findings, highlighting the strength and direction of the relationship between screen time and psychological well-being among college students. The researcher discussed the limitations of the review process and the included evidence to provide a balanced interpretation of the results. The theoretical contribution based on the review findings, and future research directions will also be offered (Hosen et al., 2021).

Following the PRISMA 2020 checklist ensures that this systematic literature review is conducted and reported with the highest transparency, rigor, and comprehensiveness standards. By adhering to these guidelines, the review will provide robust and reliable evidence to inform academic research and practical interventions (Shan et al., 2022; Haddaway, 2017).

Finally, the reporting and synthesis phase involves synthesizing the findings into a coherent narrative that addresses the research questions and objectives. Key trends, cultural influences, technological dynamics, ethical considerations, and implications for theory, practice, and future research are discussed structured and transparently, following established guidelines for systematic literature reviews. References and citations are provided for all included studies and sources of evidence, enhancing the transparency and credibility of the review.

Results and discussions

Online Consumer Behavior

Online consumer behavior across different cultures is a complex phenomenon that is influenced by a variety of factors, including cultural attitudes, beliefs, values, and norms (Kulikovskaja, Hubert, Grunert, & Zhao, 2023). This concept, which serves as the dependent variable in our study, is extensively examined through different perspectives including those presented by Balaban, Szambolics & Chiricǎ (2022); Nekmahmud, Naz, Ramkissoon & Fekete-Farkas (2022), and Kulikovskaja et al. (2023), among others. These studies shed light on how consumer behavior varies across cultural contexts and how cultural factors impact consumer decision-making processes, attitudes toward brands, and engagement with marketing strategies.

Balaban et al. (2022) study the effect of follower status and product involvement on parasocial relations (PSRs) with social media influencers (SMIs), emphasizing how these relationships affect advertising outcomes and content sharing intentions. Their research reveals that culture play a pivotal role in shaping how followers perceive and engage with influencers, thereby influencing their purchasing decisions and brand loyalty. This underscores the importance of understanding cultural differences in consumer behavior, as attitudes towards influencers and product engagement vary across cultures (Balaban et al., 2022). For instance, in cultures where social hierarchy and status are highly valued, follower status may have a more significant impact on PSRs and subsequent consumer behavior.

Meanwhile, Nekmahmud et al. (2022) delve into consumers' green purchase intentions via social media channels, examining the impact of social media marketing and usage. The study reveals a positive correlation between social media engagement and green purchase intentions, offering valuable insights for marketers and policymakers involved in sustainability initiatives.

From a cross-cultural standpoint, this study underscores the influence of cultural values related to sustainability and environmental consciousness on consumer behavior. It suggests that cultural factors play a significant role in shaping consumers' attitudes towards green products promoted through social media platforms, highlighting the importance of aligning marketing strategies with cultural values to engage diverse consumer segments across different cultures effectively.

In the realm of consumer behavior across cultures, this study sheds light on the varied impact of different social media content types on engagement levels and, consequently, on purchasing decisions. It emphasizes the importance of considering cultural preferences for content consumption when designing social media marketing strategies, as cultural nuances can significantly affect how consumers interact with and respond to different types of content.

The given studies collectively contribute to the understanding of the online consumer behavior across different cultures by examining the influence of cultural factors on decision-making processes, attitudes toward brands, engagement with marketing strategies, and consumer behavior patterns.

The implications of the studies on online consumer behavior are extensive and crucial for marketers and businesses. Firstly, there is a clear need for cultural sensitivity in marketing strategies, where understanding cultural attitudes toward risk, trust, status, sustainability, and entertainment is paramount (Hussain, Wang & Li, 2024; Nekmahmud et al., 2022; Hanaysha, 2022; Kulikovskaja et al., 2023; Balaban et al., 2022).

Influencer marketing also demands cultural context awareness, considering how follower status, product involvement, and parasocial relations vary across cultures, affecting brand loyalty (Balaban et al., 2022; Hanaysha, 2022). Sustainability marketing should align with cultural values related to environmental consciousness for effective engagement (Nekmahmud et al., 2022).

Content strategy must be tailored to cultural preferences for infotainment, remunerative, or relational content on social media (Kulikovskaja et al., 2023). Community engagement, especially in sectors like tourism, requires building trust with local communities based on cultural perceptions of risk and trust (Hussain et al., 2024). Adopting a cross-cultural market segmentation approach is advised, allowing marketers to customize strategies and enhance consumer experiences across diverse cultural landscapes.

Social Media Usage

Social media has transformed into a potent force shaping consumer behavior and organizational strategies across diverse cultural landscapes (Kulikovskaja et al., 2023). This study examines the multifaceted impact of social media usage on various dimensions of human interaction and decision-making processes. It considers social media usage as an independent variable, encompassing not only the frequency and extent of digital engagement but also the qualitative aspects such as content consumption, interaction patterns, and platform preferences (Kulikovskaja et al., 2023).

Understanding social media usage as an independent variable is crucial for unraveling its influence on consumer behavior, organizational performance, and broader societal dynamics within different cultural contexts (Hanaysha, 2022). By reviewing scholarly works, the present research clarified how social media usage serves as a dynamic and influential factor across diverse cultures, shaping perceptions, attitudes, and behaviors in various ways (Kapoor et al. 2022).

In the realm of rural mountain tourism during the COVID-19 era, Hussain et al. (2024) explore how social media acts as a catalyst in shaping tourist behavior. Their study highlights the pivotal role of social media in influencing not just the perceived risk associated with travel but also the level of community engagement among tourists.

Through social media, tourists gain insights into destinations, assess risks, and interact with local communities virtually, all of which play significant roles in shaping their travel decisions and behaviors (Hussain et al. 2024). This insight into social media's impact on tourist behavior highlights the link between digital platforms and real-world experiences, emphasizing the need for tourism stakeholders to adjust their strategies effectively to harness these digital dynamics.

Moreover, Hanaysha (2022) investigate the role of social media marketing in consumer purchase decisions, particularly in the fast-food industry. The study emphasizes that cultural preferences and social media usage patterns play a significant role in shaping consumer behaviors in different regions. For example, in the context of fast food, consumers may be influenced by social media campaigns showcasing culturally relevant menu items or promotions tailored to specific cultural preferences. This insight highlights the need for businesses to tailor their social media marketing strategies to align with cultural nuances and consumer behaviors, ensuring that their efforts effectively resonate with diverse audiences and drive desired purchase outcomes.

Nekmahmud et al. (2022) examine the relationship between social media usage and green purchase intentions among consumers. Their findings highlights that cultural attitudes towards sustainability and environmental concerns play a crucial role in shaping how social media can influence green purchase intentions. In cultures where environmental consciousness is highly valued, social media platforms can serve as powerful tools to promote sustainable products and practices. Consumers in such cultures may actively seek out information and engage with content related to eco-friendly products, leading to increased green purchase intentions.

On the other hand, in cultures where environmental awareness is less emphasized, the impact of social media on green purchase intentions may be less pronounced. This underscores the significance of considering cultural contexts when designing social media marketing strategies aimed at promoting sustainability and driving green consumer behavior.

Balaban et al. (2022) shed light on the complex dynamics between social media usage and online consumer behavior, particularly concerning parasocial relationships with social media influencers. Their research underscores cultural preferences and attitudes toward social media influencers significantly shape parasocial relationships, affecting online consumer behavior and advertising effectiveness.

While Hwang and Zhang (2018) argued the in cultures where influencers are highly credible and influential, consumers are more likely to develop strong parasocial relationship, leading to a higher likelihood of engaging with sponsored content and making purchase decisions based on influencer recommendations

Li et al. (2024) In contrast, in cultures where skepticism towards influencers is prevalent, the impact of parasocial relationships on consumer behavior may be less pronounced. This emphasizes the need for marketers to understand and adapt their strategies to cultural nuances related to social media usage and influencer engagement to effectively influence online consumer behavior and advertising outcomes.

The studies by Hussain et al. (2024), Kulikovskaja et al. (2023), Hanaysha (2022), Nekmahmud et al. (2022), Balaban et al. (2022) Hwang and Zhang (2018) and Li et al. (2024) collectively highlight the interplay between social media usage and cultural diversity. They provide valuable insights for businesses, marketers, and researchers navigating global digital landscapes.

The intersection of social media usage and cultural diversity holds significant implications for understanding consumer behavior and organizational dynamics (Hussain et al., 2024; Kulikovskaja et al., 2023; Nekmahmud et al., 2022; Hanaysha, 2022; Balaban et al., 2022). Businesses and marketers must adapt their social media strategies to align with diverse cultural contexts, considering nuances in content preferences, interaction patterns, and platform choices (Hussain et al., 2024; Kulikovskaja et al., 2023; Hanaysha, 2022). This adaptation is crucial for influencing consumer decision-making processes, including purchase intentions and brand engagement, as cultural factors play a pivotal role in shaping how consumers interact with social media content and perceive brands (Hussain et al., 2024; Kulikovskaja et al., 2023; Hanaysha, 2022).

Moreover, social media's influence extends to tourism behavior, where it acts as a catalyst in shaping tourist decisions, especially in rural and mountain tourism contexts (Hussain et al., 2024). Leveraging social media effectively in tourism can enhance visitor experiences and address evolving travel dynamics, such as those seen during the COVID-19 pandemic (Hussain et al., 2024).

Furthermore, the dynamics of parasocial relationships with influencers highlight the need to navigate cultural nuances in influencer engagement for effective online consumer behavior and advertising outcomes (Balaban et al., 2022). Recognizing and leveraging the interplay between social media usage and cultural diversity is essential for businesses and researchers navigating global digital landscapes, offering opportunities to enhance consumer engagement, brand perception, and organizational performance across diverse cultural contexts.

How do social media usage patterns relate to online consumer behavior cross different cultures?

Understanding how social media usage patterns intersect with online consumer behavior is a dynamic area of research that delves into the complexities of digital interactions and cultural influences. This collection of academic papers offers a multifaceted view, highlighting various aspects of this relationship and shedding light on key themes that provide comprehensive insights into the dynamics between social media usage patterns and online consumer behavior; some papers indirectly touch on related topics like digital omnichannel environments and e-commerce dynamics, adding further dimensions to the discussion. These papers contribute to a deeper understanding of how social media shapes consumer behaviors in an increasingly interconnected and culturally diverse digital landscape. Below are the clustered themes with the corresponding authors supporting the themes:

Theme 1: Social Media Usage Patterns Significantly Influence Online Consumer Behavior (N=4)

Hussain et al. (2024), Nekmahmud et al. (2022), Hanaysha (2022), and Balaban et al. (2022) emphasize that social media usage patterns have a significant impact on online consumer behavior, influencing purchase decisions, building trust, and shaping brand attitudes. Cultural nuances influence how consumers from different backgrounds engage with social media features.

Theme 2: Connection Between Social Media Content and Online Consumer Behavior (N=1)

Kulikovskaja et al. (2023) focus on how different types of social media content influence customer engagement behaviors, leading to outcomes like word-of-mouth and customer loyalty. Cultural backgrounds shape how consumers interact with various content types on social media platforms.

Theme 3: Role of Social Media in Spreading Knowledge and Influencing Behavior (N=1)

Nekmahmud et al. (2022) paper highlights the role of social media marketing in spreading knowledge about green products, building trust, and influencing sustainable consumption behavior, irrespective of cultural differences.

Theme 4: Social Media Usage Patterns and Digital Entrepreneurship (N=1)

Modgil et al. (2022) focus on how social media, as part of the entertainment sector, influences digital entrepreneurship initiatives and shapes online consumer behavior across cultures.

Theme 5: Cultural Variations in Social Media Shopping Behavior (N=1)

Hyun et al. (2022) argue that Cultural differences in factors like social identity, group norms, and social influence influence how individuals perceive and engage with social media shopping technology, impacting online consumer behavior.

Theme 6: Influence of Social Media Stimuli on Impulse Buying (N=1)

Kimiagari & Malafe's (2021) paper discusses how social media stimuli, such as browsing behavior and available information, impact online impulse buying behavior across cultures, particularly on platforms like Instagram.

Theme 7: Not Directly Addressing the Relationship (N=2)

Muthaffar et al. (2024) and Fernández-Bonilla et al. (2022) papers do not directly address the relationship between social media usage patterns and online consumer behavior across different cultures but discuss related topics like digital omnichannel environments and e-commerce dynamics.

The clustered themes show how social media usage patterns relate to online consumer behavior across different cultures. Authors such as Hussain et al. (2024), Nekmahmud et al. (2022), Hanaysha (2022), Balaban et al. (2022), and Kulikovskaja et al. (2023) emphasize the significant impact of social media usage patterns on online consumer behavior. They highlight that these patterns influence purchase decisions, build trust, shape brand attitudes, and affect customer engagement, leading to outcomes like word-of-mouth, customer loyalty, and sustainable consumption behavior. Cultural nuances influence how consumers from different backgrounds engage with social media features and content types, impacting their perception and engagement with social media shopping technology.

Moreover, Modgil et al. (2022) delve into how social media influences digital entrepreneurship initiatives and shapes online consumer behavior across cultures, particularly in the entertainment sector. They suggest that social media is a platform for spreading knowledge about products, building trust, and influencing behavior, irrespective of cultural differences. Hyun et al. (2022) further add that cultural variations in social identity, group norms, and social influence influence social media shopping behavior, contributing to the diversity of online consumer behavior across cultures.

However, some authors like Kimiagari & Malafe (2021) focus specifically on the influence of social media stimuli on impulse buying behavior across cultures, particularly on platforms like Instagram. On the other hand, Muthaffar et al. (2024) and Fernández-Bonilla et al. (2022) indirectly address related topics, such as digital omnichannel environments and e-commerce dynamics, but do not directly explore the relationship between social media usage patterns and online consumer behavior across different cultures.

Given the clustered themes establishing the relationship between social media usage patterns and online consumer behavior across different cultures. First, businesses must recognize the diverse impact of social media usage patterns, which significantly influence aspects like purchase decisions, trust-building, and brand attitudes. Tailoring social media strategies to accommodate cultural practices is essential for effective consumer engagement across various backgrounds. Second, understanding the connection between social media content and consumer engagement behaviors is key, as different content types can lead to outcomes like word-of-mouth and customer loyalty, influenced by cultural backgrounds. Crafting culturally resonant content can enhance engagement and loyalty among target audiences.

Furthermore, social media is significant in spreading knowledge about green products and influencing sustainable consumption behavior, as highlighted in some studies. This underscores the potential for businesses to leverage social media platforms to promote sustainability initiatives and shape positive consumer behaviors globally.

Moreover, social media stimuli, such as browsing behavior and available information, can influence consumer buying across cultures. Understanding these dynamics is crucial for businesses strategically managing social media stimuli and enhancing customer satisfaction and sales. Lastly, while some studies indirectly touch on related topics like digital omnichannel environments and e-commerce dynamics, there's potential for future research to delve deeper into these interconnected areas and their implications for businesses operating in culturally diverse contexts.

Theoretical framework. Further, explaining the relationship between Social Media Usage and Online Consumer Behavior, several theoretical frameworks can be applied, such as:

Social Identity Theory (SIT)

This theory suggests that group memberships and social categorizations shape individuals' self-concept and identity. In the context of social media usage and consumer behavior, SIT can explain how cultural factors influence online behaviors. For example, individuals may engage differently with social media content based on their cultural identity, leading to varying consumer behaviors across cultures. (Brewer, 1991).

Technology Acceptance Model (TAM)

TAM focuses on individuals' perceptions and attitudes towards technology adoption. It posits that perceived usefulness and ease of use influence a person's intention to use technology. Applied to social media and consumer behavior, TAM can help explain how cultural factors influence perceptions of social media platforms, affecting their usage patterns and subsequently impacting online consumer behaviors (Kelly & Palaniappan, 2023).

Cultural Factors as Moderators

Incorporating cultural factors as moderators in the relationship between Social Media Usage and Online Consumer Behavior Across Different Cultures is crucial. These factors may include cultural values, norms, beliefs, and communication styles. They can moderate how social media usage influences consumer behaviors within specific cultural contexts, shaping preferences, decision-making processes, and responses to marketing strategies. (Pookulangara & Koesler 2011).

The relationship between social media usage patterns and online consumer behavior across different cultures is complex and influenced by various factors. Authors such as Hussain et al. (2024) and Nekmahmud et al. (2022) highlight how social media patterns impact purchase decisions, trust, and brand attitudes, resonating with Social Identity Theory (SIT) by considering group memberships and social categorizations.

Cultural factors significantly shape individuals' engagement with social media content and consumer decisions. Additionally, the influence of different content types on word-of-mouth, customer loyalty, and sustainability aligns with the Technology Acceptance Model (TAM) and cultural factors, reflecting perceptions towards technology adoption and preferences.

Studies on impulse buying behavior, digital entrepreneurship, and e-commerce further illustrate the nuanced role of cultural factors as moderators in shaping consumer behaviors.

Understanding these dynamics helps businesses tailor strategies effectively across diverse cultural backgrounds, enhancing consumer engagement in the digital era.

Businesses hoping to succeed in the digital landscape must comprehend the intricate relationship between online consumer behavior across diverse cultures and social media usage patterns (Hussain et al., 2024; Kulikovskaja et al., 2023; Nekmahmud et al., 2022; Hanaysha, 2022; Balaban et al., 2022; Hyun et al., 2022; Kimiagari & Malafe, 2021). Compelling consumer engagement and brand resonance require social media strategies to be tailored to cultural practices and preferences (Hussain et al., 2024; Kulikovskaja et al., 2023; Balaban et al., 2022).

Businesses can improve customer satisfaction and sales across cultural backgrounds by incorporating ideas from theoretical frameworks like Social Identity Theory (SIT) and Technology Acceptance Model (TAM) and considering cultural factors as moderators (Hyun et al., 2022). They can also optimize the online shopping experience, promote sustainability initiatives, and create culturally significant content (Nekmahmud et al., 2022), all while strategically managing social media stimuli (Hanaysha, 2022).

How do different cultures influence social media usage patterns and online consumer behavior?

Understanding how different cultures impact social media usage patterns and online consumer behavior is essential in today's globalized digital landscape. Various academic papers have explored this complex interplay. Different cultures influence social media usage patterns and online consumer behavior according to various Authors, revealing distinct themes and insights. This discussion categorizes these insights into clusters, highlighting unique cultural influences on digital engagement and consumer decision-making. From cross-cultural studies to social media marketing and digital entrepreneurship, these clusters offer valuable perspectives on navigating cultural diversity for effective strategies in the digital realm, uncovering complex relationships between culture, social media, and consumer behavior. Here are the themes below:

Theme 1 Cultural Diversity and Social Media Engagement (Hussain et al., 2024)

Emphasize the moderating effect of cultural diversity on social media usage and consumer behavior. Highlighted factors: risk perception, the value of online interactions, and trust in social media platforms. The study underscores the importance of cross-cultural studies for understanding tourist behavior and designing effective interventions.

Theme 2 Cultural Context in Digital Omnichannel Environments (Muthaffar et al., 2024)

Focus on cultural diversity's impact on digital shopping behaviors and consumer mindset adoption. The study emphasizes the role of cultural norms, values, and communication styles in shaping digital experiences—the importance of considering cultural diversity in designing personalized strategies and marketing communications.

Theme 3 Cultural Nuances in Social Media Marketing (Kulikovskaja et al., 2023)

Emphasize understanding cultural influences in social media marketing content and engagement. The paper differentiates content types based on cultural preferences and values and shows the importance of designing effective strategies for global consumer segments.

Theme 4 Cultural Sensitivity in Green Product Marketing (Nekmahmud et al., 2022)

Focus on cultural factors influencing green product purchase intentions via social media marketing. The study emphasizes the need for culturally sensitive strategies to promote sustainable consumption behavior.

Theme 5 Cultural Differences in Social Media Marketing (Hanaysha, 2022)

Highlights cultural variations' impact on social media marketing effectiveness in the UAE's fast-food industry. It is important to consider cultural nuances when designing marketing strategies for target audiences.

Theme 6 Cultural Variations in Social Influence (Balaban et al., 2022)

Focus on cultural differences influencing social media influencers' effectiveness and audience engagement. The paper emphasizes the need for tailored strategies across diverse cultural contexts.

Theme 7 Cultural Diversity in Digital Entrepreneurship (Modgil et al., 2022)

Discusses how cultural attitudes influence digital entrepreneurship and consumer behavior during COVID-19. The study emphasizes understanding cultural nuances for effective digital strategies.

Theme 8 Cultural Influences on E-commerce (Fernández-Bonilla et al., 2022)

Highlights cultural factors influencing digital skills, e-trust, and Internet access in e-commerce. The article emphasizes the need for culturally sensitive strategies in digital commerce.

Theme 9 Cultural Diversity and Social Commerce (Hyun et al., 2022)

Discusses cultural influences on social identity, group norms, and social impact in social media shopping. The study articulates the importance of understanding cultural nuances for enhancing social media shopping experiences.

Theme 10 Cultural Effects on Online Impulse Buying (Kimiagari & Malafe, 2021)

Indirectly touches on cultural influences on online impulse buying behavior. The paper emphasizes the importance of understanding cultural nuances in analyzing online consumer behavior.

The mentioned themes collectively underscore the critical role of cultural diversity in shaping social media usage patterns and online consumer behavior. Businesses and marketers must embrace cultural sensitivity and tailor their strategies to resonate with diverse cultural contexts, ultimately enhancing engagement and driving effective digital outcomes.

These themes collectively suggest that a one-size-fits-all approach to social media marketing and consumer engagement needs to be revised. Instead, businesses and marketers must adopt culturally sensitive strategies that acknowledge and leverage cultural diversity. This includes tailoring content, communication styles, and digital experiences to resonate with specific cultural nuances, enhancing consumer trust and engagement, and ultimately driving positive outcomes in online consumer behavior. Understanding cultural influences is not just a matter of diversity appreciation but a strategic imperative for success in today's interconnected digital marketplace.

The moderating effect of "across different cultures" in the context of social media usage patterns and online consumer behavior is crucial to understand. The moderating effect of "across different cultures" underscores the importance of cultural intelligence and agility in directing the complexities of globalized digital markets. By recognizing and leveraging cultural diversity, businesses can unlock opportunities for enhanced consumer engagement, brand resonance, and sustainable growth across diverse cultural contexts.

To elaborate on the moderation effect of 'Across Different Cultures' within this context, the present study integrates the Social Identity Theory (SIT) as a theoretical framework. SIT proposes that individuals' self-concept and behaviors are shaped by their group memberships and social categorizations. When applied to social media usage and consumer behavior, SIT offers insights into how cultural factors moderate the relationship between social media usage patterns and online consumer behavior across diverse cultural contexts. With the individuals from different cultural backgrounds may exhibit varying preferences, communication styles, and trust dynamics when engaging with social media content and making online purchasing decisions. By employing SIT, the study gains valuable insights into how 'Across Different Cultures' influences online behaviors and consumer decisions within specific cultural contexts. This theoretical lens allows for an exploration of the dynamics of cultural moderation and its impact on the trends in social media usage and online consumer behavior. Additionally, the Technology Acceptance Model (TAM) can further enhance our understanding by focusing on individuals' perceptions and attitudes towards technology adoption. TAM suggests that perceived usefulness and ease of use influence a person's intention to use technology. When applied to social media and consumer behavior, TAM can elucidate how cultural factors shape perceptions of social media platforms, impacting their usage patterns and subsequently influencing online consumer behaviors (Kelly & Palaniappan, 2023).

Theoretical contribution

Exploring social media usage patterns and online consumer behaviour across different cultures has yielded valuable theoretical contributions, drawing insights from diverse academic perspectives. The present study highlights vital frameworks and concepts that enrich our understanding of this complex relationship.

The main learnings and essence of the thesis discussions, supported by authors and their publications may be as follows:

The present study emphasizes the importance of cultural sensitivity in business and marketing strategies, as highlighted by authors like Kulikovskaja et al. (2023), Nekmahmud et al. (2022), and Hanaysha (2022). These authors discuss how understanding and appreciating cultural differences are essential for creating successful interventions, engaging with diverse audiences, and encouraging positive online consumer behaviour.

Scholars such as Kulikovskaja et al. (2023), Balaban et al. (2022), and Hanaysha (2022) advocate for personalized and culturally relevant approaches in social media marketing, digital commerce, and online consumer engagement. They highlight the shift towards tailoring strategies according to cultural practices and preferences to enhance customer satisfaction, sales, and brand resonance across cultural backgrounds.

The present thesis underscores the importance of cross-cultural studies in research and practical applications, as emphasized by authors like Muthaffar et al. (2024). Continuous research is needed to deepen our understanding of how cultural factors influence digital interactions and purchasing decisions, contributing to more effective business strategies.

Scholars such as Kulikovskaja et al. (2023) and Kelly & Palaniappan (2023) advocate for integrating theoretical frameworks like Social Identity Theory (SIT) and the Technology Acceptance Model (TAM) to gain valuable insights into the dynamics of cultural influences on social media usage patterns and online consumer behaviour. These frameworks offer avenues for further theoretical development and empirical investigation, bridging insights from psychology, sociology, and marketing disciplines.

These main learnings bring the essence to the discussion by emphasizing the importance of cultural sensitivity, personalized approaches, ongoing research, and theoretical integration in directing the complexities of social media engagement and consumer behaviour within diverse cultural landscapes.

Managerial implications

Theoretical insights derived from this systematic exploration have profound managerial or practical implications for businesses, marketers, policymakers, and researchers operating in globalized digital environments (Fernández-Bonilla et al., 2022; Hyun et al., 2022; Kimiagari & Malafe, 2021). Understanding the interplay between social media usage patterns and online consumer behavior across different cultures is pivotal for developing effective strategies that resonate with diverse audiences and drive positive outcomes.

Businesses and marketers can leverage the theoretical contributions to tailor their social media strategies, content creation, and marketing communications to align with specific cultural preferences and values (Kimiagari & Malafe, 2021). This includes crafting culturally resonant content, adopting localized communication styles, leveraging social influence dynamics, and promoting sustainability initiatives that align with cultural attitudes towards environmental consciousness.

Policymakers can utilize these theoretical insights to inform regulatory frameworks, data privacy policies, and digital literacy initiatives that consider cultural sensitivities and promote responsible digital engagement across diverse cultural contexts (Fernández-Bonilla et al., 2022; Hyun et al., 2022).

Researchers can build upon these theoretical foundations to conduct further empirical studies, explore new dimensions of cultural influences on digital behaviors, and contribute to the evolving body of knowledge in the field of social media and consumer behavior research (Hyun et al., 2022; Kimiagari & Malafe, 2021).

Limitations and future research directions

Despite the theoretical contributions made in this study, several limitations warrant consideration for future research endeavors. Firstly, this study's scope of cultural diversity primarily focuses on broad cultural dimensions such as values, norms, and behaviors. Future research could delve deeper into specific cultural contexts, subcultures, and micro-level cultural practices to uncover more granular insights.

Secondly, the theoretical frameworks utilized, such as Social Identity Theory (SIT) and the Technology Acceptance Model (TAM), provide valuable lenses for analysis. Still, integrating additional theoretical perspectives, such as Hofstede's cultural dimensions or Hall's high-context versus low-context cultures, could offer a more comprehensive understanding of cultural influences on digital behaviors.

Thirdly, the generalizability of findings may be limited by the diverse contexts and industries examined in this study. Future research could adopt comparative studies across regions, sectors, and demographic segments to capture nuanced variations in social media usage patterns and online consumer behavior.

Lastly, the dynamic nature of digital technologies and cultural shifts necessitates ongoing research to stay abreast of emerging trends, technological advancements, and evolving consumer preferences. Longitudinal studies, trend analyses, and cross-disciplinary collaborations can enrich theoretical frameworks and practical applications in navigating the ever-changing landscape of social media and consumer behavior.

The theoretical contributions derived from this systematic exploration pave the way for a deeper understanding on how social media usage patterns and online consumer behavior intersect across diverse cultural contexts. These theoretical foundations, stakeholders can navigate cultural diversity effectively, drive meaningful digital engagements, and foster positive consumer experiences in the globalized digital era.

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THE EFFECT OF CSR ON THE LIKELIHOOD OF BANKRUPTCY: EVIDENCE FROM SRI LANKAN LISTED COMPANIES

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Abstract

This study looks upon the association of corporate social responsibility and the likelihood of bankruptcy in the Sri Lankan context. Corporate social responsibility (CSR) was measured by a Sri Lankan index while the bankruptcy was measured by Altman's Z score. Although research has been carried out separately regarding CSR and Bankruptcy, the association between the two has limited analysis. The significance of this study is that the author carried out to analyze this relationship in the Sri Lankan context. This bridges the gap in literature. This research is quantitative and considers the positivism philosophy. Data was gathered using annual reports and data was analyzed using the Stata software. The main outcome of this thesis was that in the Sri Lankan context corporate social responsibility has no association with bankruptcy, indicating that in Sri Lankan listed companies follow the pure altruistic theory of corporate social responsibility. This means that Sri Lankan firms engage in corporate social responsibility activities purely for philanthropic purposes and not to save the firm from the risk of bankruptcy. The second outcome was to identify how much corporate social responsibility is carried out by listed companies. The result was that Sri Lankan companies carry out corporate social responsibility below average.

Keywords: Corporate Social Responsibility (CSR), Bankruptcy, Altman's Z Score

Introduction

Corporate Social Responsibility (CSR) has evolved significantly from its early origins in 1776 to a more structured concept starting around 1950. Initially voluntary, CSR is now a crucial aspect of business reporting, reflecting companies' desire to contribute positively to society and ensure sustainability.

CSR involves accountability to all stakeholders, balancing economic profitability with legal, ethical, and social responsibilities. Carroll's (1983) CSR pyramid outlines four levels: economic, legal, ethical, and discretionary responsibilities. Effective CSR aims to minimize negative societal and environmental impacts while maximizing shareholder value.

Despite the growing emphasis on CSR, research shows mixed results regarding its impact on financial performance. Some studies suggest a positive correlation (Wu & Shen, 2013; Niresh & Silva, 2018), while others indicate a negative or inconclusive relationship (Thilakarathne, 2009; Abeysinghe & Basnayake, 2015; Cochran & Wood, 1984).

This study shifts focus to CSR's role in preventing bankruptcy rather than improving financial performance. It aims to explore whether CSR practices can help companies avoid bankruptcy and maintain financial stability. Prior research indicates a link between strong financial performance and reduced bankruptcy risk (Marilena & Alina, 2015; Al-Kassar & Soileau, 2014), suggesting CSR could play a preventive role.

Bankruptcy, synonymous with corporate failure, insolvency, financial distress, and default, occurs when a company's liabilities exceed its assets. Companies facing bankruptcy risk damaging stakeholders' interests and employment stability. The study will also address the lack of research on CSR and bankruptcy in South Asia, particularly Sri Lanka, and build on global findings (Gupta & Krishnamurthi, 2018; Lin & Dong, 2018; Cooper & Uzun, 2019) to explore this emerging area.

According to the knowledge of the researcher less study has been carried out between CSR and the likelihood of bankruptcy in the Sri Lankan context. Therefore, the author's contribution is to do an empirical study to fill this gap in literature and add to the prevailing literature of the studies on CSR in Sri Lanka by analyzing the effect CSR has on the likelihood of bankruptcy. According to the research gap identified, the main research question of this study will be "What is the effect of CSR on the likelihood of bankruptcy?". Based on the main research question the flowing objectives have been developed.

1. To examine the impact of CSR on the likelihood of bankruptcy.
2. To explore the extent to which Sri Lankan listed companies are being socially responsible.

This study is pioneering in the Sri Lankan context due to the absence of prior research on CSR and bankruptcy likelihood. As CSR becomes increasingly prominent in the competitive corporate landscape, understanding its impact on preventing bankruptcy is crucial.

Unlike past research that focused on CSR's effect on financial success, this study aims to explore CSR's potential role in reducing bankruptcy risk. It will provide a foundational perspective for future researchers in Sri Lanka on this topic.

Practically, the study will help companies facing financial difficulties assess whether CSR can be used as a risk-minimizing strategy to avoid bankruptcy. The findings will be valuable for company managers in decision-making about CSR investments and for investors considering CSR as a non-financial indicator of company stability. Additionally, the study will inform regulators involved in corporate wind-ups about the significance of CSR in bankruptcy prevention.

Literature review

Corporate Social Responsibility (CSR), initially adopted as a voluntary disclosure in annual reports. Although CSR disclosure is not mandatory in Sri Lanka according to Wijesinghe (2012), its inclusion in reports has increased due to stakeholder demand, prompting managers to prioritize CSR.

While CSR has been extensively studied in relation to financial performance, corporate governance, cost of capital, and stock market returns, its relationship with bankruptcy risk is a newer area of interest. This chapter will delve into CSR theories, existing literature on CSR and bankruptcy, and previous research on company bankruptcy. The aim is to investigate if there is a connection between CSR and the likelihood of bankruptcy, particularly within the Sri Lankan context, and to contribute to the existing body of knowledge on this topic.

CSR

Corporate Social Responsibility (CSR) is a business model that promotes social accountability to various stakeholders and involves considering the impact of business operations on society, the economy, and the environment. With global concerns about environmental degradation, the UN's Sustainable Development Goals (SDGs) and various NGOs have encouraged businesses to adopt CSR practices, including philanthropy and volunteer efforts.

CSR benefits both society and companies. For companies, CSR can enhance goodwill, reputation, and employee morale by fostering a sense of connection and accountability.

Definitions of CSR have evolved over time. Bowen (1953) described CSR as businesses pursuing policies and actions aligned with societal values. Macguire (1963) emphasized corporate citizenship focusing on community welfare and employee happiness but lacked specificity. Carroll (1983) defined CSR as being economically profitable, law-abiding, ethical, and socially supportive, introducing a CSR pyramid with four levels: economic, legal, ethical, and discretionary responsibilities. Wood (1991) referred to CSR as corporate social performance, reflecting a company's relationships with society, though it lacked specific dimensions for this study. Deegan (2002) and Holme (2006) expanded CSR definitions to include social and environmental impacts and ethical considerations. Chang, Kim, and Li (2014) linked CSR to the ESG (environmental, social, governance) standard. Wood (1984) outlined CSR dimensions as legal, economic, philanthropic, and discretionary responsibilities. Godfrey (2005) introduced the concept of exchange and moral capital, but this study will not use this definition.

For this study, Carroll's (1983) definition will be used, focusing on CSR as being law-abiding, profitable, ethical, and socially supportive. This aligns with Thilakasiri's (2012) CSR framework, which includes community, health, employee, education, customer, and environmental relations.

Bankruptcy

Bankruptcy is a legal process initiated when a company cannot repay its debts. The process involves evaluating, selling, and using the company's assets to pay creditors. Bankruptcy impacts many stakeholders, including employees, shareholders, and the financial sector, potentially leading to job losses, decreased GDP, and a loss of trust in financial institutions.

In Sri Lanka, bankruptcy proceedings involve delisting from the Colombo Stock Exchange, requiring shareholder and SEC approval. The process can be lengthy due to legal and policy systems. In contrast, bankruptcy in the U.S. can be seen as a strategic option for reorganization and survival.

Definitions of bankruptcy include Altman (1968) Firms that are legally bankrupt and either in receivership or reorganization. Altman and Hotchkiss (2006) Terms like corporate failure, insolvency, bankruptcy, and default are used interchangeably, with insolvency being a more chronic condition. Reisz and Perlich (2007) Firms can remain operational even with negative net worth, though formal bankruptcy might be delayed Helwege (1999): Some firms may recover from bankruptcy without formal liquidation.

The Altman Z-score model is a widely used tool for predicting bankruptcy, with studies in Sri Lanka showing its effectiveness in predicting financial distress up to three years in advance. This model's accuracy in predicting distress highlights its reliability.

Theories of bankruptcy include Maximization of Social Welfare Theory (Baird & Rasmussen, 2003) Advocates for continuing operations of financially distressed firms to maximize social welfare and piecemeal liquidation for higher value recovery. Absolute Priority Rule where is ensures equitable distribution of recovered value, with creditors paid first, followed by shareholders. Creditors' Bargaining Theory (Jackson, 1982) Suggests that rational negotiation between creditors can reduce bankruptcy costs, avoiding a "race to the courthouse." Value-Based Theory (Korobkin, 1991) Considers resources and debtors with social, political, and moral dimensions, advocating for flexible and context-sensitive approaches to distribution in bankruptcy.

Understanding these theories and predictive models is crucial for business survival and effective management of financial distress.

Main theories of CSR and Bankruptcy

There are three main theories of CSR and bankruptcy according to Cooper and Uzun (2019) is namely the stakeholder theory developed by Freeman (1984), the agency cost theory by Jensen and Meckling (1976) and the pure altruism theory developed by Modigliani and Miller (1958).

The Stakeholder Theory

Stakeholder Theory posits that Corporate Social Responsibility (CSR) helps resolve conflicts among stakeholders by aligning with ethical responsibilities and enhancing company performance. This theory emphasizes that effectively managing stakeholder relationships—such as those with shareholders, employees, customers, suppliers, governments, NGOs, and international organizations—provides long-term value and is crucial for financial success.

The core objective of this theory is to balance the expectations of all stakeholders through the company's operations (Ansoff, 1965). Identifying and addressing stakeholder interests is fundamental, as stakeholders' investments are at risk due to the organization's activities (Clarkson, 1995).

The Agency Cost Theory

Agency Cost Theory argues that CSR can be a value-destroying activity due to information asymmetry between principals (owners) and agents (managers). According to this theory, CSR efforts may deplete company resources, diverting funds away from increasing shareholder wealth and potentially reducing profits. Although CSR might enhance a company's reputation and benefit internal stakeholders, it can lead to lower dividends for investors and less funding for positive Net Present Value (NPV) projects.

The theory highlights two main issues:

The conflict between the goals of principals and agents (agency problem).

The reconciliation of differing risk tolerances between principals and agents.

Overall, Agency Cost Theory critiques CSR by focusing on its potential to undermine financial performance and shareholder value.

The Pure Altruistic Theory

Pure Altruistic Theory posits that companies engage in CSR not purely for financial gain but because they believe in a duty beyond maximizing financial performance. According to this theory, companies participate in CSR to fulfill a sense of responsibility and to benefit from tax reductions and improved firm valuations.

In essence, this theory argues that corporate altruism—unselfishly focusing on others' happiness, welfare, and well-being—motivates companies. Unlike purely self-serving actions, altruistic behavior is characterized by a genuine concern for others, reflecting a selfless approach that aligns with traditional cultural values.

Studies related to CSR and bankruptcy

Even though both CSR and bankruptcy have been studied extensively as two separate concepts, the association between the two has not been researched extensively in the Global context. This is because this association has been studied in the recent years and has been seen as a trending area that researchers across the world focus on.

The distinction between CSR and Bankruptcy is an area in literature that has not been studied until recent years and is a topic that is on trend in the current business world. When looking at the previous research done on these two broad topics it is evident that there is a clear negative association between CSR and bankruptcy. If a firm has higher CSR presence, then the likelihood of bankruptcy is less, and firms are more able to emerge from a bankruptcy situation. Gupta and Krishnamurthi (2018) stated that firms that have more moral capital are more likely to emerge from a bankruptcy situation, CSR plays a role in facilitating a firm's emergence into bankruptcy and that exchange capital component of CSR is positively related to the probability of procuring debtors in possession financing by a distressed firm while in bankruptcy. The study used a sample of 182 firms in the United States. Lin and Dong (2018) also are in line with the previous literature states that increase in the social engagement will decrease the likelihood of bankruptcy but pointed out that it is true only for larger scaled firms. The study was done using 1117 firms in the United States. Cooper and Uzun (2019) also agreed with the prior literature, but they explained that CSR does not facilitate a firm to emerge from a bankruptcy situation, but rather a preventive measure that firms take to refrain from going bankrupt. After adjusting for the moderating effect, the authors found that the high leverage firms have a higher likelihood of bankruptcy and low leveraged firms affect the relationship negatively, that the size of the firm is not related to the relationship between CSR and Bankruptcy. Finally, the moderating effect of the Altman z scores was introduced and found that it is negatively related, high scores showed less bankruptcy and low z scores showed more bankruptcy. The final sample consisted of 78 firms in the US. Shahab, Ntim and Ullah (2019) found that the negative association holds true for non-state-owned Chinese firms rather than for state owned firms. Further they found that private owned firms show a significant relationship between CSR and distress, but it was not significant in foreign owned firms. Al-Hadi, Chatterjee, Yattian, Taylor and Husan (2019) also stated that positive CSR will significantly reduce financial distress in the Australian context. And the future go on to say that the negative association between the two variables is more pronounced for firms currently in the maturity stage of the business life cycle.

Even though the association between CSR and bankruptcy has been studied in depth in other parts of the world in the Sri Lankan context it has not yet been touched upon according to the knowledge of the author. Therefore, the objective of this paper is to do an empirical study about the association between CSR and Bankruptcy giving evidence from Sri Lanka and to bridge the gap in the literature regarding this topic.

Methodology

Recent literature suggests a clear negative association between CSR and bankruptcy, indicating that firms with higher CSR engagement are less likely to face bankruptcy and are better positioned to recover from financial distress. Research by Gupta and Krishnamurthi (2018), Lin and Dong (2018), Cooper and Uzun (2019), Shahab, Ntim, and Ullah (2019), and Al-Hadi et al. (2019) supports this view, noting that the relationship holds particularly for larger firms and, in some cases, specific regional contexts like China and Australia.

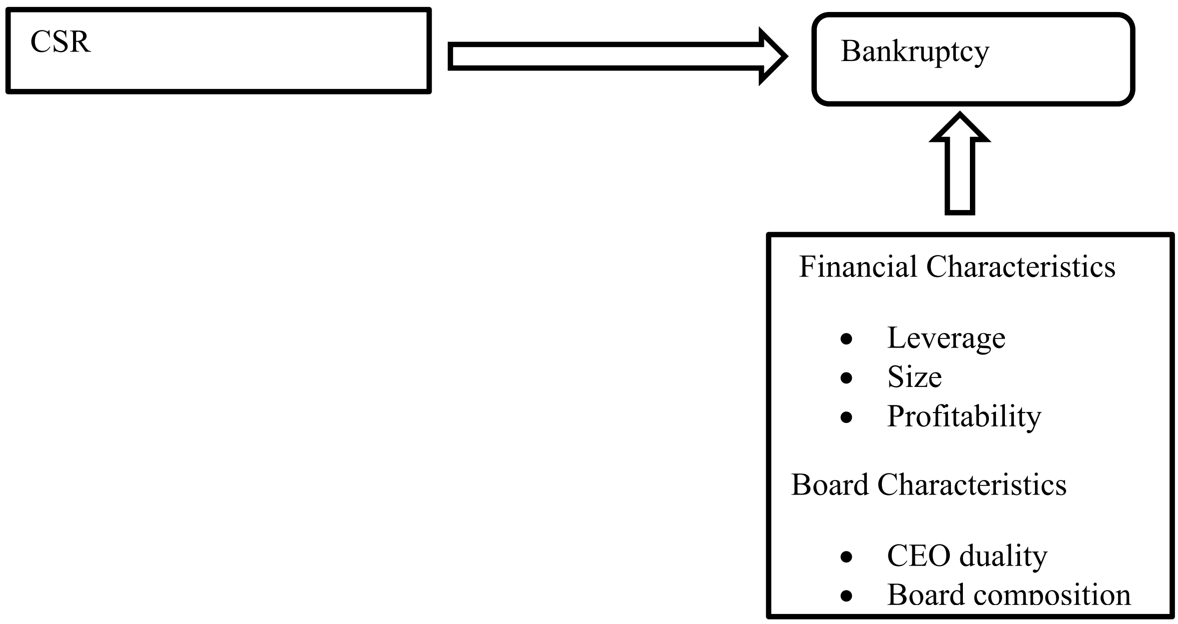
Based on this evidence, the following hypothesis has been proposed:

H0: There is a no relationship between CSR and the likelihood of bankruptcy, meaning that firms with robust CSR practices are less likely to go bankrupt, assuming other factors remain constant

H1: There is a negative relationship between CSR and the likelihood of bankruptcy, meaning that firms with robust CSR practices are less likely to go bankrupt, assuming other factors remain constant.

In this study the author looks at the association between CSR and Bankruptcy controlling for the financial and board characteristics. An in detailed analysis of this association will be carried out in the fourth chapter. The figure 1 illustrates this association in a graphical diagram.

Figure 1: Theoretical Framework, Researcher's construction



Source: Author generated

Operationalization of variables

Table 1: Operationalization of Variables

Variable	*Measurement*	*Literature Evidence*
Bankruptcy	*Altman's Z score model* *Dichotomous: Financially sound = 0, Financially distressed = 1*	*Sameera and Senerath (2015); De Silva et al. (2018)*
CSR *Community Relations*	*1. Organising video/audio programmes and short films for understanding safety: road rules, healthy foods, first aids, preventing deceases, respect to each other etc. And organising first aid programmes; safety programmes* *2. Building up houses for homeless people: tsunami affected people* *3. Organising sports activities* *4. Supporting services for elders, children and disabled person*	*Total score of the* *dimensions /* *Maximum possible* *score obtainable (28) x* *100*

	5. Organising mental relief activities: musical shows, exhibitions etc *6. Maintaining parks and towns*	*Tilakasiri (2012).* *Niresh and Silva (2018)*
Health Relations	*7. Organising Dengue, HIV and rebels preventing programmes* *8. Supporting services to government hospitals. Donating beds, equipment, theatres and additional buildings* *9. Providing scholarships for medical students, doctors for further education*	
Employee Relations	*10. Training and development* *11. Health and Safety programme* *12. Equal and impartial employment policy, Grievances handling, Prevention child labour, Labour discrimination (Women)* *13. Trade Union development* *14. Welfare facilities: transport; insurance; sports; organising functions, Organising day care centres and pre-schools children* *15. Formal recruiting, promotion and firing system* *16. Formal leaves system and financial benefits*	
Education Relations	*17. Organising education seminars for students and teachers for updating syllabuses and preparing for the exams* *18. Donations books, uniforms and foods and building up libraries in school level* *19. Organising English language support programme: organising for rural areas student* *20. Organising disability support activities for disabled children (Braille keyboards, text to speech programmes, learning aids for slow learners)* *21. Organising skill development programme for undergraduates and school leavers*	

	22. Organising day care centres and pre-schools children	
Customer relations	*23. Offers quality products and services* *24. Provides information that is truthful and useful* *25. Respects the rights of consumers.*	
Environmental Relations	*26. Organising programmes for caring the environment, saving the environment-‗save our environment ', cleaning the environment* *27. Applicable environmental rules: building plans, wastewater arrangement cleaning the garden, permission for land development* *28. Planting trees: herbal and avoiding soil erosion.*	
Firm's financial characteristics *Leverage*	*Debt/Total Assets (Debt ratio)*	*Al-Hadia et al. (2019)*
Size	*Natural Log of Total Assets*	*Thilakarathne (2009)*
Profitability	*ROA*	*Cooper and Uzun (2018)*
Board Characteristics *CEO Duality*	*CEO, Chairman separated or combined*	*Bandara et al. (2018)*

	Dichotomous: Chairman & CEO roles are combined = 0 Chairman & CEO roles are separated = 1	
Board Composition	*Proportion of Non-Executive Directors on the board* *No. of Non-Executive Directors in the Board/Total no. of Directors in the Board*	*Madusanka et al. (2018)*
Board Size	*Number of directors in the Board. Natural log of number of directors*	*Bandara et al. (2018)*

Source: Author generated

Sample selection

The study focuses on listed companies from the Colombo Stock Exchange (CSE) as of January 20, 2020, which includes 290 companies across 20 GICS industry groups with a market capitalization of Rs. 2,748.10 billion. The sample was narrowed to include only companies that have disclosed CSR activities for the past five years and were actively trading. The banking, diversified financials, and insurance sectors were excluded due to their unique nature and poor comparability with other sectors.

The final sample consists of 58 companies from 13 sectors, covering the period from 2014 to 2018, resulting in 290 firm-year observations. The selected sectors include energy, materials, capital goods, automobile and components, consumer durables and apparel, consumer services, retailing, food and staples retailing, food, beverage and tobacco, healthcare equipment and services, telecommunications, utilities, and real estate. Data was collected from secondary sources, including annual reports, financial statements, CSR disclosures, corporate governance and sustainability reports, company websites, and share price information from investing.com.

The method of analysis

According to the above theoretical framework the logistic regression model will be used in this study to find the impact that CSR has on the likelihood of bankruptcy. The Logistic regression model used in this study is based on the model used by Cooper and Uzun (2019). The logistic regression model is used since the study employs a dummy variable (Bankruptcy) as the dependent variable Darrat et al (2016). The software used to run the regression and analysis will be Stata.

$$Bnkrpt\_it = \propto it + \beta\_1\ CSR\_it + \beta\_2\ LEV\_it + \beta\_4\ SIZE\_it + \beta\_3\ PROF\_it + \beta\_5\ 〚CEO\_DU〛\_it + \beta\_7\ BC\_it + \beta\_8\ BS\_it + \varepsilon\ it$$

Bnkrpt= Bankruptcy score according to Altman Z score

CSR= Corporate Social responsibility score

LEV= Leverage

SIZE= natural log of the Size of the organization

PROF= Return on assets as a measure of profitability

CEO_DU= CEO Duality

BC=Board Composition

BS= Board Size

ε = Error term

Descriptive statistics was obtained for all variables considering the mean, standard deviation, minimum and maximum values for all variables.

Correlation analysis was done for variables; CSR, LEV, logsize, bc and bs with Bnkrpt using the Spearman's correlation method because Bnkrpt is a binary outcome. Moreover, since CEO_DU is also a binary variable the correlation analysis between ceo_du and Bnkrpt was done using the Spearman's correlation method. Correlation analysis between the rest of the variables was done using the Pearson's method.

A unit root test tests whether a variable is nonstationary and possesses a unit root. A null hypothesis is generally defined as the presence of a unit root and alternative hypothesis is either stationary, trend stationary or explosive root depending on the test used. The test that will be used to test unit root is Harris-Tzavalis unit root test.

Data Analysis

Descriptive statistics

The below table shows the descriptive statistics of the bankrupt firms, the researcher shows identified the mean, standard deviation, minimum value and the maximum value to discuss the descriptives.

Table 2: Descriptive statistics of Bankrupt firms

Variables	Mean	SD	Min	Max
CSR	32.04	14.51	0.00	67.86
LEV	.34	.34	0.00	4.50

SIZE	9.62	.73	8.00	13.00
PROF	9.66	12.24	-24.34	75.40
CEO_DU	.83	.38	0.00	1.00
BC	.71	.19	.29	1.00
BS	8.52	2.21	4.00	18.00

Source: Researchers' Construction

The above table shows the descriptive statistics of the bankrupt firms in the sample. The descriptive statistics of the bankrupt firms was used with accordance to the study carried out by Cooper and Uzun (2019).

The CSR score variance is high with a standard deviation of 14. 51, the minimum value being 0 and the maximum being 67.86. The average debt ratio for the 290 firm year bankrupt firms is 34 %.it has a low standard deviation of just .34, the minimum value being 0 and maximum being 4.5. The average profitability of the bankrupt firms is 9.66 with a standard deviation of 12.24 indicating a higher risk. The minimum value is -24.34 and maximum value being 75.40. CEO duality a binary variable has an average value of .83 and a standard deviation of .38. The board on average comprises of 71% of non-executive directors. The average board size of the bankrupt firms is closer to 9.

Correlation results

Table 03: Spearman correlation results

Pearson/Spearman Correlation Coefficients, N = 290
Prob > |r| under H0: Rho=0

	Bnkrpt*	CSR	LEV	LOGSIZE	PROF	CEO_DU*	BC	BS
Bnkrpt	1.000	0.142	0.414	0.272	-0.412	-0.114	0.078	0.163
		0.016	<.0001	<.0001	<.0001	0.053	0.183	0.006
CSR		1.000	0.044	-0.198	0.051	-0.113	-0.009	0.274
			0.453	0.0007	0.385	0.054	0.871	<.0001
LEV			1.000	-0.015	-0.015	0.045	0.075	0.071
				0.800	0.806	0.447	0.205	0.230

Pearson/Spearman Correlation Coefficients, N = 290
Prob > |r| under H0: Rho=0

	Bnkrpt*	CSR	LEV	LOGSIZE	PROF	CEO_DU*	BC	BS
LOGSIZE				1.000	-0.112	-0.044	-0.022	-0.114
					0.163	0.451	0.704	0.052
PROF					1.000	0.100	0.012	-0.064
						0.089	0.840	0.275
CEO_DU						1.000	0.235	-0.008
							<.0001	0.890
BC							1.000	-0.080
								0.172
BS								1.000

Source: Researchers' Construction

Spearman correlation coefficients were used to carry out the correlation analysis. The correlation between bankruptcy and CSR is .142 and is statistically significant at 5%. Correlations between Bankruptcy and leverage (r=0.414), log size (r=0.272) and profitability (r=-0.412) are significant at <0.0001 probability level. Relationship with Bankruptcy and Board size (r=0.163) is significant at probability level, p=0.006). Bankruptcy and Ceo duality showed a negative relationship (r=-.114) which is significant at p=0.053. Correlation between Board composition and Bankruptcy is found non-significant (r=0.078).

CSR and log size showed a significant negative relationship (r=-0.1984, 0.0.07). CSR showed negative relationships with CEO duality (r=-0.113, p=0.054) and BC, yet the relationship with BC is not significant (r=-0.009, p=0.8711). The relationship with CSR and Lev is not significant.

leverage and log size and leverage and profitability show negative relationships however both are not significant. Leverage, CEO duality (r=.045) board composition(r=.075) and board size (r=.0721) all show relationships but not significant.

Log size shows negative relationships with profitability, CEO duality, Board composition and board size with none of the variables being significant.

Profitability has negative relationship with board size (r=-.064) however this is not significant. Furthermore, the relationships between profitability and CEO duality and board composition is positive yet non-significant.

CEO duality has a negative relation with board size (r=-.008) however this is insignificant (p=.890). CEO duality and board composition has a positive relationship (.235) and is significant at 1% (p=0001).

Board composition has a negative relationship with board size (r=-.080) however that relationship is not significant.

Unit root

A unit root test tests whether a variable is nonstationary and possesses a unit root. A null hypothesis is generally defined as the presence of a unit root and alternative hypothesis is either stationary, trend stationary or explosive root depending on the test used. The test that will be used to test unit root is Harris-Tzavalis unit root test.

root is Harris-Tzavalis unit root test.

Table 4: Unit root test for CSR.

	Statistic	T statistic	Probability
CSR-Rho	-0.5141	-3.1406	0.0008
Leverage-Rho	-0.2590	-0.1065	0.4576
Log Size-Rho	-0.3387	-1.0549	0.1457
Profitability-Rho	-0.2831	-0.3940	0.3468
Board Composition-Rho	-0.4357	-2.2086	0.0136
Board size- Rho	-0.3212	-0.8473	0.1984

Source: Researchers' Construction

The panels are stationary for CSR therefore no need for differencing. The panel contains unit roots therefore need to do differencing for leverage. The panels are non-stationary for log size therefore need to do differencing. Panels are non-stationary for profitability therefore must do differencing. The panels are stationary for board composition therefore no need to do differencing. The panels are non- stationary for board size therefore need to do differencing.

In summary all the variables except CSR and board composition are non-stationary and it is necessary to do differencing for those variables. But as CSR and Board composition are stationary it is not necessary to do differencing.

Results of the regression analysis

Table 5: Logistic regression results

Variable	Coefficient	T statistic	Probability
Intercept	-5.386	-1.530	0.125
CSR	-.038	-0.700	0.483
LEV	.032	0.070	0.943
SIZE (Natural log)	-2.922	-1.380	0.168
PROF	-.179	-2.570	0.010
CEO_DU	-4.138	-1.720	0.086
BC	4.763	0.980	0.326
BS	.092	0.480	0.632
Wald Chi-square test statistic	14.11		
Probability	0.0492		

Source: Researchers’ Construction

The logistic regression was run using the random effects model. According to the above regression after controlling for firm financial characteristics and board characteristics, CSR has a negative association with bankruptcy which is in line with the prior literature (Cooper & Uzun, 2019; Lin & Dong, 2018; Shahib et al, 2018; Gupta & Krishnsmurthi, 2016; Al Haid et al, 2017). However, this association is not significant. This would reject the hypothesis H1 that CSR has a negative association with bankruptcy. Therefore, in conclusion it can be said that there is no relationship between CSR and Bankruptcy. No relationship between CSR and bankruptcy means that however much an organization engages in CSR activities it does not provide a company protection from entering into a bankruptcy state in the Sri Lankan context.

Leverage has a positive association with bankruptcy which is in line with prior literature (Cooper & Uzun, 2019) which indicates that firms with higher leverage are more likely to become bankrupt. However, this variable too is not statistically significant. When considering size, it has a negative association with bankruptcy which means larger firms are less likely to become bankrupt. This variable too is not statistically significant. Literature shows the firm size is not related with bankruptcy (Cooper & Uzun, 2019).

Unsurprisingly, profitability has a negative association with bankruptcy, and it is statistically significant at 10%. This means that companies with higher profits and ROA will be less likely to become bankrupt. This too is consistent with prior literature (Cooper & Uzun, 2019; Al Haid et al, 2017).

CEO duality has a negative association with bankruptcy, which is interesting as when CEO and chariman roles are separated the company is less likely to become bankrupt. This is significant at 10% and also is in line with prior literature Daily and Dalton (1994) which states that duality is high for bankruptcy.

Board composition has a positive association with bankruptcy, which means when the number of independent directors in the board increase the firms is more likely to become bankrupt. This goes against literature which states that firms with large independent directors file for less bankruptcy (Weusbach, 1988; Hambrich &D Aveni,1992)

Board size also shows a positive association with bankruptcy which means larger the board size is the higher probability of becoming bankrupt. This too is in line with prior literature, Gales and Kesner (1994) and Lipton and Lorsck (1992) both saying that larger boards are indeed associated with the likelihood of bankruptcy. The wald chi square statistic is significant at 5% indicating that the entire model is a good fit.

Conclusion

The major aim of this study was to find the association between CSR and bankruptcy in the Sri Lankan context. According to the results of the regression, it was found out that there is no significant relationship between CSR and bankruptcy for listed Sri Lankan firms across the 17 sectors.

According to Cooper and Uzun (2019) a negative relationship between CSR and bankruptcy is supported by the stakeholder theory of CSR. Which means that if a company does more CSR activities the likelihood of bankruptcy is less due to stakeholders are having a positive attitude thereby the companies will have better financial capabilities that would reduce the likelihood of bankruptcy.

On the other hand, according to Cooper and Uzun (2019) if a positive relationship was found between CSR and bankruptcy, the result will lend support to the agency theory of CSR. According to this theory CSR will increase the company reputation but will diminish the profits as CSR is seen as a value diminishing activity that goes against the shareholder wealth maximization.

Finally, Cooper and Uzun (2019) state that if no relationship exists between CSR and Bankruptcy, it would suggest that CSR may be a purely altruistic activity and that is more related to a firm’s choice and preference rather than an entrenchment tool (agency theory) or as a means to enhance financial performance (Stakeholder theory).

Therefore, in the Sri Lankan context firms perform CSR activities with an ulterior motive and is supported by the pure altruistic theory of CSR. Sri Lankan companies engage in CSR because they believe they have a duty beyond financial performance and a reasonable number of investors prefer corporate philanthropy over individual charitable giving. The main reason for this preference is charity reduces corporate taxation moreover the firm valuation is maximized by following social policies that involves strict positive levels of corporate altruism. According to this theory companies do CSR for their own sake, which is the outcome of this study.

Other significant finding was that profitability has a negative association with bankruptcy. When profitability increases then the company is less likely to be bankrupt, which is consistant with prior literature as well (Cooper & Uzun, 2019; Al Haid et al, 2017). Ceo duality too has a negative association with bankruptcy, when the roles of the CEO and Chairman are separated the firms are less likely to become bankrupt. This too is in line with prior literature (Daily and Dalton, 1994).

The second objective of this study is to explore the extent to which Sri Lankan listed companies are being socially responsible. Accordingly, the mean value of CSR activity in the descriptive statistics the average amount is 32.04% among the bankrupt firms. Indicating that on average Sri Lankan listed companies engage in CSR activities below a 50% mark which when compared to other countries is quiet low.

Practical implication

Practically the importance of identifying the association between CSR and bankruptcy is to access if by engaging in CSR related activities whether a company will be able to minimize the likelihood of going bankrupt. This will be important for the companies who are currently undergoing financial difficulties or are not performing as expected. By understanding this relationship, they will be able to determine if they should in fact engage in CSR as a risk minimizing strategy and to use CSR as a preventive action against Bankruptcy. However, as the result of this study shows that there is no significant relationship between the CSR and the likelihood of bankruptcy it goes on to show that Sri Lankan companies used CSR for their own sake.

This study will be useful for all companies who want to remain as going concern without entering bankruptcy. The results of this study can be used by company managers when allocating funds for CSR projects. Furthermore, for companies to be more philanthropic rather than focusing on profits alone. As merely by engaging in CSR it doesn't reduce the chance of becoming bankrupt in the Sri Lankan context. Managers will get an understanding that CSR cannot be used as a tool to gain more profits or to protect the company from going bankrupt.

Limitations and further studies

Firstly, limitations of the data collection process will be discussed. The yearend Balance sheet dates of the data set collected have not been aligned into the same date. Some companies had a yearend balance sheet date of 31st march while some companies had a yearend date of 31st December. This is a limitation because it is difficult compare companies with two different balance sheet dates. Therefore, future research should be done aligning the year-end balance sheet dates.

The market capitalization date and the year-end balance sheet dates were different. Here too there is a problem of comparability. Therefore, future research should try to match the balance sheet dates with the market capitalization date selected.

Other limitations of this study will be looked upon as follows, even though in other countries the research used a database to measure the CSR and Bankruptcy, in Sri Lanka there was no database to obtain the values. This is a major limitation as the researcher had to manually calculate the figures for CSR and Bankruptcy separately. In Sri Lanka there was a index developed by STING consultants to measure the CSR level in companies but this index was not maintained annually for the past 5 years. However, for future studies regarding this topic researchers should be vigilant about possible databases and indexes developed locally to carry out the study swiftly.

In this study the researcher has taken only secondary sources like websites and annual reports to measure the variable CSR. To carry out a more detailed analysis future researchers could investigate primary data collection sources like interviews to enhance the findings. So, a more mixed approach can be used when carrying out data collection by using both primary and secondary data collection methods.

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EVALUATION OF THE IMPACT OF VACCINATION ON EDUCATIONAL AND SOCIO-ECONOMIC DEVELOPMENT OF DEVELOPING COUNTRIES: A STUDY IN SRI LANKAN CONTEXT

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Abstract

Vaccination has a very great impact on health of human population but on a broader aspect it is interconnected with educational attainment of children and socio-economic factor of the country. Unlike developed countries, infectious diseases can immensely affect the economic or financial status of a developing country due to impact on health, education, and investments. This research mainly aims to analyze and understand the global and local impact of vaccination on socioeconomic development, focusing on developing countries as it experiences a high impact and using Sri Lanka as an example. It also covers the aspect of educational development achieved through vaccination on individual basis, contributing to economic status and development of a country. This review article emphasizes on the Sri Lankan context, which is a belonging to developing countries and Low- and middle-income (LMIC) country with vaccination playing a major role on eradication of diseases, and education and socio-economic development and how the public health system has integrated vaccines in an effective manner to uplift and enhance the quality of lives and reducing economic burden on the society. It is also taken into consideration of the importance of vaccines in the strong and low-cost model of public health system. The review also emphasizes the impact of vaccination in terms of education development and empowerment through education.

Keywords: Vaccination; Developing countries; educational development; Socio-economic development

Introduction

Vaccines are one of the cost-effective intervention towards human health, working in preventing an individual from serious infectious diseases which has the potential of resulting in morbidity or mortality. Infectious diseases are considered a huge global burden in the past as well as the present due to humans being highly exposed to the causative agents which are micro-organisms dispersed in the living environment, and the transmissible nature. Due to transmissibility, infectious diseases can develop pandemic situations affecting a vast population leading to interruptions in the general lifestyle and nationwide, or worldwide shutdown. Vaccines are developed as a remedy of fighting against the incurable providing a chance of completely eradicating the health burdens. The main benefit of vaccination is the improvement of human health (Curtiss III, 2011). Concept of vaccines depends on the terminology "immunological memory", where the body's immune system is boosted by introducing a potential causative agent (microbe) in a less virulent stage forming a primary response memory. This eventually prevents the entry of a similar pathogen at a high virulent stage in the future. As a result, the individual is prevented from contracting the infectious diseases once considered as deadly and even if contracted, the severity will be quite less thereby reducing mortality rates and long-term complications such as blindness, deafness, paralysis or sometimes cancer (Farber et al., 2016; Vetter et al., 2018).

Starting from the development of variolation techniques by Edward Jenner in 1796 against controlling smallpox outbreak, several vaccines of different forms have been and still developing. The main types of vaccines include live-attenuated vaccines injecting pathogens with reduced pathogenicity (MMR vaccine) (Minor, 2015), inactivated vaccine with killed pathogens (polio and hepatitis A vaccine) (Sanders, Koldijk and Schuitemaker, 2015), Conjugate vaccines combining weak and strong antigens of pathogens (pneumococcal conjugate vaccine) (Tsaban and Ben-Shimol, 2017), toxoids injecting inactivated toxins of pathogens that causes the disease (tetanus) (Möller, Kraner and Burkovski, 2019), and new approach of mRNA vaccines (Covid vaccine) (Pardi et al., 2018)

Introduction of vaccine campaigns has positively impacted on the rate of coverage of vaccinations among the population leading to controlled spread of diseases and complete eradication of diseases such as smallpox and measles.

Sri Lankan public health system

Sri Lankan public health system is setting a good example in universal health coverage based on the indicators used by World Health organization for surveillance. The main indicator is the maternal, newborn and child-health, in which Sri Lanka demonstrates a well-proven results by a relatively low neonatal and infant mortality rate under SDG health targets (12-25 per 1000 births) (de Silva, Ranasinghe and Abeykoon, 2016; World Health Organization, 2023). Infancy mortality and under-5-mortality is marked as a critical risk for public health worldwide since from way-back, recording 5 million deaths globally as in 2021. Introduction of maternal and neonatal immunization on high-mortality diseases such as measles and tetanus, impacted greatly on reduction of infant deaths and pre-term births following the Millenium development goals set by United Nations in 2001. But it was not achieved successfully. Despite this scenario, Sri Lanka was considered as the one South-Asian countries with a low infant death of 6.9 per 1000 births and ranked the 178th in 241 countries experiencing the under-5-mortality (in 2020). According to a study in 2011, high immunization coverage, eradication of tetanus, and free healthcare (vaccination-programs) play a significant role in contributing to the reduced infant mortality rate in Sri Lanka. This displays the effective immunization programs established in Sri Lanka and policy maintained in vaccine administration of individuals (Chapman and Dharmaratne, 2019; Thabrew, Sooriyarachchi and Jayakody, 2023). The health of pregnant mothers and infant are maintained by other services such as antenatal care (visited by 93% of pregnant women), home-visit midwifery, and delivery by skilled-healthcare workers (World Health Organization, 2015).

In terms of infectious diseases, SL has the lowest cases of respiratory infections (lower tract), tuberculosis and HIV. This represents the high immunization coverage and Health-systems in-built to monitor incidence cases thereby taking precautionary activities to prevent the spread. It is also important to mention that Sri Lanka is one of main countries without any measles incidence following the Covid-19 pandemic and none in malaria after 2012 (de Silva, Ranasinghe and Abeykoon, 2016).

Sri Lanka has a well-structured and organized immunization program followed by the introduction of extended program of immunization in 1975, has reduced the incidence rate of diseases and eventually led to the eradication of number of diseases such as polio, measles, diphtheria and pertussis (Lindqvist, Duminda Guruge and Trollfors, 2019).

Table 1: Vaccination Schedule in Sri Lanka (Lindqvist, Duminda Guruge and Trollfors, 2019)

Diphtheria, Pertussis, Tetanus (DTaP) *Hepatitis B* *Hemophilus influenza B* *Oral polio vaccine*	*2, 4 and 6 months of birth*
Japanese encephalitis	*9 months*
Measles, mumps, and rabies (MMR)	*2 months and 3-year doses*
DTaP vaccine and OPV	*4th dose in 18 months*

Poliomyelitis, a spinal cord infection causing paralysis is a widespread infection with 5-10% death rate worldwide. Polio vaccine was introduced as a strategy of overcoming the high rate of poliomyelitis cases, yet the cases are still sparsely spread among the countries out of which 3-4 countries never eradicated the polio virus as in 2014. Sri Lanka has a proper routine immunization program with oral polio vaccines as five doses in different ages as 2, 4, 6, and 18 months, and in 5 years of age. With the last case of polio in 1993, vaccination continues encompassing 95% rate of coverage and a research study in 2015 provided results that explained all ages of population demonstrated protection against all serotypes of polio. Further it is also noted that Sri Lanka was the first county to introduce two doses of intradermal-fractional dose inactivated Polio vaccine in addition to Oral Polio vaccine following the recommendation of Strategic Advisory group of Experts (SAGE). Even though vaccine campaigns for polio vaccine have been reduced since 2003, the vaccination coverage remains at a higher rate (Gamage et al., 2015, 2019).

Cervical cancers are observed in an increased rate among women, globally and 90% cases in Low- and middle-income countries. According to the National cancer control program, Sri Lanka has an annual incidence of cervical cancer among 9.9 per 100,000 women and the Human Papillomavirus (HPV) acts as a main causative agent. From the introduction of HPV vaccine in 2006 globally, Sri Lankan government introduced the vaccine under National Immunization program from 2017 and covered an administration rate of 82%. The vaccination coverage in worldwide view is considered slow, and the main reasons contributing is the issue with affordability due to higher cost. But unlike other countries, SL has introduced HPV-school vaccination programs for teenage girls, which acts as a milestone in increasing the coverage of HPV-immunization. Although it is still being established, it is hoped to provide better results in reducing cervical cancer cases in near future (Debellut et al., 2024).

Measles outbreak and eradication – Sri Lanka

Measles is a viral infection caused by viruses belonging to the Paramyxoviridae family and affected the worldwide population at a larger extent (Bester, 2016). Globally, it has been estimated that measles vastly affects more than 95 countries and causes about 5-8 million deaths annually, out of which Sub-Saharan Africa was majorly affected (Moss and Griffin, 2006). Measles outbreaks in Sri Lanka began from the 13th century (era of kingdoms), and major epidemic outbreak was obtained in the period of 1982-1990. This epidemic covered about 13,000-14,000 cases. Following the introduction of measles vaccination globally in 1960, Sri Lanka introduced it under Extended Program of Immunization (EPI) from 1985 leading a gradual decline in cases by 1988 (Puvimanasinghe et al., 2003). The gradual decline was continuous, and measles was on the brink of elimination when another pandemic outbreak of disease was observed in 2013 and declined back again to last incidence in 2016. As the next strategy, Sri Lankan government targeted elimination of measles by 2020 and was successful in completing the target just one year before (2019). One of the main reasons for eliminating measles was including the MMR vaccination as a government policy to be attained as an infant and vaccination campaigns, which is a success of vaccination and SL public health system to be notified (Dahanayaka et al., 2015; Gamage, 2020).

Vaccination and Education

The emergence of infectious diseases raises a main concern of educational development of children and teenagers. Attending school is a major aspect of the learning of an individual which contributes to the future development of a personal right and as a part of society. Due to a child or a young adult being infected, with respect to factors such as compressed immune system and transmission, results in less attendance at school or university depriving the child of obtaining the required level of knowledge. Through vaccination, as the cause of infectious diseases are prevented the number of children affected reduces resulting in reduction of absenteeism (Nettleman et al., 2001; Wiggs-Stayner et al., 2006; Colosi et al., 2022). Hindrance in obtaining the required education at the childhood builds up the character and knowledge required for employment at adulthood contributing to the economic development of a country, and reduction of productivity.

In educational aspect, vaccines are said to impact on the cognitive development of children. Recurrent infections in children can effect on the cognitive aspect of children growth and it may indirectly impact on their ability for future learning, decision-making, and future economic loss by employment issues (Nandi and Shet, 2020; Joe and Kumar Verma, 2022).

Rubella vaccines program in Sri Lanka

Vaccines protect against diseases such as rubella, herpes simplex virus, cytomegalovirus, and pneumonia caused by Chlamydia pneumonia which causes cognitive impairment in individuals involving the loss of ability to think, remember, focus, and learn. Loss of cognitive development can vastly impact on educational development and future (Warren-Gash et al., 2019). Introduction of vaccines against these viruses, mainly rubella has reduced the impact on congenital impairment of children yet not all the mentioned causative micro-organisms possess a vaccine such as the HSV, the vaccines are still under pre-clinical phase testing. Rubella infection during pregnancy has been revealed to several pathologies in neonates including miscarriages, still-births, and congenital rubella syndrome (Dontigny et al., 2008). In low- and middle-income countries like Sri Lanka rubella was considered a wide-spread epidemics. In 1994-1995, significant outbreaks of rubella were observed in Sri Lanka ranging from 212-275 cases and a majority of the affected showed CRS (275 in 1994 and 169 in 1995). Considering this major impact, Rubella vaccine was introduced as a monovalent vaccine in 1996 in National Extended Program of Immunization (EPI) given in 9 months. After it was replaced by MMR vaccine (measles-mumps-rubella) by the EPI as a national policy in 2011. With the introduction of rubella vaccine in 3 years, and vaccine campaigns in 2003(95% coverage) and 2004(72% coverage) reduced the incidence of cases gradually from 19 per million population in 1999 to 0.6 per million population in 2014. Through case-based surveillance carried out by National communicable disease surveillance program of epidemiological unit, for continuous monitoring of CRS cases in rubella patients. It was observed that the CRS cases largely reduced to >96% with a timeframe of over a decade starting from the introduction of vaccine programs(Palihawadana, Wickremasinghe and Perera, 2003; Gamage, Galagoda and Palihawadana, 2015).

Vaccination and Socioeconomic factors

Infectious disease outbreaks and epidemic situations vastly affect the human capital and productive workforce of a country since health of population is determined as an indicator of the economic status. An episode of microbe infection on a population-based results in risks of costs in terms of health system, personal wages, investment decisions and work productivity (Ismahene, 2022).

Several patients being affected rapidly or on regular basis due to transmission overwhelms the heath system of the state limiting the ability to provide proper care to the patients and maintain disciplinary preventive actions. This can worsen the situation further and lead to large incurrence of costs. Specifically, developing countries lack proper health infrastructure facilities which impact greatly on patient health and maintenance in pandemic situations. Vaccination reduces the spread of diseases on a large scale, reducing the number of patients being admitted to the hospital enabling utilization of resources of routine care (Rémy, Zöllner and Heckmann, 2015).

Beyond the impact on health system, disease episodes cause the sick and caregivers to take time off-work for long-term periods resulting in loss of wages and increasing consumptions. For proper economic balance and development, the wages of individuals should be balanced with the consumption rate but in epidemic cases the balance is disrupted. In turn, vaccines can reduce the number of days off-work and increase productivity (Stack et al., 2011; Rodrigues and Plotkin, 2020).

Vaccines are most significant factor of reducing medical costs that comes with infectious diseases. Rather than severity of infectious diseases, the loss of income on treating the condition or after -effects (long-term) is considerably high and concerning. It includes the cost of hospitalization, caretakers, reports, medicine and much more. Vaccination is a cost-averting method, which reduces the cause of disease thereby medicals cost. This enables cost-saving and future investments (Stack et al., 2011).

Boarder restrictions implied by the countries in response to epidemic situations in the aspect of preventing imported disease spread, impacts on the trading activities and tourism of the nations. This causes a decline on the import and export businesses leading to a reduction in economic growth. At the same time, the number of tourists entering the country monthly or annually reduces causing a reduction in capita income. Vaccinations have been proved to ensure continuous trade balance and flourish the tourist industry despite the pandemic era. Further, vaccinations are considered a must in travel restrictions by certain countries to prevent the chance of the travelers being a carrier of non-endemic diseases (Strielkowski, 2014; Rosselló, Santana-Gallego and Awan, 2017; Vaidya et al., 2020).

Dengue and its impact on Sri Lanka

Dengue is one of the significant health concerns of the public in tropical or subtropical regions. Sri Lanka is considered a hyperendemic region for dengue due to the substantial increase in the number of cases and deaths in the near past. Starting from the identification of the first case in 1960s, dengue was endemic to specific regions of Sri Lanka but with the climatic changes and urbanization the growth of dengue vectors increased resulting in increased transmission. Dengue fever affects not only children but adults as well, ranging from mild fever conditions to severe dengue hemorrhage fever. As reported by the Epidemiological department of Sri Lanka, annually 30,000 to 100,000 people are being affected by dengue and as exception in 2017-2018, more than 150,000 patients were reported. Cause of dengue does not only effect on the health but develops an immense economic burden, in terms of direct costs involving medical costs and indirect costs including the loss of education by children leading to future economic loss productivity loss by patients and caretakers (Perera, John and Senanayaka, 2019; Weerasinghe et al., 2022). According to a survey analysis carried out in 2022 in the Southern part of Sri Lanka to enquire on costs involved with dengue episodes, an estimated rate of 77.29% of the monthly income is spent on the direct and indirect costs during an individual of a family being affected. At the same time, it provided that based on the number of days children are being absent to school (~3-7 days) by dengue fever leads to a future loss of 0.44% in the income (Weerasinghe et al., 2022). Another article published in 2019, which carried out a data analysis on published data of economic management and disease management costs; indicated that according to 2012 report an estimate of US$ 971, 360 is individually spent on dengue control activities, and medical costs of patients varies from an average of public cost US$ 164(Thalagala et al., 2016; Perera, John and Senanayaka, 2019). Despite the large amount of cost spent on controlling the dengue endemic, the cases still arise rapidly indicating the loss of efficiency. Similarly, an article published in 2016, estimating financial expenses on control activities and hospitalization during the 2012 dengue epidemic provided conclusion that hospitalization costs vary depending on the severity of the disease. A general dengue fever can cost about LKR 14,000-15,000 per episode while in dengue hemorrhagic conditions it vary from LKR 29,000-30,000 per episode(Thalagala et al., 2016; Perera, John and Senanayaka, 2019).

Considering this economic burden created by Dengue Fever, and the unavailability of proper treatments calls for the introduction of vaccines for prevention of diseases. However, vaccines have not been yet released for use but in developmental stage.

Future Perspectives

The impact of vaccination on educational attainment and socio-economic advancement in developing countries is a topic that will likely be the subject of ongoing research and innovation as the change in global health and development landscape is navigated. In envisioning the future course of related topic, several key considerations emerge addressing new issues and utilize opportunities to effectively maximize the advantages of vaccination campaigns. Following this, the potential directions that could improve our knowledge and application of immunization tactics in supporting socioeconomic and educational development in various settings.

Another perspective is addressing the vaccine hesitancy among the population of developing countries still prevailing and re-emergence of beliefs and conspiracies by the Covid-19 vaccinations. Misconceptions on vaccine are still circulating among different people, regarding vaccine safety, efficiency, risks, and advantages which is a major barrier of vaccine hesitancy (Geoghegan, O'Callaghan and Offit, 2020; Swarnamali et al., 2023). Moreover, anti-vaccination groups are developed in the community in the motive of spreading the vaccine negative beliefs. In the future, focusing on better strategies for addressing the concerns and hesitancy in targeted communities such as vulnerable population dispels misinformation. It also includes future efforts on introducing innovative vaccine delivery system such as mobile clinics to rural areas or areas with less accessibility.

In the current scenario, the risk of infectious diseases is increasing relative to urbanization and global climatic change (Heffernan, 2018; Baker et al., 2022). This has resulted in a vast number of health issues and an undeniably large burden on the non-health factors like the recent unexpected Covid-19 outbreak and dengue epidemic. Therefore, investing on research and development of new vaccines and resilience to future pandemics is significantly potential in future to reduce the impact on social and economic factors.

Conclusion

Introduction of vaccines and increase in vaccine coverage has a broader impact on educational attainment and socio-economic development of Sri Lanka. Several vaccines being covered from past, proper vaccination campaigns, policies and surveillance system ensuring high immunization coverage has immensely contributed to fighting against diseases causing eradication, suppression and preventing the resurgence of infectious diseases such as measles. It is a point of consideration in Sri Lankan health system. Yet, challenges are faced against the development of vaccines for dengue which is highly prevalent in the nation and misconceptions circulating among the population, having the potential threat of loss of vaccine coverage in future. Addressing the challenges and developing strategies to overcome it can be beneficial for the educational and socio-economic aspect of Sri Lanka as a developing country.

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ABSTRACTS

ENVIRONMENTAL SUSTAINABILITY PRACTICES IN SINGAPORE'S RETAIL SECTOR - A QUALITATIVE STUDY

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Abstract

As global awareness of environmental issues intensifies, the retail sector in Singapore is experiencing increasing pressure to adopt sustainable practices. This qualitative study investigates the implementation of environmental sustainability practices within Singapore's retail sector by examining the motivations, challenges, and outcomes associated with these initiatives. The study is set against the backdrop of the crucial role that the retail sector plays in promoting environmental sustainability and considers the unique regulatory and consumer environment in Singapore. The primary research problem addressed is the limited understanding of how retailers in Singapore are responding to the growing demand for sustainability. To explore this, the study employs a methodology involving in-depth interviews with retail managers and sustainability officers from a diverse range of retail businesses, including large retail chains, small independent stores, and online retailers. The data collection process utilized semi-structured interviews, which provided rich, detailed insights into participants' experiences and perspectives. This approach allowed for an in-depth exploration of various dimensions of sustainability practices, including their implementation processes, challenges faced, and perceived outcomes. The data were analyzed using thematic analysis to identify common themes and patterns. The findings reveal that retailers in Singapore are increasingly adopting sustainable practices driven by regulatory requirements, consumer demand, and corporate values. Regulatory pressures, such as government policies and guidelines promoting environmental responsibility, have significantly influenced this shift. Consumer awareness and demand for sustainable products have also played a crucial role, compelling retailers to adapt their practices to align with environmental goals. Additionally, corporate values and internal motivations, such as enhancing brand image and aligning operations with broader sustainability objectives, have contributed to the adoption of sustainable practices. Despite these positive trends, the study identifies several significant challenges that retailers face. High costs associated with implementing new technologies and sourcing sustainable products present major barriers, particularly for small independent stores. Furthermore, a lack of expertise and knowledge about sustainable practices hinders the effective integration of these practices into some retail operations. Difficulties in sourcing sustainable products further complicate the transition, as retailers struggle to find suppliers that meet their sustainability criteria. To address these challenges, the study recommends that retailers collaborate with government agencies, non-governmental organizations (NGOs), and other stakeholders to develop comprehensive strategies for enhancing sustainability efforts. Such collaborations can provide the support and resources needed to overcome obstacles and implement effective sustainability practices.

Additionally, investing in employee training and consumer education is suggested as a key strategy for promoting sustainable practices. Training programs can equip employees with the necessary knowledge and skills, while consumer education can raise awareness and drive demand for sustainable products. Overall, while the study highlights significant challenges, it also underscores the substantial opportunities available for retailers in Singapore to contribute to environmental sustainability and achieve a competitive advantage.

Keywords: Environmental sustainability, retail sector, Singapore, qualitative study, thematic analysis

ASSESSING THE IMPACT OF GREEN CERTIFICATIONS ON CONSUMER PURCHASING BEHAVIOR IN THAILAND

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Abstract

Green certifications are increasingly recognized as a valuable tool for promoting sustainable consumer behavior, yet their impact on purchasing decisions in South East Asia, particularly in Thailand, remains under-researched. This quantitative study investigates the influence of green certifications on consumer purchasing behavior in Thailand, with a focus on understanding how these certifications affect consumer choices towards environmentally friendly products. The research is set against the backdrop of the growing importance of green certifications in guiding consumer decisions and fostering environmental sustainability. The primary problem addressed is the lack of empirical data regarding the effectiveness of green certifications in shaping consumer behavior within the Thai market. To tackle this issue, the study employs a survey-based methodology, collecting data from a diverse sample of consumers who frequently purchase certified green products. This sample encompasses individuals from various age groups, income levels, and educational backgrounds, ensuring that the data reflects a broad spectrum of consumer experiences and perspectives. Data collection was conducted using an online questionnaire specifically designed to assess consumers' awareness of, perceptions towards, and purchasing behaviors related to green certifications. The analysis of the collected data involves statistical techniques such as correlation and regression analysis, which are used to explore the relationship between green certifications and consumer purchasing behavior. The findings from the analysis reveal a significant positive relationship between the presence of green certifications and increased consumer purchasing intention. Consumers who are aware of and trust green certifications are found to be more likely to choose certified products, underscoring the crucial role that these certifications play in promoting sustainable consumer behavior. This indicates that green certifications effectively influence consumer choices by enhancing their confidence in the environmental credentials of the products they purchase. Based on these insights, the study recommends that businesses in Thailand invest in acquiring and promoting green certifications for their products. By doing so, companies can align with consumer preferences for environmentally friendly products and enhance their market competitiveness. Additionally, increasing consumer awareness and trust in green certifications through targeted education and transparent communication is deemed essential for maximizing the impact of these certifications. Educating consumers about the benefits and credibility of green certifications can help reinforce their purchasing decisions and drive broader adoption of sustainable products. This research highlights the effectiveness of green certifications as a tool for encouraging sustainable consumer behavior in Thailand, but also points to the need for further exploration.

Future research could investigate the effects of specific types of green certifications on consumer behavior across different South East Asian countries, providing a more nuanced understanding of how these certifications influence purchasing decisions in varied cultural and economic contexts. By expanding the scope of research to other regions, valuable insights could be gained into the broader impact of green certifications on sustainable consumer practices and market dynamics.

Keywords: Green certifications, consumer behavior, Thailand, quantitative research, survey

DIGITAL TRANSFORMATION FOR SUSTAINABILITY IN INDONESIAN SMES - A QUALITATIVE ANALYSIS

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Abstract

Digital transformation presents significant opportunities for small and medium-sized enterprises (SMEs) to enhance their sustainability practices, yet the role of this transformation in promoting sustainability among Indonesian SMEs remains underexplored. This qualitative study delves into how digital transformation can support sustainability efforts within SMEs in Indonesia, emphasizing the potential of digital tools and technologies to improve both operational efficiency and environmental performance. The research highlights the critical problem of the limited understanding regarding the adoption of digital transformation for sustainability by Indonesian SMEs. To address this issue, the study employs a qualitative methodology involving interviews with SME owners and managers across various industries. This approach ensures a broad spectrum of perspectives, as the population encompasses SMEs from different sectors. Data collection was carried out through semi-structured interviews, which allowed for a detailed exploration of participants' experiences and viewpoints regarding digital transformation and its impact on sustainability. The data collected were analyzed using thematic analysis, which helped to identify key themes and insights related to the role of digital technologies in enhancing sustainability practices. The findings reveal that digital transformation has a substantial positive effect on the operational efficiency and environmental performance of SMEs. Specifically, the adoption of digital tools and technologies enables SMEs to streamline their operations, reduce resource consumption, and minimize environmental impact. However, the study also identifies several challenges that hinder the widespread adoption of these technologies among Indonesian SMEs. High costs associated with digital transformation, a lack of digital skills among SME employees, and inadequate infrastructure are significant barriers that need to be addressed. These challenges highlight the need for supportive measures to facilitate the digital transition of SMEs. Based on these findings, the study recommends that government and industry stakeholders play an active role in supporting SMEs by providing funding, training, and infrastructure development. Such support would help SMEs overcome the barriers to digital transformation and leverage technology to enhance their sustainability practices. The study suggests that while digital transformation holds considerable promise for advancing sustainability among SMEs in Indonesia, addressing the existing challenges is essential for realizing this potential. Future research could expand on these findings by investigating the impact of specific digital technologies on the sustainability performance of SMEs in other South East Asian countries. This would provide a broader understanding of how digital transformation influences sustainability across different regional contexts and help identify best practices and strategies for promoting sustainable business practices globally.

Keywords: Digital transformation, sustainability, SMEs, Indonesia, qualitative study

EFFECT OF WORK-LIFE BALANCE CHALLENGES ON SUSTAINABLE EMPLOYEE MOTIVATION AMONG FEMALE WORKERS IN BANKING SECTOR ORGANIZATIONS IN SRI LANKA: CASE STUDY OF ABC BANK PLC

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Abstract

The expectations placed on corporations, governments and institutions are changing dramatically. In addition to ensuring profitability, service oriented establishments such as banking sector organizations are increasingly expected to focus on sustainable practices. Organizations strive to actively involve employees in sustainability and prevent issues related to motivation leading employees to the perception of their jobs as being meaningful and sustainable. Consequentially, increased engagement is expected, which in turn is positively related to business performance and profitability of organizations involved. In Sri Lanka, women are frequently burdened by cultural expectations to manage both work and home responsibilities, making work-life balance a crucial factor in determining sustainable employee well-being. The banking industry poses distinct obstacles and demands that can affect the capacity of female employees to adequately balance their home and professional life, given its dynamic and competitive nature. The aim of this research was to comprehensively examine and address work life balance challenges influencing sustainable employee motivation among female workers in the banking sector organizations in Sri Lanka, with a specific focus on the case study of ABC Bank PLC. Five independent variables were identified from literature review which influence female employee motivation in banking sector. The identified independent variables are unequal distribution of household responsibilities, lack of flexible work arrangements, lack of female role models, societal expectations and limited access to affordable childcare. Therefore, five objectives were made to identify the relationship between each independent variable and dependent variable. The study was developed with a positivism as the research paradigm with a deductive approach as a mono quantitative study. For the study authors have successfully collected data from 306 female employees working in ABC bank PLC using well developed structured questionnaire. Statistical models correlation and Chi-Square analysis were used to analyze the collected data and testing hypothesis. Further, a descriptive analysis of each statements was also carried out. According to the descriptive statistics under each variable, all of the variable's mean value was fallen near to the 4 (Agree) indicating most of responders have selected agree opinion for each statement in the questionnaire. Consequently, respondents have shown that little access to reasonably priced childcare, cultural expectations, lack of female role models, uneven division of domestic duties, and rigid work schedules all have a negative impact on female employee motivation in banking sector. The results of the Chi-Square analysis showed that the motivation of employees are related to the unequal allocation of household obligations, the absence of flexible work arrangements, the dearth of female role models, and societal expectations. Advocating for affordable childcare policies, establishing flexible work arrangements, supporting female leadership, questioning cultural expectations, and ensuring comprehensive support for working parents are among the proposals to enhance motivation among female workers. Organizations in the banking sector in Sri Lanka can improve employee motivation, engagement and general well-being by putting these suggestions into practice.

Keywords: Banking Sector, Motivation, Work Life Balance Challenges, Female Workers

DOES FAIRNESS OF PERFORMANCE MANAGEMENT SYSTEMS AFFECT JOB SATISFACTION AMONG SERVICE SECTORS WORKERS? AN EMPIRICAL STUDY FROM SRI LANKA WITH SPECIAL REFERENCE TO STUDENT COUNSELLORS IN THE PRIVATE HIGHER EDUCATION SECTOR

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Abstract

Recent research studies of descriptive and empirical nature have recognized the importance of quality performance management experience on the level of organizational effectiveness, evidenced by a richness of published work attempting to depth understand the topic and discussions from different areas and perspectives. One of the fields that researchers have recently scrutinized is the effect of perceived fairness of performance management on employee level of job satisfaction. Despite the significance of the performance appraisal process (PAP) in the higher service sector to enhance the job satisfaction and sustainable productivity of the executive staff, and non-executive staff, only a limited amount of research work has been reported so far pertaining to this research scope of examining the effect of fairness of the process upon job satisfaction among service sectors workers in the Sri Lankan context. This study discussed the effect of fairness of Performance Management Systems upon job satisfaction among Student Counselors in the Private Higher Education Industry with special reference to ABC Pvt Ltd., which is a leading Private Higher Education Network in Sri Lanka delivering educational programs to the Tertiary education system. This study aimed to know the dimensions related to the fairness of the performance management system that influence Student Counselors' Job Satisfaction in the Higher Education Industry. Through a thorough literature survey in consideration of sources published within ten years have led to identification of five dimensions of fairness of performance management systems affecting to job satisfaction. These were operationalized and considered as variables to be investigated for this study for the study. This study was carried out as a mono quantitative research study with a deductive approach. Data was collected through using a structured questionnaire sent via electronic forms to the employee population in ABC Pvt who are functioning as student counselors who are primary employee category responsible for enrolling students for various programmes. The number of returned and valid questionnaires was 103. Correlations and Chi squared tests were used to arrive at conclusions. The results of the study concluded that fairness dimensions, fair opportunity to learn new skills, fair opportunity to progress, transparent procedures, fair procedures to communicate feedback and fair procedures to determine salary revisions of performance management systems had a positive and significant influence on student Counselors' job satisfaction, both directly and indirectly consolidating the significant effect of fairness of performance evaluation systems as a predictor of job satisfaction in education sector.

This study proposed a suggestion for improving performance of employees to influence the job satisfaction and retain and develop the student counselors in private higher education industry. Based on the findings of the study it is highly recommended that the management of service sector organizations should open up opportunities to learn new skills by driving non- academic operation by forming teams, cross-team learning, job rotation techniques.

Keywords: fairness, employee growth, performance management, transparent processes

UNVEILING THE ALLURE OF AYURVEDA: EFFECT OF WELLNESS RESORT LEVERAGES SRI LANKA'S ANCIENT TRADITION TO ATTRACT WELLNESS TOURISTS

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Abstract

Sri Lanka's vibrant tourism scene is undergoing a metamorphosis, gracefully embracing the flourishing realm of wellness travel. This exciting shift caters to a new generation of explorers – those seeking rejuvenation and a holistic approach to their adventures. Imagine this: ancient cultural treasures intertwine with breathtaking landscapes, all while nurturing your mind, body, and soul. This is the essence of Sri Lankan wellness tourism. This exploration into the island's unique charm as a wellness destination, considering its rich cultural tapestry and the diverse experiences it offers. Sri Lanka possesses a treasure trove of natural beauty, rich culture, and historical heritage, attracting tourists with stunning landscapes and captivating destinations. However, despite the global surge in wellness tourism, a gap exists in our understanding of how it can further enhance Sri Lanka's appeal to travelers. While initial efforts in wellness tourism have shown promise, a lack of comprehensive research specifically focused on the Sri Lankan context hinders its full potential. Sri Lanka, renowned for its stunning natural beauty, rich culture, and historical heritage, is a magnet for tourists. The research aims to bridge a crucial knowledge gap by specifically examining how wellness tourism entices travelers to Sri Lanka. These insights will prove invaluable for stakeholders who wish to tap into this burgeoning frontier of Sri Lankan tourism. For this research, analyzed 19 publications spanning 2010 to 2018, unveiling key themes across three distinct segments of wellness tourism, Luxury Wellness Retreats- Personalized attention, all-encompassing well-being programs, and a profound connection with nature – these are the hallmarks of Sri Lanka's luxury retreats. Imagine indulging in world-class treatments while surrounded by breathtaking scenery, all backed by a reputation for excellence. Fitness and Adventure Tourism- Calling all adrenaline enthusiasts! Sri Lanka beckons with unique and challenging activities nestled amidst stunning natural beauty. This segment is all about personal growth, cultural immersion, and the thrill of adventure, all delivered with the utmost safety in mind. Mindfulness and Mental Health Tourism-In a fast-paced world, the need to unwind and prioritize mental well-being has never been greater. Sri Lanka offers the perfect escape – authentic experiences in serene environments, designed to melt away stress and cultivate inner peace. Sri Lanka beckons with a captivating blend of cultural heritage, breathtaking landscapes, and a deep respect for holistic well-being. So, embark on a transformative journey - discover the power of Sri Lanka's wellness renaissance. Despite the valuable insights, this research has limitations that should be addressed in future studies. The scope of themes identified may not capture the full spectrum of customer motivations and preferences across diverse demographic and cultural backgrounds. Additionally, the research primarily focuses on high-income individuals, potentially overlooking the needs and preferences of middle- and low-income customers. Furthermore, the long-term impact of wellness tourism experiences on customer well-being remains underexplored, as does the economic impact of wellness tourism on various

destinations and regions. Future research should also consider the evolving trends and future directions of the wellness tourism industry to stay relevant and adapt to changing customer preferences and market dynamics. Areas for future research include the economic impact of wellness tourism on different destinations and regions, the long-term effects of wellness tourism experiences on customer well-being, and the evolving trends and future directions of the wellness tourism industry.

Keywords: Wellness tourism, luxury wellness retreats, fitness tourism, adventure tourism, mindfulness tourism

CUSTOMER JOURNEY MAPPING FOR OPEN BANKING ADOPTION: A CASE STUDY OF ABC BANK PLC

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Abstract

Open banking is a revolutionary approach to financial services that uses technology to securely exchange customer financial data across various institutions. Hence the open banking promises enhanced customer experiences, operational efficiencies, and aligns with industry trends towards digitization and innovation. Open banking allows third-party service providers to access financial data in financial institutions for value-added services, facilitating connections between banks and FinTech companies using Open APIs and enabling secure data sharing. Sri Lanka's Open Banking framework is expected to boost competition, financial inclusion, and innovation, aligning with the global trend towards open banking, a trend seen in countries like the UK, EU, Japan, Hong Kong, and Australia. Although only over half are aware of open banking, almost two thirds actively use it to make purchases now and pay for them later, pay their bills, and do other financial tasks. Like in any other nation, Sri Lanka may have unique difficulties and technical concerns when implementing open banking. Therefore, understanding customer acceptance of open banking is crucial for maximizing its benefits. The study aims to offer useful information to ABC Bank PLC on how to improve open banking integration while guaranteeing that it complies with legal requirements and consumer expectations in Sri Lanka. The study was utilizing deductive approach within epistemological standpoint of positivism, the research examined the perceived usefulness, perceived ease of use, perceived risk, regulatory environment and social influence on acceptance of open banking. The research has been conducted based on a Case Study-based Survey by selecting Customers of ABC Bank PLC who are actively using the bank's existing digital products as a sample framework of 384 customers during January to March 2024. A multiple regression analysis was conducted to test the hypotheses. The results indicated that the p-values were significant, leading to the rejection of the null hypotheses and support for the alternative hypotheses. Based on the data analysis results it can be concluded that perceived usefulness, perceived ease of use, perceived risk, regulatory environment and social influence has an influence towards the acceptance of open banking. Therefore, it is recommended to strengthen the relationship between perceived usefulness and the acceptance of open banking, banks should highlight the unique benefits of Open Banking by clearly articulating its advantages, Improving perceived ease of use involves streamlining the navigation flow, simplifying processes, and enhancing the visual and interactive design of Open Banking platforms, To address perceived risk, ABC Bank PLC should redesign its platform to simplify navigation and payment processes, enhancing intuitive design, ABC Bank PLC should advocate for regulatory standards that ensure data security and interoperability, implement clear disclosure requirements, and establish effective dispute resolution mechanisms, and Leveraging social networks and influencer marketing can enhance acceptance of Open Banking.

ABC Bank PLC should collaborate with influencers and financial experts to create engaging content and launch multimedia campaigns. A key limitation of the study was the absence of qualitative data, which would have enriched the suggestions of this research.

Keywords: Open Banking, Financial services, Digitization, Customer acceptance

EFFECTIVE LEADERSHIP STYLES AND ROLES IN MODERN ORGANIZATIONS - A REVIEW

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Abstract

The most suitable leadership style for a position and individual along with the most ideal and beneficial leadership style are arguments carried out since the ancient times. With the external environment rapidly changing during the last half a decade due to the Pandemic, economic crisis and technological advancements (such as AI), organizations, cultures and view on things kept evolving. Proper leadership is crucial for an organization as it is tightly tied with factors such as the organization's performance, change management, Job satisfaction etc. This study aims on identifying the organizational factors influenced by Leadership, different roles in a modern organization such Liaisons, mediators etc. and external factors and changes that have affected Leadership in the recent years such as the implementation of work from home, increasing prominence given work life balance, ethics, sustainability and collaboration. Accounting these changes the most 3 ideal leadership styles identified are Democratic, Transformational and situational leadership styles including certain combinations of these leadership styles. The main objectives of the study is to identify the factors to be consider for effective and successful leadership in a modern organization that has gone through many changes within a short period of few years. To identify these factors a systematic literature review has been done by extracting information from Journal articles and news articles published from 2019 to 2024. These articles have been sourced from various databases such as Emerald, Research gate, Sage Journals, Science direct etc. After careful analysis 4 ideal steps to follow to achieve effective leadership in any modern organization have been compiled. Starting with identifying an individual's personal leadership style or most utilized styles of leadership, which is mostly based on personality traits and experience. Secondly understanding the 3 components of leadership, leader, follower and context in position. The third factor is to understand the organizational structure and culture along with other components such as span of control, chain of command etc. The fourth element is to recognize the different roles the job title of an individual requires them to play at different situations, resource allocator, disturbance handler, figurehead etc. Lastly it is important to recognize what impact your decisions as a Leader makes. Understanding and analyzing these 4 elements in the work environment could be considering an understanding your environment and the requirements of an individual thus helping to mold a successful leadership that caters appropriately. In addition to promoting this framework for new employees organizations are recommended to promote transformational, situational and democratic leadership styles in their culture.

Keywords: Effective leadership, External changes, Roles in an organization, Situational leadership, Democratic leadership, Transformational Leadership

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EVALUATING HOW TECHNICAL PROFICIENCY AFFECTS USER SATISFACTION IN ERP SYSTEMS: EVIDENCE FROM A SRI LANKAN TELECOM ORGANIZATION

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Abstract

This study explores the influence of user technical background on satisfaction with Enterprise Resource Planning (ERP) systems within a Sri Lankan telecommunication organization. While user satisfaction with ERP systems is generally tied to expectations and the benefits provided in daily tasks, key factors such as system quality, information quality, service quality, and the user's technical background play a significant role. However, empirical evidence on how these factors influence ERP user satisfaction in Sri Lanka is limited. This research specifically examines the role of user technical background in shaping ERP user satisfaction, with a focus on quantifying the influence of technical proficiency through specific measurements. There are two main objectives: first, to identify the effect of user technical background on ERP system user satisfaction within the selected telecommunication organization; and second, to provide recommendations for improving ERP user satisfaction in the telecommunication sector. The study, guided by a Positivist philosophy and deductive approach, employed a case study and quantitative method in a cross-sectional design. Data were collected from 369 employees, selected through stratified sampling of technical and non-technical staff, using an online questionnaire. User satisfaction was measured as the dependent variable, while five independent variables—common information systems knowledge, general computer skills, troubleshooting skills, functionality skills, and the user's technical environment, were assessed on a 5-point Likert scale. Quantitative analysis, including correlation and hypothesis testing, revealed that all factors had mean values close to 4.1, indicating a strong positive influence of technical knowledge on user satisfaction. Spearman's correlation coefficient of 0.753 showed a moderate positive relationship between technical background and satisfaction. A chi-square test confirmed a statistically significant relationship between these variables, with a p-value of 0.0 at a 5% significance level. Descriptive statistics further indicated that employees generally attributed their satisfaction to system quality, service quality, and information quality. The findings suggest that higher technical proficiency among users is associated with greater satisfaction with ERP systems. The study concludes with recommendations for improving ERP user satisfaction by enhancing user technical skills. Future research should explore additional factors affecting satisfaction and employ regression analysis to identify significant predictors. This study contributes valuable insights into the role of technical expertise in ERP user satisfaction and offers practical recommendations for improving ERP system effectiveness in telecommunication organizations.

Keywords: Enterprise resource planning, User satisfaction, Technical background.

FACTORS ASSOCIATED WITH POTENTIAL RISKS ON THE JOB ROTATION AMONG MANPOWER WORKERS IN SRI LANKA. WITH SPECIAL REFERENCE TO ABC CO (PVT) LTD.

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Abstract

The need for successful job design that enhance the productivity of the organizations is a key requirement in the present world. Specially organizations that are labor-intensive also known as manpower worker-oriented organizations have faced diverse challenges in identifying the motives, views and concerns of manpower personnel on job rotation. This study aimed to address the central problem of lacking comprehensive insights on the factors associated with the potential risk on job rotation among manpower workers in Sri Lanka with a particular focus on ABC (Pvt) Ltd. The main objective was to identify the relationship between potential risks and the preference for job rotation of manpower workers of ABC (Pvt) Ltd; a leading non-alcoholic beverage manufacturer in Sri Lanka. The study followed positivism as the research philosophy, where deductive reasoning was employed as the research approach to conduct a case study-based survey. As the research choice the mono quantitative method was employed taking a cross-sectional study. To collect data a survey questionnaire was used. The population of the study include 500 regular workers and from such a sample of 125 manpower workers of ABC (Pvt) Ltd was selected using the simple random sampling method. The IBM SPSS software version 27 was used for the statistical data analysis where the inferential statistics is derived using chi-square test and Pearson correlation. The findings of the study provided that rotating key personnel, job rotation program, unfair or poorly managed job rotation, resistance to change and challenges to be considered as key areas that affect the potential risks on the job rotation among manpower workers in Sri Lanka. According to the Pearson chi-square test produced a statistic of 70.531 ($df = 27$, $p < 0.001$), indicating a highly significant relationship between the variables. The statistical analysis of the likelihood ratio test produced a significant result of 77.808 ($df = 27$, $p < 0.001$), which show a substantial correlation between people's preferences for changing jobs and how much danger they perceive to be involved. Further, the Pearson correlation value of 0.370 suggested a moderate positive correlation between potential risks and preference for job rotation, indicating that employees' perceptions of risks influence their willingness to embrace rotation opportunities. Furthermore, the chi-square value of 0.000 indicated a significant relationship between potential risks and preference for job rotation, further emphasized the impact of risk perceptions on employees' attitudes toward rotation. The recommendations discussed the need for improvement of the relationship between potential risks and employees' preference for job rotation as it required a multifaceted strategy grounded in empirical evidence. Organizations could resolve concerns and foster buy-in by asking employees to participate in discussions regarding the reasons behind job rotation initiatives and providing feedback. Furthermore, to guarantee that workers are suitably trained for new jobs, job rotation frequently necessitates large investments in training and development. Organizations could assist employees in understanding the goals and advantages of job rotation programs by candidly discussing the reasoning behind them. Employee commitment to the program could also be increased by including them in decision-making processes linked to job rotation, such as establishing rotation criteria for selecting qualified applicants. Hence, a culture of trust and cooperation has to be fostered by this participative method, which is essential for its successful implementation of job rotation.

Keywords: Culture of Trust, Job rotation, Manpower workers, Potential risks, Resistance to change

GREEN SUPPLY CHAIN MANAGEMENT AS A SUSTAINABLE BUSINESS MODEL

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Abstract

In an era marked by rising environmental consciousness and the importance of sustainable business practices, Green Supply Chain Management (GSCM) is now recognized as a critical approach for businesses around the world. GSCM entails integrating environmental and economic goals across the supply chain lifecycle, addressing concerns like climate change, decreasing resources in manufacturing process, and regulatory pressures. GSCM promotes ecologically responsible practices, which not only reduces environmental impact but also increases cost savings, brand reputation, and endurance in future challenges. Carefully incorporating to GSCM methods in procurements, manufacturing, distribution and waste disposal will help to reduce the hazards to the environment while maintaining the competitiveness among the businesses. GSCM will also serve as a core approach, integrating environmental concerns within the supply chain framework to meet the demands of sustainability, resource availability, and changing market dynamics. The primary goal of this research is to examine GSCM as a sustainable business strategy. The additional objectives of this study are to successfully implement the GSCM concept in one's business and to provide some ideas for the implementation of GSCM in the business from the manufacturing process to marketing and waste disposal. Finally, the study evaluates GSCM's overall impact, including its role in decreasing environmental footprint, delivering cost savings, strengthening brand reputation, and boosting resilience to future difficulties. The study conducts a thorough search of PubMed, Google Scholar, and other relevant databases for peer-reviewed publications and grey literature to comprehensively review and synthesize existing knowledge on Green Supply Chain Management as a sustainable business model and its pivotal role in promoting sustainable business practices worldwide. Key findings includes that there is growing trend towards the GSCM in the modern business world meeting regulatory requirements without reducing the competitive edge of the market. This growing trend is also facilitated by Consumer demand for environmentally friendly products. Implementing GSCM techniques carries significant obstacles for manufacturing companies, including high initial costs, resistance to change, and difficulties in incorporating sustainable practices. These difficulties can be overcome by strengthening collaboration, and supporting to evolving consumer preferences for sustainable products. In conclusion, the study highlights the increasing implementation of GSCM as a vital strategy in modern business, driven by regulatory compliance and consumer demand for sustainability. Despite initial costs and reluctance to change, incorporating GSCM has great potential to improve overall organizational performance while minimizing environmental damage which underscores the importance of GSCM not only in achieving business objectives but also in developing long-term environmental sustainability.

Keywords: Green Supply Chain Management, Sustainable business practices, Environmental Consciousness, Economic goals, Ecological responsibility, Implementation challenges.

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IMPACT OF AI-POWERED MOBILE HEALTH FOR SUSTAINABLE HEALTHCARE TRANSFORMATION IN AUSTRALIA

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Abstract

The rapid integration of digital health technologies, including mobile health (mHealth) applications and artificial intelligence (AI), has the potential to transform the healthcare sector. With an aging population and increasing prevalence of chronic diseases, there is a growing demand for innovative approaches to maintain high standards of care while controlling costs. The use of AI in mHealth can revolutionize healthcare delivery by improving diagnostic accuracy, optimizing treatment plans, and enhancing public health management. However, there is limited research on the long-term impact of these technologies on healthcare delivery, patient trust, and business viability. This study addresses this gap by exploring how AI-powered mHealth can contribute to sustainable digital healthcare transformation in Australia, focusing on the intersection of healthcare and business. The primary objective of this study is to evaluate how the development and adoption of AI-powered mHealth technologies affect digital healthcare sustainability in Australia, focusing on effectiveness, privacy safeguards, trustworthiness, and business implications. This study used a mixed-methods approach, including systematic reviews and primary research articles retrieved from Google Scholar and PubMed, along with surveys and interviews conducted with healthcare professionals and patients. Key privacy and trustworthiness features of the apps, such as privacy policy declarations, authorization requirements, and credible information sources, were evaluated. Additionally, the operational performance of AI technologies in diagnosis, treatment optimization, and public health management was analyzed. The key findings of this research reveal that AI-powered mobile health (mHealth) apps show significant promise in improving healthcare outcomes by providing precise diagnostic insights and optimizing treatment strategies. However, ongoing concerns about patient data protection, AI algorithm transparency, and the validation of medical information need to be addressed. Resolving these privacy and trust issues is essential for the widespread adoption and sustainability of AI in Australian healthcare. The adoption of AI technologies in healthcare is heavily influenced by healthcare professionals' trust and understanding of these innovations. Their willingness to use AI in clinical practice depends on perceivable benefits such as improved diagnostic accuracy, streamlined workflows, and enhanced patient care. Therefore, educating and engaging healthcare professionals on AI's capabilities and ethical considerations is crucial for sustainable healthcare transformation. Additionally, the successful integration of AI-powered mHealth applications requires collaboration among developers, healthcare providers, policymakers, and the public. These partnerships are necessary to create robust frameworks for the ethical development, deployment, and evaluation of AI technologies in healthcare, ensuring they meet regulatory standards and prioritize patient-centered care. In conclusion, AI-powered mobile health (mHealth) has significant potential to drive sustainable healthcare transformation in Australia. To successfully integrate these technologies, it is crucial to address privacy and trust issues and foster collaboration among stakeholders. The findings emphasize the need for ongoing evaluation and development of responsible mHealth apps. These apps should positively impact healthcare outcomes while addressing ethical concerns. This research

highlights the importance of business models that support the ethical and effective deployment of AI in healthcare, paving the way for sustainable digital transformation.

Keywords: AI, mobile health, digital health, sustainable healthcare, Australia, patient outcomes

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INFLUENCE OF NEW MEDIA ON CHOOSING A DIGITAL BANKING APPLICATION AMONG GENERATION 'Z' CUSTOMERS IN SRI LANKA: A CASE STUDY IN COLOMBO DISTRICT

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Abstract

With the rapid advancements in technology and the growing popularity of digital banking, understanding the factors that influence Generation 'Z' customers' choices becomes essential for financial institutions aiming to cater to this segment effectively. The research investigated whether the level of engagement with new media, defined as the means of mass communication using digital technologies such as the internet, has a significant impact on the selection of a digital banking application with special reference to Z generation banking customers. Service sector organisations such as banks aim to use new media for efficiency and effectiveness, such as social media, mobile devices, or near field communication technology. New media also give competitors, including businesses outside of the banking industry, more opportunity to compete and increase their customer base. As banking sector orgnisations spend more and more money to induce younger generations to use digital banking applications, this study would play a significant role in contributing to applicable knowledge. The study aims to identify the relationship of new media engagement with generation Z and their acceptance of digital banking applications in the perspective of an organisation. For this study authors have systematically reviewed the contemporary publications on new media and technology adoption published between years 2013 and 2023. Identified gaps in the literature were developed in to variables as having an influence on accepting digital banking applications. Nearly 80 articles were reviewed to gather insights on existing knowledge gap related to influence of reviews, promotions, peer reviews and user generated content on new media upon user acceptance of digital banking applications. The primary research was carried out based on positivism philosophy as quantitative research with a cross-sectional time horizon. The primary data was gathered through a structured questionnaire and the sample size was 385 out of 400 target population. Authors were focused on obtaining insights that would be necessary for future researchers to further develop the research design and develop hypotheses to be tested in a wider context. This paper concluded that tech new media influences Z generation individuals in choosing a digital banking application. The SMART recommendations were carefully provided based on the key findings of the research. Authors acknowledge that study was limited within the Colombo region and the consideration of multiple regions would have been better in the light of the findings.

The study provided a insight of how new media influences the decision of choosing a digital banking application which ultimately result in choosing a bank to carry out daily banking needs. Contrary to popular belief that new media would play a significant role in influencing Z generations decisions to adopt technology, selected variables for the study information and reviews, advertisements and promotions, opinions and experiences user generated content as having a weak influence on Sri Lankan Z generations decision to select digital banking applications.

Keywords: Generation 'Z', Digital banking applications, New media sources, Technological change

INNOVATIONS IN SUSTAINABLE SUPPLY CHAIN MANAGEMENT - A MIXED-METHODS STUDY IN SOUTH EAST ASIA

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Abstract

Sustainable supply chain management has emerged as a crucial strategy for businesses aiming to minimize their environmental impact while enhancing their competitive edge. This mixed-methods study delves into the innovations shaping sustainable supply chain management in South East Asia, focusing on the strategies and technologies adopted by leading companies across the region. The background of this research highlights the pivotal role that sustainable supply chains play in achieving both environmental and economic objectives, reflecting a growing global emphasis on sustainability. The problem addressed is the insufficient understanding of the specific innovations driving sustainable supply chain practices within South East Asia. To address this issue, the study employs a comprehensive methodology that combines qualitative and quantitative approaches. The qualitative component involves detailed case studies of leading companies from various industries, offering in-depth insights into their sustainable supply chain practices. This component includes interviews and document analysis, providing a nuanced understanding of how these companies implement and benefit from sustainable strategies. Complementing this, the quantitative component involves a survey of supply chain managers and sustainability officers from a broader spectrum of companies, designed to gather data on the adoption rates and impacts of these innovations. Data collection for the qualitative component was meticulously carried out through direct interviews and the examination of relevant documents, while the quantitative data were collected via an online questionnaire targeting a diverse sample of industry professionals. The analysis of the qualitative data employs thematic analysis to uncover key themes and patterns, whereas the quantitative data are analyzed using statistical methods to identify trends and correlations. The findings from this study indicate that several innovations, including advanced digital technologies, green logistics practices, and circular economy principles, are significantly enhancing the sustainability of supply chains in South East Asia. These innovations contribute to improved resource efficiency, reduced environmental footprint, and increased operational transparency. However, the study also identifies several barriers to broader adoption, such as high implementation costs, stringent regulatory challenges, and a lack of collaboration among supply chain partners. These obstacles impede the widespread integration of sustainable practices and limit the overall impact of these innovations. Based on these insights, the study suggests that businesses in the region should focus on investing in cutting-edge technologies and fostering stronger collaboration with supply chain partners to overcome these challenges and advance sustainability goals.

Emphasizing the need for greater investment in innovation and collaborative efforts, the study underscores the potential of these advancements to drive significant improvements in supply chain sustainability. Future research could expand this investigation by examining the effects of specific innovations on supply chain performance across different regions, providing a broader understanding of how sustainable practices influence global supply chains and informing strategies for enhancing sustainability on an international scale.

Keywords: Sustainable supply chain, innovations, South East Asia, mixed-methods study, digital technologies

IMPACT OF DIGITAL TRANSFORMATION ON BUSINESS PERFORMANCES OF SMALL AND MEDIUM ENTERPRISES IN SRI LANKA - A REVIEW

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Abstract

Globally, the fast development of digital technologies has transformed many industries; yet, less remains known about how this shift has affected small and medium-sized enterprises (SMEs) in developing nations like Sri Lanka. This study aims to assess the impact of digital transformation on business performance among small and medium-sized enterprises (SMEs) in Sri Lanka, emphasizing both favourable and unfavorable aspects. The main objective of this study is to provide a thorough overview of the topic by examining and analyzing existing literature. Accordingly, the study has adapted a systematic literature review of 4 articles published from 2019 to 2024. The key findings suggest that, in many firms, digital transformation is important for enhancing business operations in Sri Lankan SMEs. Digital transformation (DT) offers various advantages to Sri Lankan SMEs, which include, enhanced productivity and cost reductions by automation of repetitive processes, optimization of workflows, and utilization of data analysis to achieve enhanced efficiency. It also, encourages innovation and distinction, giving SMEs the chance to stand out in a crowded market by creating new products, experimenting with innovative promotional methods, and customizing consumer experiences. Moreover, social media platforms, online stores, and mobile applications—all of which promote consumer engagement by solidifying client relationships and offering 24/7 assistance—help to facilitate this. However, adopting digital transformation presents challenges such as deficiency of technological infrastructure and a shortage of proficient individuals which can hinder the effective digital transformation in SMEs in Sri Lanka. Despite these challenges, Digital Transformation (DT) is essential for Sri Lankan SMEs because it increases consumer interaction, fosters innovation, and improves operational efficiency thereby increasing profitability, improving cash flow, enhancing return on investment (ROI), and boosting overall productivity. The paper suggests that SMEs invest in digital infrastructure and technological skill development programs to ensure sustained digital transformation, based on the findings. Additionally, Governments should also establish favourable conditions to promote SMEs' adoption of digital technology.

Keywords: Digital Transformation (DT), Small and Medium Enterprises (SMEs), Business Performance, Sri Lanka

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CONSUMER PERCEPTIONS OF SUSTAINABLE MARKETING IN SOUTH EAST ASIA A QUALITATIVE STUDY

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Abstract

Sustainable marketing is increasingly pivotal as businesses seek to align with the rising consumer demand for environmentally friendly practices, yet there is limited understanding of how consumers in South East Asia perceive these efforts. This study aims to address this gap by exploring consumer perceptions of sustainable marketing in Malaysia, Indonesia, and Thailand through in-depth qualitative interviews. The background of this research highlights the global emphasis on sustainability and the necessity for businesses to meet evolving consumer expectations. The problem addressed is the insufficient knowledge about regional consumer attitudes towards sustainable marketing, which is crucial for developing targeted and effective strategies. The methodology involves interviewing a diverse sample of consumers from both urban and rural areas across these three countries. Data collection was conducted via semi-structured interviews, which facilitated an in-depth exploration of participants' thoughts and feelings regarding sustainable marketing. Thematic analysis was employed to identify common themes and insights from the data. The findings reveal significant variations in consumer perceptions, influenced by cultural and economic factors. Malaysian consumers exhibited a high level of awareness about sustainability but expressed skepticism regarding the authenticity of marketing claims. They were cautious about whether the sustainability messages communicated by businesses genuinely reflected their practices. In contrast, Indonesian consumers were more influenced by price and availability rather than the sustainability credentials of products. Their purchasing decisions were primarily driven by cost-effectiveness and product accessibility. Thai consumers, on the other hand, demonstrated a preference for traditional and local approaches to sustainability. They valued sustainability practices that resonated with local traditions and cultural values, and were more receptive to marketing that highlighted these aspects. Based on these findings, it is recommended that businesses tailor their sustainable marketing strategies to reflect the specific contexts of each country and address the unique concerns of consumers. For instance, increasing transparency in marketing practices could build consumer trust in Malaysia, while emphasizing the local benefits of sustainable practices might resonate better with Thai consumers. In Indonesia, integrating sustainability into pricing and availability strategies could enhance consumer engagement.

The study underscores the importance of understanding regional nuances for the success of sustainable marketing initiatives in South East Asia. Future research could further investigate the impact of specific sustainable practices on consumer behavior in other countries within the region. Expanding the scope of research to include additional South East Asian nations could provide a more comprehensive understanding of consumer attitudes towards sustainability and inform the development of more effective and regionally appropriate marketing strategies. This approach would help businesses better align their sustainability efforts with consumer expectations across diverse cultural and economic landscapes.

Keywords: Sustainable marketing, consumer perception, South East Asia, qualitative study, thematic analysis

BARRIERS TO IMPLEMENTING SUSTAINABLE BUSINESS PRACTICES IN MYANMAR - A QUALITATIVE STUDY

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Abstract

Sustainable business practices are increasingly recognized as crucial for achieving long-term environmental and economic goals, yet businesses in Myanmar encounter substantial challenges in implementing these practices. This qualitative study investigates the barriers to adopting sustainable business practices in Myanmar by examining the experiences of business leaders and sustainability experts. The research highlights the critical role of sustainability in the business world and addresses the unique obstacles faced by enterprises in developing countries like Myanmar. The problem under investigation is the insufficient understanding of the specific barriers hindering the adoption of sustainable business practices within the Myanmar context. To address this issue, the study utilizes a qualitative methodology involving semi-structured interviews with business leaders and sustainability experts across various industries. This approach ensures a diverse range of perspectives by including companies of different sizes and sectors. Data collection was conducted through in-depth interviews, which provided valuable insights into participants' experiences and viewpoints on the challenges and opportunities related to sustainability. The data were analyzed using thematic analysis, which helped identify key themes and patterns regarding the barriers to sustainable practices. The findings reveal that businesses in Myanmar face several significant barriers, including regulatory hurdles, financial constraints, and a lack of awareness. Regulatory challenges are characterized by inconsistent policies and inadequate enforcement, which create uncertainty and hinder the implementation of sustainable practices. Financial constraints involve limited access to funding sources and high costs associated with adopting and maintaining sustainable practices, making it difficult for businesses to invest in such initiatives. Additionally, a lack of awareness regarding sustainable practices contributes to the problem, as many business leaders and employees have insufficient knowledge and understanding of the benefits and requirements of sustainability. Based on these findings, the study recommends that both government and industry stakeholders play a crucial role in supporting the adoption of sustainable practices. This support could take the form of providing funding, facilitating training programs, and developing infrastructure that enables businesses to implement sustainable practices effectively. Government intervention could involve creating more consistent and enforceable regulations that incentivize sustainability and reduce the associated costs for businesses. Industry stakeholders could contribute by offering resources and expertise to help businesses integrate sustainability into their operations.

The study highlights that while there are considerable challenges to adopting sustainable practices in Myanmar, there are also significant opportunities for businesses to leverage these practices for competitive advantage. Future research could build on these findings by exploring the impact of specific sustainable practices on business performance in other developing countries, providing further insights into how different regions navigate the challenges and opportunities of sustainability. This expanded research could offer valuable information for policymakers, business leaders, and sustainability experts aiming to foster more effective and regionally tailored approaches to sustainable business practices.

Keywords: Sustainable business practices, barriers, Myanmar, qualitative study, thematic analysis

MEASURING THE IMPACT OF CSR ON EMPLOYEE ENGAGEMENT IN MALAYSIA

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Abstract

Corporate Social Responsibility (CSR) initiatives are increasingly recognized as crucial drivers of employee engagement, yet there remains a notable lack of empirical evidence from South East Asian countries, particularly Malaysia. This quantitative study aims to address this gap by examining the impact of CSR on employee engagement within Malaysian companies. The background of this research highlights the growing importance of employee engagement as a key determinant of organizational success and explores how CSR can play a significant role in enhancing employee engagement. The problem at hand is the dearth of quantitative data that elucidates the relationship between CSR activities and employee engagement specifically in the Malaysian context. To tackle this issue, the study employs a survey-based methodology, gathering data from employees across various industries throughout Malaysia. This approach ensures a broad and representative sample of the workforce, encompassing a diverse array of sectors and organizational types. Data collection was carried out using an online questionnaire, meticulously designed to assess employees' perceptions of their company's CSR activities, as well as their own levels of engagement, motivation, and job satisfaction. This method allows for a comprehensive analysis of how employees view CSR initiatives and how these perceptions correlate with their engagement levels. The analysis employs advanced statistical techniques, including correlation and regression analysis, to explore the relationship between CSR activities and various indicators of employee engagement. The findings reveal a significant and positive correlation between CSR initiatives and employee engagement. Employees who perceive their company's CSR efforts as authentic, impactful, and aligned with their personal values report higher levels of engagement, motivation, and job satisfaction. This indicates that well-implemented CSR activities not only foster a sense of pride and belonging among employees but also enhance their overall job performance and satisfaction. Based on these findings, the study recommends that companies in Malaysia invest in meaningful and impactful CSR initiatives and ensure effective communication of these efforts to their employees. By doing so, organizations can improve employee morale, increase productivity, and enhance overall organizational performance. Furthermore, it is advised that companies integrate CSR strategies into their core business operations to maximize their impact on employee engagement. The study concludes that CSR is a valuable tool for fostering employee engagement and should be a central component of business strategy. Future research should focus on identifying the specific types of CSR activities that most significantly influence employee engagement.

Additionally, exploring how different CSR practices affect various employee demographics could provide deeper insights into tailoring CSR efforts for maximum impact. Such research could contribute to a more nuanced understanding of effective CSR practices and help organizations refine their strategies to better engage employees. By expanding this knowledge, companies can enhance their CSR initiatives, leading to greater employee satisfaction and overall business success. This comprehensive approach will ensure that CSR activities are not only beneficial for societal impact but also for fostering a motivated and engaged workforce, ultimately driving long-term organizational success.

Keywords: Corporate social responsibility, employee engagement, Malaysia, quantitative research, survey

ORGANISATIONAL FACTORS ASSOCIATED WITH EMPLOYEE TIME DISTRIBUTION AMONG TELECOMMUNICATION SECTOR WORKERS IN SRI LANKA

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Abstract

The telecommunications sector in Sri Lanka, specifically Hutchison Telecommunications Lanka (Pvt) Ltd. (HTLL), plays a pivotal role in the nation's economic and technological advancement. This research investigates the impact of various organizational factors on time distribution among employees within this sector. The study aims to elucidate how job characteristics, performance expectations, work environment and culture, technology and tools, and remote work arrangements influence employees' time management and overall productivity. A quantitative research methodology was adopted, involving the distribution of structured questionnaires to a sample of 195 employees out of a total population of 380 at HTLL. The questionnaire was designed to gather comprehensive data on the five key organizational factors and their perceived impact on employees' time management capabilities. Descriptive statistics were employed to summarize the data, and chi-square tests were conducted to explore the relationships between the variables. The analysis revealed that job characteristics, such as autonomy, task variety, and complexity, significantly affect how employees allocate their time. Employees who experience greater autonomy and a higher degree of task variety and complexity tend to manage their time more effectively, as they feel more empowered and engaged in their work. Furthermore, clear and attainable performance expectations were found to be crucial in enhancing employees' time management skills. Employees with well-defined goals and performance metrics are better able to prioritize tasks and allocate their time efficiently. The study also highlighted the importance of a supportive work environment and a positive organizational culture. A work environment that fosters collaboration, open communication, and mutual respect contributes to better time management among employees. Additionally, the availability and effective use of technology and tools were identified as key enablers of efficient time management. Employees equipped with modern technological tools and resources are able to streamline their tasks and reduce time wastage. Remote work arrangements, which have become increasingly prevalent in the telecommunications sector, were also examined. The findings suggest that remote work, when managed effectively, can lead to significant improvements in time management. Flexibility in work schedules and the ability to work from different locations contribute to enhanced productivity and work-life balance for employees. The research concludes with practical recommendations for telecommunications companies, particularly HTLL, to improve organizational practices.

These include fostering job designs that promote autonomy and task variety, setting clear performance expectations, creating a positive work environment, investing in modern technological tools, and developing effective remote work policies. By addressing these factors, telecommunications companies can enhance their employees' time management capabilities, leading to increased productivity, job satisfaction, and overall organizational success. This study contributes to the existing body of knowledge on time management in the telecommunications sector and provides valuable insights for practitioners and policymakers aiming to optimize organizational practices and enhance employee performance.

Keywords: Employee Productivity, Hutchison Telecommunications Lanka (Pvt) Ltd. (HTLL), Job Characteristics, Technology and Tools, Telecommunications Sector, Time Management, Performance Expectations, Remote Work, Work Environment.

THE ROLE OF CULTURAL VALUES IN SUSTAINABLE MARKETING - INSIGHTS FROM VIETNAM

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Abstract

This study explores the influence of cultural values on sustainable marketing practices in Vietnam, a nation experiencing rapid economic development and significant cultural shifts. The research delves into how traditional Vietnamese values intersect with modern sustainable practices, addressing the problem of insufficient understanding regarding the impact of these cultural values on consumer acceptance of sustainable marketing efforts. Employing a qualitative methodology, the study utilizes focus group discussions to collect rich, detailed data from a diverse sample of Vietnamese consumers, encompassing various age groups and socio-economic backgrounds. The data collection process involved conducting multiple focus groups in both urban and rural settings, ensuring a comprehensive representation of views across different demographic segments. Thematic analysis was used to examine the collected data, identifying key themes and patterns related to cultural influences on sustainable marketing. The findings reveal that Vietnamese consumers highly value community-oriented principles and environmental stewardship, which significantly shape their perceptions of sustainable marketing. These values underscore a strong preference for marketing efforts that align with community benefits and ecological responsibility. However, there is a notable gap between consumers' awareness of sustainability issues and their actual purchasing behavior. This gap is attributed to economic constraints and a degree of skepticism regarding the authenticity of sustainability claims made by businesses. Economic limitations often lead to prioritizing cost over sustainability, while skepticism about the genuineness of sustainability efforts undermines consumer trust and engagement. Based on these findings, the study recommends that marketers in Vietnam should focus on emphasizing the community benefits of their sustainable marketing efforts and ensure authentic, transparent communication to build consumer trust. Highlighting local and traditional sustainable practices can further enhance consumer engagement by aligning marketing messages with culturally resonant values. For instance, incorporating elements of traditional Vietnamese sustainability practices into marketing strategies can foster a stronger connection with consumers who value cultural authenticity. The study underscores the importance of aligning marketing strategies with cultural values to achieve success in sustainable marketing within Vietnam. To build on these insights, future research could expand to examine the impact of specific sustainable practices on consumer behavior in other South East Asian countries. Such research could provide a broader understanding of how cultural factors influence consumer acceptance of sustainable marketing across different regional contexts, offering valuable information for developing more effective and culturally tailored sustainable marketing strategies. This approach would help businesses navigate the complexities of cultural values and enhance their efforts to promote sustainability in diverse markets.

Keywords: Cultural values, sustainable marketing, Vietnam, qualitative research, focus groups

CORPORATE SOCIAL RESPONSIBILITY PRACTICES IN THE PHILIPPINES - A QUALITATIVE EXPLORATION

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Abstract

Corporate Social Responsibility (CSR) is increasingly essential for businesses seeking to make a positive societal impact while enhancing their sustainability. In the Philippines, where CSR practices are shaped by a range of socio-economic factors, there is a notable lack of comprehensive studies on these practices. This study aims to fill this gap by exploring CSR practices in the Philippine context through qualitative research, focusing on the motivations, challenges, and impacts associated with CSR efforts. The background of this research highlights the growing global importance of CSR and the unique socio-economic landscape of the Philippines, where CSR is influenced by local economic conditions, regulatory frameworks, and cultural norms. The central problem addressed is the insufficient understanding of how CSR is both implemented and perceived within the Philippine business environment. The study employs a qualitative methodology, involving semi-structured interviews with business leaders, CSR managers, and stakeholders from a diverse range of industries. This approach ensures a comprehensive examination of CSR practices across different types of companies, from large corporations to small and medium-sized enterprises. Data collection was conducted through both face-to-face and virtual interviews, which allowed for an extensive gathering of detailed insights into the practices and perceptions of CSR in the Philippines. The data were analyzed using thematic analysis to identify recurring themes and patterns. The findings indicate that CSR in the Philippines is driven by a combination of ethical motivations and business benefits. Companies engage in CSR to improve their corporate image, meet regulatory requirements, and contribute positively to community development. Despite these motivations, businesses face several challenges in their CSR efforts, including limited resources, insufficient awareness of CSR's benefits, and difficulties in measuring the impact of their initiatives. These challenges hinder the full realization of CSR's potential benefits. The study recommends that businesses adopt a strategic approach to CSR, embedding it into their core operations and ensuring transparency and accountability in their practices. Effective CSR strategies should integrate genuine community engagement and adhere to best practices for reporting and evaluating impact. Additionally, collaborations with non-profit organizations and government agencies can enhance the effectiveness and reach of CSR initiatives, providing greater resources and expertise to address community needs.

The study concludes that CSR holds substantial potential to contribute to sustainable development in the Philippines, provided that businesses address the existing challenges and commit to implementing impactful, transparent practices. Future research could further explore the long-term effects of CSR on business performance and community development, providing deeper insights into how CSR influences both organizational success and societal progress. This expanded research could help refine CSR strategies and enhance their effectiveness in driving positive change within the Philippine context and beyond.

Keywords: Corporate social responsibility, business ethics, Philippines, qualitative study, thematic analysis

THE IMPACT OF SUSTAINABLE BUSINESS PRACTICES ON FINANCIAL PERFORMANCE - EVIDENCE FROM SOUTH EAST ASIA

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Abstract

Sustainable business practices are increasingly recognized as pivotal for enhancing corporate financial performance, and this quantitative study delves into the relationship between these practices and financial outcomes among companies in South East Asia. The backdrop of this research underscores the growing global emphasis on sustainability and its potential impact on financial metrics, yet there is a notable gap in empirical evidence regarding the financial benefits of sustainable practices specifically within the South East Asian context. To address this gap, the study employs a quantitative methodology that involves analyzing financial data and sustainability reports from a diverse sample of firms spanning various industries across the region. The population for this study includes companies from different sectors, ensuring a representative sample that reflects the broader business landscape of South East Asia. Data collection was conducted through secondary sources, including financial statements, annual reports, and sustainability reports, which provide comprehensive information on both financial performance and sustainability efforts. The analysis employs regression techniques to explore the relationship between sustainable business practices and key financial performance indicators such as profitability, return on assets, and market value. The findings reveal a significant positive correlation between the adoption of sustainable business practices and enhanced financial performance. Specifically, companies that incorporate sustainability into their core operations exhibit higher levels of profitability and market value compared to their peers who do not prioritize sustainability. This correlation suggests that sustainable practices contribute not only to environmental and social benefits but also to improved business success, reinforcing the notion that sustainability can be a competitive advantage. Based on these findings, the study recommends that companies in South East Asia prioritize the integration of sustainable practices into their strategic planning and operational frameworks. Embracing sustainability can enhance financial performance by improving profitability and market positioning, thus supporting long-term business success. The study also suggests that future research should focus on identifying and evaluating the specific types of sustainable practices that exert the most substantial impact on financial performance. Such research could provide deeper insights into which aspects of sustainability are most beneficial from a financial perspective, enabling companies to make more informed decisions about their sustainability strategies. By understanding the nuances of how different sustainable practices affect financial outcomes, businesses can better tailor their approaches to maximize both environmental and economic benefits. This expanded knowledge could contribute to a more robust framework for integrating sustainability into business operations and strategic planning, ultimately supporting more widespread adoption of sustainable practices across the South East Asian business landscape.

Keywords : Sustainable business, financial performance, South East Asia, quantitative research, regression analysis

ROLES OF LEADERSHIP IN THE SUSTAINABLE ADOPTION OF DIGITAL TRANSFORMATION IN THE BANKING SECTOR OF SRI LANKA

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Abstract

In today's rapidly evolving banking industry, digital transformation has emerged as a critical change agent, transforming how banking organisations function and connect with their clients in a sustainable manner. The banking industry in Sri Lanka is transforming the sustainable adoption of digital technology to improve efficiency, customer experience, and competitiveness. However, digital technology adoption does not always succeed, and banking sector organisations have made considerable investments in adopting digital transformation but have failed to achieve the desired commercial benefit. Further, the authors emphasise that the gaps between strategy formulation and plan implementation frequently cause these failures, and inappropriate digital technology deployment may result in disruptive change, resulting in high risk and uncertainty during the transformation. The primary driving force behind this study is the necessity to have a comprehensive understanding of the roles of leadership in adopting digital transformation within the banking sector in Sri Lanka. Although there are many studies have been carried out in other countries, in the context of the Banking Sector in Sri Lanka, there is no evidence of published journal articles to suggest that the research is in digital transformation. Therefore, the adoption of digital transformation was selected as the dependent variable for this research. Further, there is no evidence of published journal articles researching the relationship between leaders' innovation capabilities, strategising capabilities, change management capabilities, and adopting digital transformation in the banking sector in Sri Lanka. The study employed a positivist epistemological perspective and a deductive research style. It utilises a survey strategy with a mono-method design. Data was acquired in the Sri Lankan banking sector through a cross-sectional time-horizon using a standardised questionnaire delivered to executives. The primary objective of this study was to investigate the associations between leadership capabilities, including innovation, strategising, and change management, and the level of adoption of digital transformation. The research study provides significant findings through a comprehensive analysis of questionnaire responses obtained from 384 people. The investigation employed statistical techniques, including Pearson correlations and Chi-Square tests, to identify noteworthy results that support theoretical frameworks and underscore the crucial role of leadership in achieving successful digital transformation initiatives. The Chi-Square analyses found strong relationships between the roles of leaders and the adoption of digital transformation. The Pearson Chi-Square test for Hypothesis 1 revealed a value of 1302.639 and $p < .001$, demonstrating a significant association between the innovative capabilities of leaders and digital transformation adoption. The Pearson Chi-Square value for Hypothesis 2 was 1132.128 and $p < .001$, indicating a substantial relationship between leaders' planning ability and digital transformation adoption. Similarly, Hypothesis 3 demonstrated a significant relationship, as evidenced by a Pearson Chi-Square value of 936.535 and $p < .001$, emphasising the connection between leaders' change management skills and digital transformation adoption. These results highlight the importance of banking industry leaders' innovation, strategy, and change management capabilities to adopt digital transformation successfully. The research findings have significant practical consequences for industry leaders, as they provide valuable insights that can assist them in effectively utilising their strengths and correcting any flaws in their strategies for digital transformation. Moreover, this study highlights potential areas for further investigation, promoting a more thorough examination of leadership dynamics across many businesses and situations. This, in turn, contributes to the advancement of scholarly knowledge and the practical implications for the banking sector and other sectors.

Keywords: Digital transformation, innovation, leadership, strategizing

TELEMEDICINE AS A SUSTAINABLE BUSINESS MODEL

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Abstract

After the COVID-19 pandemic, digital healthcare technologies have become indispensable for enhancing healthcare systems and guaranteeing long-term business practices (Ogenyi & Paul-Chima, 2024). Sustainable business models in healthcare are essential for providing high-quality, affordable, and accessible healthcare services while maintaining financial stability (Božić, 2023). Telemedicine is a revolutionary sustainable business model for healthcare delivery that has gained prominence in recent years. It leverages telecommunication and electronic information technologies to provide services at a distance (Ogenyi & Paul-Chima, 2024). Its applications include online patient consultations, remote monitoring, telehealth nursing and remote physical and psychiatric rehabilitation (Haleem et al., 2021). The primary objective of this study is to evaluate how telemedicine can be used as a sustainable business model to improve patient outcomes, reduce healthcare costs, and promote sustainable business practices within the healthcare sector. Additionally, the study aims to evaluate the business model effectiveness using Osterwalder's "Business Model Canvas" to enhance sustainability. The study also highlights the importance of adapting telemedicine to local contexts and aligning business strategies with regional healthcare systems to effectively generate value for stakeholders. The study draws from a comprehensive search across PubMed, Google Scholar, and Science Direct, identifying relevant studies that highlight how telemedicine can be implemented as a sustainable business model. Telemedicine can enhance sustainable business models by minimizing risks and costs while enhancing the chances of success for telemedicine initiatives. Developing a thorough business model during the early stages of development is essential to accomplish this objective (Chen et al., 2013). Osterwalder's "Business Model Canvas," which consists of nine building blocks, is a valuable tool for understanding telemedicine business models, providing a detailed view of value creation and delivery, activity systems, and cost/revenue structures essential for evaluating the success and sustainability of telemedicine systems (Božić, 2023).

With the use of data analytics and remote monitoring, telemedicine enables personalized medicine by customizing treatment plans to each patient's needs, improving patient satisfaction and outcomes (Božić, 2023). Telemedicine not only improves the quality and efficiency of emergency services but also reduces costs for both doctors and patients by streamlining clinical procedures and minimizing the need for hospital visits (Haleem et al., 2021). Moreover, telemedicine serves as a sustainable business model, providing remote care services. This is especially beneficial for rural patients and those with travel challenges. It reduces costs by eliminating the need for in-person visits, thereby reducing expenses such as transportation and facility maintenance (Božić, 2023).

Limitations and future directions: However, telemedicine faces several challenges in developing sustainable business models, especially in developing countries. These challenges include limited infrastructure, connectivity issues, and different healthcare regulations. Additionally, customers in these regions often prioritize cost savings over convenience, which affects revenue generation. Telemedicine companies must consider local factors and ensure they create value for all stakeholders to avoid inefficiencies and sustainability issues. Finally,

the diversity in regional healthcare systems requires a deep understanding of local challenges to align business strategies effectively (Chen et al., 2013).

Telemedicine emerges as a transformative and sustainable business model that addresses the critical need for accessible, high-quality healthcare while maintaining financial stability. Osterwalder's "Business Model Canvas" aids in designing effective telemedicine strategies by analyzing value creation and cost structures. Despite the challenges of limited infrastructure and varying healthcare regulations, particularly in developing countries, telemedicine demonstrates significant potential for sustainability by reducing the need for in-person visits and customizing treatments to individual needs.

Keywords: Telemedicine, Sustainable Business Model, Healthcare, Digital Transformation, Personalized Medicine, Remote Monitoring

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THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY AND BUSINESS ETHICS ON ORGANIZATIONAL PERFORMANCE AND STAKEHOLDER TRUST

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Abstract

This study explores the relationship between Corporate Social Responsibility (CSR) initiatives, ethical behavior, organizational performance metrics, and stakeholder perceptions across various industries. It aims to provide insights into how strategic integration of CSR and ethics can foster sustainable organizational growth and improve stakeholder relationships, thereby enhancing stakeholder trust. This study investigates the impact of corporate social responsibility (CSR) activities and ethical business practices on organizational performance and stakeholder trust. It aims to understand how CSR initiatives influence key performance indicators like financial performance, operational efficiency, employee engagement, customer loyalty, and stakeholder perceptions. The study also explores the challenges and opportunities of implementing effective CSR strategies in dynamic business environments. This research aims to explore the relationship between Corporate Social Responsibility (CSR) and organizational performance, focusing on how CSR initiatives enhance organizational effectiveness, profitability, and competitive advantage. It also investigates the impact of ethical business practices on stakeholder trust, identifying key factors influencing successful implementation of CSR initiatives and ethical standards. The research also provides practical recommendations for managers and policymakers to develop sustainable CSR strategies that align with organizational goals and enhance stakeholder relationships, based on empirical findings. This study uses a mixed methods approach to investigate the relationship between corporate social responsibility (CSR), business ethics, organizational performance, and stakeholder trust. A systematic review of academic literature and industry reports is conducted to establish a theoretical framework and identify empirical evidence. Quantitative research, including surveys and statistical analysis, is used to gather primary data from a diverse sample of organizations across different sectors. Qualitative research, such as in-depth interviews and case studies, is employed to provide deeper insights into organizational dynamics and contextual factors influencing the relationship between CSR, business ethics, and stakeholder perceptions. Data is then analyzed using appropriate statistical techniques and qualitative analysis methods, including regression analysis to examine the relationship between CSR variables and organizational performance metrics and thematic analysis to identify patterns and themes. The key findings of this study encompass empirical insights and theoretical contributions, this study highlights the impact of Corporate Social Responsibility (CSR) strategies on organizational performance, stakeholder trust, and challenges in implementing effective CSR strategies. Robust CSR strategies lead to improved financial performance, operational efficiency, and employee productivity, demonstrating stronger resilience and competitive advantage. Ethical business practices also build trust and credibility among stakeholders, leading to increased customer loyalty, investor confidence, and positive community relations. Challenges in implementing effective CSR strategies include measuring outcomes, aligning with organizational goals, and managing stakeholder expectations. Successful integration of CSR with ethical business practices can enhance brand reputation and mitigate reputational risks. The study provides practical recommendations for managers and policymakers to improve CSR effectiveness and ethical standards within organizations, including fostering a culture of ethics and transparency. In conclusion, this study underscores the critical importance of integrating CSR initiatives and ethical business practices in driving organizational performance and fostering stakeholder trust. By examining the multifaceted impacts and challenges associated with CSR and ethics, this research contributes to advancing theoretical understanding and practical applications in the field of sustainable business practices.

Keywords: Corporate Social Responsibility, Business Ethics, Organizational Performance, Stakeholder Trust, Sustainability

UNCORKING CURIOSITY: THE ROLE OF BEVERAGE DIVERSITY IN ENHANCING CUSTOMER INTEREST IN FINE DINING

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Abstract

Imagine a dining experience transformed, not just sustenance, but a symphony of flavors unlocked by a vibrant selection of beverages. The hospitality industry, a global economic powerhouse, recognizes this power. Spanning continents and encompassing diverse experiences, the hospitality industry stands as a global economic powerhouse, weaving together food and beverage, travel and tourism, lodging, and recreation to create a dynamic ecosystem fueled by ever-evolving technology and customer expectations. The hospitality industry recognizes the significant influence of beverage diversity on customer expectations. Guests have a wide range of preferences, from those seeking a sophisticated wine pairing to those who favor a refreshing beer or a classic whiskey. To meet these diverse tastes, hotels strive to maintain a well-stocked inventory that caters to various preferences and fulfills customer expectations. This research examines the captivating world of beverage diversity within Sri Lanka's hospitality sector. It is to be identified with a wider range of beverage options tantalizes guests, potentially influencing their choices and driving business growth. Drawing on a systematic literature review, this study examines existing research on beverage diversity and presentation methods, adopting an inductive approach to integrate and evaluate findings. The review encompasses 22 articles published between 2010 and 2023, exploring diverse beverage categories, unique presentation techniques, and emerging trends shaping the hospitality landscape. Findings reveal the extensive diversity within the beverage world, spanning alcoholic and non-alcoholic options, each offering unique characteristics and catering to diverse consumer preferences. Alcoholic beverages, ranging from fermented (e.g., beer, wine) to distilled (e.g., whiskey, vodka), have long been sought-after products in the hospitality industry, while non-alcoholic options like refreshing fruit juices and stimulating teas offer alternatives for varied tastes. Unique beverage presentations, including signature cocktails, mocktails, and expertly crafted drinks by skilled bartenders, emerge as key factors in enhancing customer interest and satisfaction. Moreover, new beverage trends such as sugar-free options, healthy beverage focus, eco-friendly packaging, and the rise of coffee culture driven by skilled baristas and social media influence, underscore the evolving preferences of contemporary consumers. Based on these findings, recommendations are provided for hospitality establishments to develop well-curated beverage menus, invest in staff training, incorporate interactive elements, implement sustainable practices, and leverage social media platforms to showcase unique beverage offerings. This research has explored the multifaceted world of beverages and their role in attracting customers to fine dining experiences. While the findings underscore the significance of beverage diversity, presentation, and adaptation to new trends in enhancing the dining experience, several limitations and areas for future research remain. The study primarily relies on qualitative insights, which may not capture the full breadth of customer preferences and behaviors across different demographics and cultural contexts. Additionally, the focus on high-end dining establishments may not be generalizable to more casual dining environments. Further research should examine the impact of beverage pairing on customer perception and overall dining satisfaction, the influence of social media on beverage trends and customer preferences, the role of emerging technologies in enhancing the beverage experience, and the economic feasibility and customer acceptance of hyper-local and seasonal beverage selections. Quantitative studies involving larger and more diverse samples would provide more robust data to support these findings and recommendations

Keywords: Beverage diversity, hospitality industry, customer interest, beverage presentation, emerging trends.

WEARABLE TECHNOLOGY IN SRI LANKAN SPORTS INDUSTRY: A CONCEPTUAL ANALYSIS

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Abstract

This study examines the socioeconomic effects of wearable technology integration in Sri Lanka's sports sector, emphasizing sustainability. Wearable technology has become a viable tool in recent years for monitoring health data, optimizing training regimens, and improving athletic performance. Its possible socioeconomic ramifications, especially in developing nations like Sri Lanka, are yet little understood. This real problem centers on understanding how wearable technology adoption can foster sustainable practices within Sri Lanka's sports industry This evaluates its potential to improve the performance metrics, reduce injury rates, and enhance resource efficiency. The main Objectives of this study are threefold: firstly, to analyze current trends and applications of wearable technology in global and regional sports contexts, secondly to assess the economic implications of adopting these technologies within Sri Lanka's socio-economic framework; and thirdly to propose strategies for sustainable integration that balance economic feasibility with environment and social benefits. Using a conceptual analysis framework is the study's methodology. Economic effect analyses customized for the Sri Lankan context are combined with an extensive analysis of the literature on wearable technology in sports. Furthermore, case studies from comparable socioeconomic contexts are employed to offer comparative perspectives and useful suggestions. Important conclusions point to the possibility of greatly improving sustainability if wearable technology is used by Sri Lanka's sports sector. Increased injury prevention, better athlete monitoring, and efficient resource use are among the advantages. These results add to the body of knowledge in academia as well as real-world applications, providing legislators, sports commissioners, and tech developers with useful information for promoting sustainable business practices in the sports sector.

Keywords: Wearable technology, sustainability, sports industry, Sri Lanka, socio-economic impact, efficient

AN EMPIRICAL STUDY ON FRONT-END DOWNTIME AFFECTING SUSTAINABILITY IN GARMENT MANUFACTURING SECTOR OF SRI LANKA: CASE OF LINEA AQUA AVISSAWELLA FACTORY

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Abstract

Downtime is a stop of planned production process due an event for a period. Needle downtime is considered as the main reason which disturbs the sustainable manufacturing process of apparel industry. In the dynamic landscape of the textile industry, the smooth functioning of the plant sewing operation is imperative for meeting production deadlines and ensuring customer satisfaction. however, the operational efficiency of the sewing unit is consistently impeded by delays and miscommunications originating from front-end teams, including commercial, merchandising, planning, divisional operation teams, and raw material suppliers. These disruptions manifest in several critical areas, significantly impacting the overall performance of the plant. The repercussions of these disturbances extend beyond the confines of the Sewing unit, affecting the overall performance of the plant. Selecting a case organization whose findings that can be generalizable to the industry, this study aims to identify the main factors affecting Front-End delays and provide some counter measure and permanent measures to reduce the occurrences and impact from those identified factors to the manufacturing process. Linea Aqua Avissawella (LAA) is a leading apparel manufacturing factory under SMA Holdings in Sri Lanka, and they have the capability of producing a wide range of product categories for various customer brands all around the world. In the recent past, LAA face the problem of having higher needle downtime due to front end issues and hence they could not achieve their main Key Performance Indicators, which justifies the selection of the organization for this study. According to the previous studies, there can be various reasons for front end downtime which can be categorized as raw material receiving delay, customer changes, ineffective communication, planning issues, operation method change, raw material quality and were considered as independent variables affecting down time based on the literature review carried out. The study was carried out as a case-based survey and a mono quantitative study with an epistemological paradigm of positivism. The population comprised workers from the plant comprising of 1296 individuals out 333 & selected from each team under stratified sampling method with 95% confidence level. The collected data was analyzed using SPSS statistical tool. Correlation analysis and Chi-squared testing were conducted to investigated the relationships between variables and to test hypothesis. The results revealed that the selected variables as having significant contribution toward front end downtime and have a significant positive relationship with front end downtime. As per the findings through the in depth data analysis, except operation method change other all independent variables found to have a significant relationship with front end downtime.

Based on the results of the study and past studies related to the topic, some practical solutions such as outsourcing the input management system, using modern technology to improve supply chain management system and applying modularity-based manufacturing, recommended for applying to reduce the issues related to front end downtime. These findings can be used for the apparel industry as well as the other manufacturing industries with specific adjustments to improve the production process with more sustainability, stability and consistency.

Keywords: Apparel, Down Time, Manufacturing, Operations

CRYPTOGRAPHY-BASED AI E-LEARNING PLATFORM: ENHANCING THE SUSTAINABILITY OF THE EDUCATION INDUSTRY

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Abstract

In the pursuit of sustainable and innovative education, this study introduces a cryptography-based AI e-learning platform designed to enhance the accessibility and effectiveness of digital learning. This platform leverages cryptographic techniques not only to secure the learning environment but also to integrate AI-driven features that adapt to individual learner needs, creating a personalized and engaging educational experience. The primary objective of this research is to develop a crypto based secure, AI-powered e-learning platform to ensure data integrity and privacy while delivering personalized educational content. The platform aims to support sustainable education by offering adaptive learning paths, interactive modules, and secure communication channels that cater to diverse learner needs. Additionally, the platform seeks to enhance user engagement and retention through AI-driven feedback, personalized learning recommendations, and hands-on learning activities. The development of the platform involves utilizing advanced cryptographic algorithms like AES, DES, and RSA to secure user data and communications within the e-learning environment. The front-end is built using the React framework with HTML, CSS, and JavaScript, while the back-end processing is handled by Python. AI algorithms are integrated into the platform to analyze user behavior, provide real-time feedback, and adapt the learning content according to individual progress. The platform's architecture is designed to ensure both security and scalability, with cryptographic techniques embedded at various levels to protect data and enhance user trust. Afterward, user acceptance testing has conducted with 50 of sample size of undergraduate representing 2 state universities and 3 private universities in Sri Lanka under snowball sampling method. Evaluation criteria are accuracy, data security, privacy, real time support to maintain the effectiveness of delivery and retention time. The integration of crypto based AI in the e-learning platform resulted in a robust and secure environment that supports personalized learning experiences. The use of cryptographic techniques not only safeguarded user data but also ensured that the platform met the highest standards of privacy and integrity. The AI-driven features significantly improved user engagement by providing tailored learning paths and real-time support, leading to higher retention rates and more effective learning outcomes. According to the finding of the user acceptance testing 92% accuracy, 72% data security, 75% ensuring privacy, 92% positive response on real time support to maintain the effectiveness of delivery and retention time. The findings demonstrate that a cryptography-based AI e-learning platform can play a vital role in promoting sustainable education by addressing key challenges in data security, personalization, and learner engagement.

This study successfully developed a cryptography-based AI e-learning platform that addresses the critical need for secure, personalized, and sustainable education solutions. The platform's innovative combination of cryptographic security and AI-driven adaptability offers a unique approach to e-learning that can enhance the effectiveness and accessibility of digital education. The research highlights the potential of such platforms to contribute to the long-term sustainability of the education industry by providing secure, engaging, and tailored learning experiences that meet the diverse needs of modern learners.

Keywords: Sustainability of Education, Artificial Intelligence, Crypto, e-learning

CASE STUDIES

A STRATEGIC ANALYSIS OF THE SINGLE QR CODE SYSTEM'S IMPACT ON THE SRI LANKAN APPAREL INDUSTRY

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Abstract

As a powerful economic driver, the fashion industry is under growing investigation into the damage it does to society and the environment. In response, a single QR code system is set to transform sustainable practices in the industry. This research delves into the recent partnership between GS1, the International Financial Reporting Standards (IFRS), and the Asian Development Bank (ADB) to establish this ground-breaking system. Clothing items can have all their information material composition, supply chain travel, and recycling guidelines provided by a single QR code. Facilitating easier exports, this technology greatly improves supply chain visibility, cuts down on waste, and helps with compliance with various regulatory frameworks. By doing so, it promotes environmentally conscious business practices and equips customers to make sustainable decisions. This innovation gives the Sri Lankan clothing sector a leg up by making operations more efficient and in line with global sustainability standards. The business is well-known for its substantial contribution to the national economy. Finally, Results show that Sri Lankan brands' strategic positioning, economic growth, environmental sustainability, and supply chains all benefit. This study finds that the one QR code system could revolutionize the garment industry by significantly increasing operational efficiency and sustainability.

Keywords: Single QR Code, Sri Lankan Apparel industry, Collaboration, Implementation, Analysis

Introduction

The fashion business has been in the spotlight for both its financial and environmental achievements. The sector is under increasing pressure to implement environmentally friendly practices due to the growing importance of sustainability in the eyes of both consumers and governments (Nayak et al., 2020). As a result, new approaches emerged in ethical manufacturing practices. An example of such a development is the unique QR code system, which has the potential to completely alter the way garments are monitored and controlled all throughout their useful lives (Iezzi et al., 2024). As part of the unique QR code system, a single QR code can be embedded into garments to provide detailed product information (Akram et al., 2022). Included in this are specifics regarding the materials utilized, the path taken by the supply chain, and regulations for recycling. By providing easy access to comprehensive product information, this technology helps both brands and customers reach their sustainability goals. In addition to helping firms reach their sustainability goals, this technology provides customers with extensive product information, empowering them to make informed purchasing decisions.

The United Nations promotes sustainability in the fashion industry through projects such as the United Nations Alliance for Sustainable Fashion, which seeks to organize efforts and facilitate fundamental transformation throughout the industry. This program is centred around advocating for sustainable practices, enhancing working conditions, and minimizing the environmental consequences of fashion production and consumption (Cai & Choi, 2020). With a focus on the garment sector globally, this study aims to investigate the use and results of the unique QR code system. We will take a look at the ways this system can help large Sri Lankan firms with sustainability, supply chain efficiency, and other things. To help create a more ethical and environmentally friendly fashion sector, we want to shed light on how the QR code system could work on its own.

Collaboration Background

The Asian Development Bank, the International Financial Reporting Standards (IFRS), and GS1 have formed a strategic agreement to improve the apparel industry's sustainability via technology innovation. The success of this program depends on the distinct skills and resources provided by each organization, which is why their participation is essential. Financial backing and strategic advice from the Asian Development Bank (ADB) are crucial to the success of this partnership. Furthermore, funding projects that promote economic progress while protecting the environment is a priority for the Asian Development Bank (ADB), which prioritizes sustainable development. The garment industry is a major economic driver in developing nations like Sri Lanka, and the ADB is hoping to promote sustainable practices in the industry by supporting the unique QR code system.

It is the responsibility of the International Financial Reporting Standards (IFRS) organization to guarantee that the QR code system is in line with worldwide sustainability and financial reporting standards. Data collected and published through QR codes will be up to pace with international standards for openness and responsibility thanks to IFRS's involvement. To facilitate easy exports and guarantee that brands adhere to diverse legal frameworks in different jurisdictions, this standardization is essential.

A worldwide leader in supply chain standards and solutions, GS1 is responsible for providing technical support for the unique QR code technology. The QR code system is strong, extensible, and compatible with other systems because of GS1's knowledge of developing and overseeing worldwide standards for data exchange and barcoding. When it comes to creating the QR codes' technical specs and implementation recommendations, their function is crucial.

Additionally, more openness in the supply chain, less pollution, and more involvement from consumers are the main aims of this partnership. The initiative's goal is to create sustainability a practical and economical option for clothing brands by merging all product details into one QR code. The Sri Lankan apparel industry is particularly dependent on this collaboration, as it has the potential to improve competitiveness, streamline operations, and integrate local practices with global sustainability standards.

Finally, GS1, the Asian Development Bank, and IFRS are working together in a ground breaking way to promote sustainable innovation in the apparel sector. These groups are pooling their resources to create a single QR code system that will revolutionize the production, tracking, and management of garments, leading to a more ethical and environmentally friendly business model.

How It Is Implemented By Other Brands?

Process of Zara's Implementation

The world-renowned fast fashion retailer Zara has integrated the unique QR code technology into its supply chain processes and sustainability initiatives. An extensive analysis of Zara's current supply chain was the first step in the implementation process; it helped pinpoint critical places where QR codes may have the greatest impact (Rokhzad, 2023). Zara made sure that every garment was marked with a distinct identification by integrating QR codes into their production processes in close collaboration with their technological partners. The whole lifecycle of materials, from procurement to manufacturing to retail, could be monitored in great detail thanks to this (Arash, 2020).

Zara upgraded its in-store and online retail platforms so shoppers could scan the QR codes to make consumer involvement even easier. Learn more about the garment's construction, its effect on the environment, and how to recycle or dispose of it with the help of this handy feature (Kulic & Roggero, 2021).

Results (Costs and Advantages)

Zara has reaped numerous benefits from using the QR code technology. Customers are now able to make better-informed purchases thanks to the increased transparency, which has strengthened their trust and loyalty (Kulic & Roggero, 2021). Additionally, Zara's supply chain has been made more efficient thanks to the thorough tracking, which allows for quicker responses to market demand and reduces inefficiencies. Inventory management has been enhanced and costs have been reduced as a result of this.

Nevertheless, there were substantial upfront expenses associated with the implementation process. New technology, employee training, and system updates were all part of these initiatives. Zara is now at the forefront of sustainable fashion techniques, which has resulted in long-term financial and reputational gains that have made the investment worthwhile, despite these expenditures.

Procedure for Balenciaga's Implementation

Another high-end luxury label that has joined the solitary QR code trend is Balenciaga, which is all about sustainability and tracking products. As part of the deployment, Balenciaga completely rethought its manufacturing and supply chain procedures. Balenciaga collaborated with suppliers and tech specialists to encapsulate a garment's whole lifecycle in a QR code(Liu, 2023).

This high-end label was quite forthright about the processes and materials used to make its wares, drawing attention to the fair trade practices that went into their production. Customers could learn more about Balenciaga's dedication to sustainability and the impact each item had on the environment by scanning the brand's QR codes.

Results (Costs and Advantages)

The use of QR codes has greatly improved Balenciaga's reputation and the way its customers view the brand, especially among eco-conscious high-end consumers. The ability to track the route of each garment has strengthened Balenciaga's dedication to sustainability by increasing accountability and trust.

The operational side of things has been improved by the QR code system, which has increased supply chain efficiency, decreased waste, and guaranteed greater quality control. The most expensive parts were managing the data that was gathered and integrating the technology with other systems.

Despite the hefty price tag, the payoff in increased brand loyalty and streamlined operations has been well worth it. In the high-end fashion industry, Balenciaga has been an environmental trailblazer, inspiring other labels to do the same.

Examining Real-Life Examples of Achievements and Setbacks

The fact that Zara and Balenciaga have both found success with the QR code system shows how useful this technology can be for many fashion sector markets. Supply chain openness, customer trust, and operational efficiency have all been greatly improved. Brand loyalty has grown and the company has gained an advantage in the market as a result of these advantages.

Nevertheless, one must not disregard the difficulties encountered during the implementation process. Huge upfront expenses, complicated new technology integration with old systems, and substantial staff training were challenges that both businesses had to overcome. On top of that, there needs to be continuous investment and maintenance to keep the data collected by QR codes accurate and secure.

To sum up, there are some short-term difficulties with using single QR codes in the fashion business, but there are huge long-term gains in sustainability, efficiency in operations, and customer involvement. Based on their experiences, Zara and Balenciaga have shown that this unique approach can help the sector undergo a sustainable transformation if properly planned and funded.

Effect on the supply chain

Supply chains can be defined as the involvement of 3 or more companies in the flow of business functions such as finances and products and services. With globalization the supply chains of products have become increasing complex as the process from manufacturing to final consumption involves different countries, industries and businesses to produce a single unit. (Alves et al., 2021)

Counterfeits have gained the increased attention from different organizations and the EU in the recent years. Making product authentication a crucial component towards achieving traceability (Alves et al., 2021). Adidas been a prominent brand has proceeded to announce that up to 10% of their products in the market are counterfeits, this is despite possessing a registered trademark, the 3 stripes. (Chistruga, 2023) Similarly counterfeits in the apparel industry is not unheard of. Formaldehyde, commonly used in the apparel industry to create permanent press effects on certain designs, is limited to certain restrictions as levels such as 20 parts per million could cause health hazards such as skin cancer, respiratory problems, asthma and irritations. Despite these rules been implemented batches of counterfeit woolen and cotton clothes have been found with 500 times higher Formaldehyde levels. (Chistruga, 2023) To prevent counterfeits from entering the market EU has introduced different regulations such as Article 8, point 4, which presents certain obligations to present technical documentations such as a product description, safety procedures, possible risks (eg- allergies), actions to take at these risks etc. (Chistruga, 2023) EU further has a block chain to update these information for verifiability purposes. The QR code system could contain all the documentation updated on a real time basis, and its connection to block chain could help fasten the required procedures prior to moving on in the supply chain. Further the use of QR code could facilitate certain information to be available to other users such as other whole sale buyers, consumers, authorities etc. And information such as the health certificates, manufactured date, materials used could also be communicated. (Chistruga, 2023)

As a good with a QR code enters the warehouse the employee that accepts the batch of textile goods could scan the code through their mobile phones, this would also be repeated throughout the process (dispatch, arrival, unloading and loading processes, Shipments etc.) (Kar et al., 2022) The scanning at each of these times would be recorded in the database with the date and time of each scan along with the employee details, and up to which point of the supply chain it is and what the next steps are, assuring no mishaps such as shipping to the wrong destination occurs.

Moreover, QR codes facilitate tracking of the whole supply chain the apparel go through on a real times basis, which means apparel companies can receive immediate notification if a disruption is caused in the supply chain and products are destroyed, halted or misplaced(Kar et al., 2022). This immediate notice helps organizations take corrective actions without any delays. Aiding to reduce the probability of showrooms and retail customers experiencing delays in the availability of stocks. While this improves the efficiency and effectiveness of the supply chain it further brings a competitive advantage and improves the brand's reputation.

Effect on the Environment

With Fast- fashion emerging and brands releasing up to 12-16 collections each year, the fashion industry now produces up to 92 million tons of waste annually with an expected increase of 60% from 2015 to 2030. (Mishra et al., 2020) While recycling is a much heard topic, in reality the garments recycled into new garments amount only to 1% of total fashion waste. (Santi, 2023) An additional topic of which recycling is a topic under is the circular economy. Replacing the 'end- of-life' concept where after going through production, transportation, consumption at the end the product awaits disposal, is been replaced by processes such as recovering, reusing, recycling etc., so that the product is reengaged to a new lifecycle which is run continuously in a close loop. (Alves et al., 2021; Jia et al., 2020) QR codes storing the recycling procedures help organisations recycle garments faster in the appropriate manner thus less fashion waste would fill landfills and less raw material extraction is required as most garments would re-enter the manufacturing process.

QR codes would empower customers to be more conscious about the purchases they make, based on a specific article of clothing's sustainable specifics and ensure that they make eco-friendly wardrobe choices using the sustainability information of the complete production from designing to sourcing and transportation provided (Doluweera, 2024). The usage of these QR codes in the Sri Lankan apparel industry would further compel start up apparel producers and any apparel producer entering the Sri Lankan apparel industry or competing in the international market to make sustainable choices and produce sustainable products in order to remain competitive.

Prior to QR codes all organisations used and currently use traditional paper or fabric tags. While these consume large amounts of paper and fabric, exporters would sometimes be required to add more than a single tag to provide customers with product details in different languages and according to different guidelines and regulations, this creates many wastes. (Aquino, 2023) However with the implementation of QR codes organisations such as Patagonia have achieved to minimise or completely eliminate, in some cases, this wastage. Since this implementation with the Spring 2023 collection Patagonia has allegedly cut back 100,000 pounds of paper from initially utilising 400 inserts for 20 designs. (POMP MMXIX, 2023)

Effect On the Economy

Currently, Sri Lanka has over 300 apparel manufacturers and 20 major key players in the apparel sector which includes brands such as MAS, Brandix, Hirdaramani and Star garments. (Export development board of Sri Lanka, 2024) This industry provides direct employment for up to 600,000 workers (Export development board of Sri Lanka, 2024) and thus can be identified as a major employer among the industries. The implementation of the QR codes would help brands be competitive in the international market and gain more orders to increase production volumes and re- recruit employees who have been made redundant during the pandemic, thus increasing the possibility of reducing the unemployment rate of Sri Lanka from 4.3% as of the last quarter of 2023 (Department of census and statistics, 2024) to increase the standard of living of the population. An increase in the production of apparel in the country would also increase the GDP.

Apparel exports amounts to large portion of export earnings of Sri Lanka. Apparel exports earnings of 2024 shows a 6.66% increase from 2023 (Export development board, 2024), if a further increase in exports is gained due to the implementation of the QR code system it would positively affect the Merchandise account and in return the current account which would finally have a positive effect on the Balance of payment.

Further the QR code implementation could increase the performance of the local apparel manufactures and could attract foreign capital investments in the share market which would also further have a positive impact on the balance of payments.

Effect On the Sri Lankan Apparel Industry

Apart from the QR code system aiding increasing the supply chain traceability, having a positive environmental impact etc. the QR code system could further help the Sri Lankan brands predict trends. A considerable proportion of Sri Lankan's export is made of apparel exports and to remain in the global market it is crucial that Sri Lankan brands understand the trends of the global market and the countries they export to, and cater to these trends. The use of QR codes, would facilitate organizations with real time data on the movement of all the clothing items, this data can be analyzed to identify which designs and garments are most constantly moving and the rate of movement. With the addition of technical help and extraction of other information such as cross elasticity, price elasticity (Boggess, 2021), diminishing marginal utility (the utility of buying the first corset is different from the utility of buying the 3rd) will help brands identify which designs and garments would be demanded in the future along with other specific trends. According to this Sri Lankan exporters could determine which apparels their international customer would demand more, determine prices (low prices if the specific country’s demand is low for specific garment and relatively high prices if the demand is high) etc. Further understanding trends would help reduce wastages, as if a brand was planning to export a batch of products to country A but the demand is decreasing, the possibility of their retail customer not placing further orders for the product would be low thus they could either not proceed with production before receiving the customer’s confirmation or they could observe what other customers have shown increase in demands for the specific product and inquire about stock refill requirements. This helps brands prevent managerial inefficiency, which would be caused by allocating resources to a product which the customer might not purchase, thus further preventing an organizational slack or X- inefficiency from occurring. Additionally understanding the trends and catering to them faster would help Sri Lankan apparel be more competitive, as brands would be ready with stock for customer requirements faster. (Kar et al., 2022)

Due to global warming showing increasing effects and affecting lifestyle, customers and consumers have shown increasing interest in sustainability. This is something that organizations from all industries cannot ignore. Similarly in the Fashion industry sustainability concerns have risen however due to issues such as green washing consumer trust is an element that is hard to gain. By using QR codes Sri Lankan brands are able to communicate information regarding the sustainability affect to a product at each stage of production, ranging from the fabric material chosen, how the material is manufactured, the use of socially fairer or environmentally friendly materials, the dyeing process etc., and communicate these information with both domestic and international customers which includes wholesalers to retailers to final consumers. (Alves et al., 2021) Thus the Sri Lankan apparel industry is able to gain the trust of customers, improving the reputation of Sri Lankan manufactured apparel while also gaining loyal customers and attracting potential customers.

Strategic Effect on Sri Lankan Brands

Most sustainability strategies used in the textile industry are reactive and not preventive, which concentrates on not creating waste instead of focusing on dealing with waste after its produced (Grams, 2022). QR code implementation is a Zero waste management theory as it prevents waste created by the use of additional tags, while it is preventive it arguably aids as a reactive strategy as well, making recycling easier by containing information regarding recycling procedures to be followed (Grams, 2022). This helps the clothing item to directly enter the recycling process without going through intensive tests such as fabric testing. This makes products much sustainable thus increasing the brand reputation which would bring along benefits such as competitive advantages, attraction of skilled employees who prefer working in organizations and also increases the staff morale as they feel motivated to work for a sustainable organization which in result increase efficiency.

The QR code system could further be used by organizations as a marketing tool. The QR codes attached to the clothing items could contain links to social media pages, online engagement pages, email subscription forms etc. (Apparel resources private limited, 2024) The organization could communicate the dates for any new events they will be hosting for the consumers and also share what new projects the brand has been investing in (e.g.- Developing new fabrics, charity events, CSR programs) and gain customer opinions, which promotes interaction between the brand and its customers. Further other products could also be marketed through these QR codes using different strategies. Matching garments for the clothing item chosen by customers could be shown visually on models, by scanning the code, so that these customers could go through these pictures to see different available options promoting repeated purchases occur and boosting sales.

However the initial stages of familiarizing customers with the QR system effectively is vital for its long term use. Sri Lankans interacted with QR codes to a certain extent due to the new QR pay systems been introduced due to Covid restrictions, thus it is not a completely unfamiliar subject, this would be great support for the implementation. But to promote the system Brands could use strategies such as collecting attendance to a hosted event through scanning a QR code for which customers would receive special discounts (Apparel resources private limited, 2024). Another strategy would be to include the QR code in the loyalty cards prepared by the organization, as loyalty cards are prominently used by Sri Lankan consumers, and scanning the QR code helps them directly view the seasonal discounts along with a help center for any product inquiries instead of revisiting the store for any complaints and enquiries. Consumer engagement is crucial for any brands and QR codes could help facilitate the effective communication required.

Theoretical Frameworks

A green strategy

A green strategy supports a business to make decisions that would cause less damage to the environment while serving as an ethical foundation based on economic logic and true social responsibility intentions, to make decisions. (Dragomir, 2019) Examples for green strategies could be implementation environmentally friendly practices such as video conferencing, employee training sessions to improve staff awareness on environmental issues etc. The implementation of the QR code system could motivate the customers to be concerned about the sustainability of the apparel, to simplify and increase the efficiency of recycling process etc, thus is a successful green strategy as observed from implementations thus far.

Proactive environmental strategies

Proactive environmental strategies (PES) aim on finding common ground between the environment and business operations, trying to achieve profits while being environmentally friendly. (Dragomir, 2019) Proactive environmental strategies consists of 4 components which are:

- Redesigning and changing the production process, addition of new technologies.
- Need for the integration of skills & experience across different disciples and internal controls as PES requires marketing, Financial, legal, environmental, procurement data.
- Employee participation
- Eco- branding and environmental initiations

The implementation of QR codes in the Sri Lankan apparel industry involves all these components. The implementation of the QR codes would change the traditional tag system and would require the cooperation of the legal department to include the legal documentations, marketing to include data such as social media pages and customer engagement events, purchasing data to provide proof for ethical sourcing etc. Employee support and participation are required throughout the production process until the purchase of the final consumer to ensure the information included in the QR code is up to date. Finally successful eco-branding on the products sustainable origins and if implemented successfully could help with product differentiation and as a competitive advantage. (Dragomir, 2019)

Circular Fashion

Circular Fashion is a combination of the principles, circular economy and sustainable development (Oana Mionel & Mihaela Ştefãnescu, 2024; Rathinamoorthy, 2019). The fashion industry is commonly involved in the linear economy 'take –make-dispose' which results in high consumption of raw materials as each unit of clothing utilises new raw materials and would be directly disposed after use, this has further increased due to fast fashion. (Oana Mionel & Mihaela Ştefãnescu, 2024) In comparison the circular economy intends on reengaging the product in the production of new garments thus extending its life cycle (Santi, 2023). Whereas Circular Fashion is where a product's movement from design, to manufacturing, to the end of life is catered with the intention of achieving circularity efficiently for the longest time possible. (Oana Mionel & Mihaela Ştefãnescu, 2024). While economical models that enable circular fashion is low there are 3 models to be used which could further be enhanced by QR coding:

Mainly on products that are used for a short time period such as wedding dresses, suits, maternity wear, costumes etc. (Oana Mionel & Mihaela Ştefãnescu, 2024). Brands could maintain a platform which is linked to the QR code and accessible to consumers. When renting an article of clothing such a wedding dress the QR code could be scanned and the duration of renting could be entered, this would be displayed in the platform and other customer could know since when the dress would be available for rent again. Further the platform could show what clothing items are available for the customer's required time period.

The most highly suitable model for increasing the life cycle of a product without any changes made, and has been gaining increasing attention with increasing number of people reaching for the second hand market due to sustainability concerns. (Oana Mionel & Mihaela Ştefãnescu, 2024) If the need for resale arises consumer could both scan the QR code and inform the organisation of their intentions to resale which could then be entered to a second hand market operated by the brand or simply display the offer in a second hand apparel website provided in the QR code. (Oana Mionel & Mihaela Ştefãnescu, 2024) The QR code could further include tips on different ways to reuse the specific clothing item.

Despite been known as an effective method for decades the implementation rate is extremely low due to 2 main concerns. Apart from the high costs involved, inability to identify the fabrics, which means chemical composition and fibres are unknown, creating the requirement of tests to be carried out creates barriers for efficient recycling. (Oana Mionel & Mihaela Ştefãnescu, 2024) QR codes serve as an ideal solution as information regarding the value chain and other relevant information can be stored along with the specific recycle procedures to be followed, further the degree of circularity can be extracted by understanding factors such as number of times reused etc. (Oana Mionel & Mihaela Ştefãnescu, 2024)

Methodology

For this case study different forms of secondary data has been collected and analysed. This mostly consists of journal articles, Books, peer- reviewed journal articles, government reports and publications. These resources were taken from years ranging from 2019 to 2024 to ensure that data used in this review to prove the effect of the collaboration in Sri Lanka is based on up to date information and outcomes of the most recent implementations of this technology. Databases most prominently used to extract information are ProQuest, Springer, IEEE Xplorer etc. A few Journals used are mentioned below:

The Journal for a Sustainable Circular Economy

Journal of Cleaner Production

Social Responsibility Journal

Journal of the American Chemical Society

Conclusion

The study emphasizes the revolutionary potential of a single QR code system in fostering sustainability in the apparel business. The results show that major brands like Balenciaga and Zara have greatly increased supply chain transparency, consumer confidence, and operational efficiency since using this technology. There may be some up-front expenses and difficulties with integrating technology, but the payoff in improved operational efficiency, reduced costs, and increased brand loyalty is well worth it.

Specifically, the Sri Lankan garment sector stands to benefit from the one QR code scheme. This technology can help Sri Lankan firms become more competitive on the global market, comply with various regulations more easily, and satisfy international sustainability standards. The industry's economic prospects can be further enhanced by appealing to environmentally concerned consumers with the increased transparency and traceability given by QR codes.

One potential future outcome of widespread use of QR code systems is to spur more far-reaching, environmentally friendly developments in the apparel sector. It is a model of how a responsible and environmentally conscious industry can be created through the use of technology and teamwork to tackle difficult sustainability issues. Sri Lankan fashion firms, like those throughout the world, must embrace such innovations if they want to survive and thrive in the face of changing consumer tastes and market conditions.

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EMPOWERING EMPLOYEES AND COMMUNITIES: A CASE STUDY ON CSR AND ETHICAL LEADERSHIP AT JETWING HOTELS AND RESORTS

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Abstract

Jetwing Hotels and Resorts, a leading luxury hotel chain in Sri Lanka, exemplifies the integration of ethical leadership, corporate social responsibility (CSR), and human resource management. This case study explores Jetwing's journey, highlighting its commitment to ethical leadership through adherence to international standards such as the Global Code of Ethics for Tourism and comprehensive human rights policies. The objective is to provide insights into how Jetwing navigates the rough tides and commits to being a responsible corporate citizen by ensuring its commitment to human rights, tourism, and community engagement, ultimately becoming a trendsetter in the industry. About this research technique, primary interviews were used to gather data for the case study in addition to comprehensive qualitative secondary analysis using articles from academic journals and annual reports. The CSR activities of Jetwing Hotels are a testament to their dedication to social and economic upliftment, as seen by their annual and sustainability reports. Despite obstacles like cultural reluctance, initiatives like the Jetwing Youth Development Programme, the Tuk-Tuk project, and assistance for nearby farms demonstrate creative solutions. The emphasis Jetwing places on the growth and well-being of its workforce emphasizes how crucial it is to make human capital investments. Jetwing uses strategic CSR to overcome challenges while upholding international standards and moral principles that benefit society and the company. This essay seeks to demonstrate Jetwing's CSR and moral leadership accomplishments, acting as a role model for the hospitality sector.

Keywords: Human Resource Management, Ethical leadership, CSR, Hotel Industry, Community Engagement.

Introduction

Jetwing Hotels and Resorts is an excellent establishment in the dynamic world of hospitality in Sri Lanka, this luxury hotel chain has not redefined the standards of ethical leadership, corporate social responsibility, and their integral connection to human resource management. Jetwing operates as a significant player in the hospitality industry while taking ethical principles and social responsibility into account. The tourism industry takes the cost of ethical and environmental elements into consideration.

The company's commitment to ethical leadership with consistent decision-making, transparency, and dedication to the well-being of the employees and community it performs duties to. Jetwing's CSR initiatives extend far beyond philanthropy which ensure ethical leadership and environment and society embedded in the core values of the company. The sustainable practices in its operations to community development employing rural youth in the hospitality industry, the local community benefited through livelihood support.

This case study develops ethical leadership, CSR endeavours, and a direct connection to HRM. Through discovering the company's journey successes and challenges Jetwing is a notable example of how a hospitality industry leader can thrive through ethical standards and contributing positively to society and its workforce. The study covers Jetwing's values, global frameworks, CSR initiatives like the Youth Development Programme and Tuk-Tuk project, and challenges in implementing ethical leadership amid cultural resistance and resource constraints.

Background

Background of the Jetwing

The stepping stone of Jetwing dates to 1975 when the vibrant tourism landscape of Sri Lanka was promoted worldwide. Jetwing was founded by Herbert Cooray a pioneer in Sri Lankan tourism and the hotel chain began in the iconic Blue Oceanic Hotel in Negombo. The main destinations of growth focused on beach resorts, expanding to various scenarios such as cultural retreats, wildlife lodges, and city hotels. The company faced challenges during the 30-year civil war. Today, Jetwing is a strong family business led by second-generation leadership and responsible for sustainability and community engagement (Jetwing Hotels and Resorts, n.d.).

Jetwing is a leading hospitality provider in Sri Lanka, operating over 40 hotels and resorts across the island, varying the portfolio of diverse styles from heritage bungalows to luxurious eco villas that target different customer and traveler segments. Jetwing is recognized for its commitment to responsible tourism, winning different awards for sustainability and cultural preservation. Moreover, the company is actively involved in community development projects that support education, healthcare, and environmental initiatives (Jetwing Hotels and Resorts, 2023).

The company has specific values integrated into the organization's operations, initially, the family-oriented strong family values permeate the company, integrating a sense of belonging and close-knit communities within the workforce. The next is respect for the environment and people the company respects nature and local communities and ensures to conducts responsible tourism practices and community engagement initiatives. The passion for service creates exceptional guest experiences forms the core of Jetwing's objective. The entrepreneurial mindset ensures to implementation creativity and innovation and empowering employees to contribute to the company's improvement the position. Jetwing as a company believes in enhancing and developing the organization by fostering a culture of continuous learning and development and encouraging employees to enhance skills and knowledge (Jetwing Hotels and Resorts, n.d.).

Ethical Leadership

In the year 2015, on behalf of the Jetwing hotel chain, Mr. Hiran Cooray signed the private sector commitment to the Global Code of Ethics for Tourism which was adopted in 1999 by the General Assembly of the World Tourism Organizations as a fundamental framework of responsible and sustainable tourism and this is a comprehensive framework to key players in tourism development. The main motive is to help maximise the sector's benefits while reducing the impact on the environment, cultural heritage and societies across the globe. Through, this agreement specifically sheds light on respect between people and societies, and its importance such as fulfilling the obligations of stakeholders in tourism development and the right of workers and entrepreneurs of the industry (Daily FT, 2016).

Jetwing is a family business that has been owned and involved heavily in the industry for over 50 years. In addition, Jetwing has created a set of human rights policy statements that acknowledges non-discrimination and equality policy, labour and human rights, health and safety, working conditions including working hours, fair wages and compensations and no harsh or degrading treatment (Jetwing Hotels Sri Lanka, 2019).

Jetwing accepts the principles contained in the Universal Declaration of Human Rights and the International Labour Organization's declaration on fundamental principles and rights at work and these consistent principles Jetwing commits to protect human rights. In terms, of non-discrimination equality of opportunity and treatment and respect for each individual's human rights and further discrimination on race, color, gender, religion, creed, age, mental disability or sexual orientation in any hiring process. Jetwing as a responsible organization is committed to ensuring that any exploitation of children and forceful labour is as per the ILO convention. Jetwing also adherence to the Jetwing Health and Safety Policy and ensures the safety of associates and stakeholders. Moreover, Jetwing complies with the national laws and benchmarks of the industry and associates are not required to work more than 45 hours a week. Wages are paid as per the labour laws and statutory regulations of the country, workmen's Compensation Act Shop and Office Employees' Act and the important statutory minimum wage of the standard industry wage (Jetwing Hotels Sri Lanka, 2019).

The CSR Projects

Jetwing as an organization has contributed immensely to a variety of projects including the Jetwing Youth Development Program which allows the communities in the region to establish hotels. These long-term projects are designed to address specific needs that benefit tourism for livelihood development by addressing the social and economic challenges that the youth face. Also JYDP has objectives and benefits, showing it successfully offers vocational careers and advancement opportunities, economic stability, and training. (Tissera et al., n.d.) This is an award-winning initiative that was launched in 2006 at Jetwing Vil Uyana and has achieved the community outreach effort. This program started with the aid of chief monks and teachers in Polonnaruwa to carry out a vocational training program for school leavers. Through the project, Jetwing has sustained a clear recruitment strategy that upskills the youth while enhancing overall company performance (Jetwing Hotels and Resorts, n.d.) .

The next innovative step is the second careers program where the company is the largest player in addressing the shortage of female participation in the industry. Jetwing offers a second career to women in the local community who are over the age of 45 to enhance household management to a professional work environment in areas of kitchen and housekeeping operations. In addition, through recruiting women in need and improving their quality of life the remarkable social and economic benefit trickle down to families and local communities and change their lives for the better. Jetwing was awarded the PATA Gold Award in 2022 under Women Empowerment category (Jetwing Hotels and Resorts, n.d.).

The Tuk Tuk project at Jetwing Light House is another project that led to a PATA award for welcoming tuk-tuk drivers to be part of hotel operations due to the proximity to the hotel and this eliminated the need for hotel taxi services with a community who were treated as guest now treated as part of family values (Jetwing Hotels and Resorts, n.d.).

Over the years the farmers at Wellawaya have experienced issues with the harvest, therefore to support the farmers Jetwing have assisted in solving loan issues and have used 50 acres of paddy land to provide the farmers with seed money for cultivation. An equal portion is divided between the Kaduruketha hotel and the farmers, the excess is sold to other hotels of the Jetwing family. The farmer is not required to repay the money and enable a steady income neighborhood (Jetwing Hotels and Resorts, n.d.).

Findings and Discussion

CSR Initiatives

Jetwing as organisation has contributed immensely on variety of projects including Jetwing Youth Development Programme which allows the communities in the region to establish hotels. These long term projects are designed to address specific needs that benefit tourism for a livelihood development by addressing the social and economic challenges that the youth faces. This is an award winning initiative that was launched in 2006 at Jetwing Vil Uyana and has achieved the community outreach effort. This program started as per the aid of chief monks and teachers in Polonnaruwa to carry out vocational training program to school leavers. Through the project Jetwing has sustained a clear recruitment strategy that upskill the youth while enhancing overall company performance (Jetwing Hotels and Resorts, n.d.) .

The next innovative step is the second careers programs where the company as the largest player addressing the shortage of female participation in the industry. Jetwing offering a second career to women in local community who are over the age of 45 to enhance household management to a professional work environment in areas of kitchen and housekeeping operations. In addition, through recruiting women in need and improving their quality of life the remarkable social and economic benefit trickle down to families and local communities and change their lives for the better. Jetwing was awarded the PATA Gold Award in 2022 under Women Empowerment category (Jetwing Hotels and Resorts, n.d.).

The Tuk Tuk project at Jetwing Light House is another project that led to a PATA award for welcoming tuk-tuk drivers to be part of hotel operations due to the close proximity to the hotel and this eliminated the need for hotel taxi services with a community who were treated as guest now treated as part of family values (Jetwing Hotels and Resorts, n.d.).

Over the years the farmers at Wellawaya have experienced issues with the harvest, therefore to support the farmers Jetwing have assisted in solving loan issue and have used 50 acres of paddy land to provide the farmers with seed money for cultivation. An equal portion is divided between the Kaduruketha hotel and the farmers, the excess is sold to other hotels of the Jetwing family. The farmer is not required to repay the money and enable a steady income neighbourhood (Jetwing Hotels and Resorts, n.d.).

Employee Wellbeing and Social Benefits

Jetwing as an organisation provides training and development that is crucial for a career. The human resources policy allows the importance of training and development of associates, through investing in effective training the competencies and confidence in associates will enhance and allow Jetwing to enhance services while strengthening quality services. Upskilling the employees through means of innovative training and development programmes and challenges will allow associates to improve their skills and progress in their careers. The training and development has the priority to create custom tailored training to ensure associates are allowed to get on-the-job training which is customised according training needs of hotels. The following innovative training programs at Jetwing are the Bartenders Challenge, Wine Sommeliers Challenge, Tea Sommeliers Challenge, Culinary Challenge and Accommodation Challenge (Jetwing Hotels and Resorts, n.d.)

Also The CSR initiative of Jetwing Hotels, in particular the Jetwing youth Development Project (JYDP), provides significant social advantages, such as giving impoverished youth access to vocational training and employment prospects as well as financial security. The programme raises living conditions, offers educational opportunities, and develops participants' abilities. JYDP lessens urban migration and promotes community uplift by providing rural youth with opportunities. Furthermore, programmes such as 'Taxiline via Community' and 'Lighthouse Community Pool' foster social integration, improve community ties, and heighten cultural awareness. In general, JYDP improves the quality of life for participants and their communities while addressing social and economic disparities, which supports sustainable development.

Challenges and Solutions

In order, for Jetwing to implement ethical leadership there are several hurdles to cross such as the cultural resistance of Sri Lanka, and the hierarchical and authoritative nature of business culture could pose resistance to a more transparent and inclusive leadership style. This is mainly due to the high power distance Sri Lanka poses as per the Hofstede cultural dimension and as a result high power creates room for power inequality (Dimitriou, 2022)

Nonetheless, to combat the issue of power distance and the authoritative nature of leadership it is important to invest in training programs which shed light on the leaders and associates to foster a culture of transparency and equipping ethical decision-making in the cooperate (Dimitriou, 2022)

The challenges possessed when implementing CSR are mainly resource constraints and lack of awareness of the community especially for smaller business, which impacts the long-term impact due to lack of government support implementation of CSR is quite challenging and further with the rise of cost of living across the world and the economic crisis of Sri Lanka had caused several questions in the hospitality industry to include CSR in budget (Shazuli, 2023)

The first stepping stone Jetwing could involve is including a CSR-innovated culture, which can influence the culture inside the organisation provide training and allow the new employees to understand the importance of CSR and ensure they understand CSR is not a marketing tactic but moreover a responsibility of cooperate citizen. Through each CSR activity, it is important to understand the long-term societal and environmental impact (Bohdanowicz & Zientara, 2008)

Conclusion

In Conclusion, The case study of Jetwing Hotels and Resorts shows a noteworthy journey from the company's founding in 1975 to its rise to prominence in Sri Lanka's hospitality sector. Jetwing has demonstrated throughout its history its dedication to moral leadership, corporate social responsibility (CSR), and employee welfare. The cornerstones of Jetwing's company philosophy are an entrepreneurial spirit, environmental awareness, and family-oriented values. Jetwing demonstrates ethical leadership by its compliance with international standards, including the Global Code of Ethics for Tourism, and its extensive human rights policy. The company's dedication to non-discrimination, equality, and employee well-being is a monument to its ethical leadership. Jetwing has demonstrated a dedication to community development through its unique CSR activities, which include the Jetwing Youth Development Programme, Tuk-Tuk project, and help for local farmers. In addition to promoting social progress, these programmes tackle issues such as the dearth of female involvement in the sector. The company's emphasis on the growth and well-being of its workforce through customised training initiatives highlights the value of making human capital investments. Jetwing's dedication to ongoing learning and development is in line with the focus on on-the-job training and skill-enhancement initiatives like the Bartenders Challenge and Culinary Challenge.

Jetwing Hotels & Resorts is a prime illustration of how moral leadership, corporate social responsibility, and worker welfare can be essential to a business's prosperity and make a beneficial impact on the community. Jetwing has established a high standard for the hospitality sector by its unrelenting dedication to responsible tourism and community engagement. It has demonstrated that moral business practices not only lead to success but also have a long-lasting effect on the welfare of individuals and communities.

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CASE STUDY: INNOVATING SUSTAINABILITY: TEEJAY LANKA PLC'S PIONEERING APPROACH TO CHEMICAL MANAGEMENT IN THE TEXTILE SUPPLY CHAIN

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Abstract

Teejay Lanka PLC, a leading fabric manufacturer, has implemented a comprehensive sustainable chemical management system as part of its Abhivarah-2030 strategy. This initiative is aimed at addressing environmental challenges associated with chemical use throughout its entire lifecycle—from procurement and storage to handling, disposal, and monitoring. By aligning with the Zero Discharge of Hazardous Chemicals (ZDHC) framework, Teejay is committed to maintaining responsible and environmentally friendly chemical management practices. The primary objectives of this initiative include reducing environmental pollution through sustainable disposal practices and optimizing chemical inventory management. Teejay has significantly streamlined its chemical inventory, reducing the number from over 600 to approximately 300. This reduction involves replacing hazardous chemicals with safer alternatives, thereby minimizing environmental impact, and enhancing overall sustainability. Teejay's commitment to these practices is further validated by its adherence to global benchmarks such as the Higg Facility Environmental Module (FEM) and the Carbon Disclosure Program (CDP). These standards help ensure that the company meets stringent environmental criteria and demonstrates its leadership in responsible textile manufacturing. By focusing on these sustainable chemical management practices, Teejay not only improves its environmental performance but also reinforces its position as an innovative leader in the industry. In summary, Teejay Lanka PLC's sustainable chemical management system exemplifies its dedication to reducing environmental impact and promoting sustainability. This strategic initiative aligns with global standards and enhances the company's role as a forward-thinking leader in the textile manufacturing sector.

Keywords: Sustainable chemical management, Abhivarah-2030, environmental impact, ZDHC, Higg FEM, Carbon Disclosure Program.

Introduction

Company Overview

Driven by its ambition to become the premier fabric solutions provider for branded clothing, Teejay has established itself as Sri Lanka's leading multinational manufacturer of weft knitted fabrics. Headquartered in Avissawella, the company has expanded its presence both locally and internationally, notably with the development of a state-of-the-art printing facility and a Strategic Business Unit in India, which matches its headquarters in both capacity and capability.

The Teejay Group operates through three key facilities: Teejay Lanka PLC and Teejay Lanka Prints (Private) Limited in Sri Lanka, and Teejay India (Private) Limited in India. This network allows Teejay to offer a diverse range of products and services, including weft knit fabrics, lace dyeing, yarn dyeing, synthetic fabric production, and fabric printing. Strategic partnerships with leading industry players such as Brandix Lanka and Pacific Textiles further enhance Teejay's expertise and market presence.

In response to increasing demands for sustainable production, Teejay is investing in advanced machinery to improve capacity and efficiency while reducing environmental impact. This forward-thinking approach has resulted in significant growth in production capabilities. The company's dedication to innovation and quality has attracted a prestigious client base, featuring global brands like PVH, Calzedonia, L Brands, Decathlon, Marks & Spencer, Nike, Uniqlo, and LIDL.

Teejay's commitment to innovation is also evident in its business incubation department, which focuses on developing new customers and brands. The Group's robust research division, specializing in R&D across yarn, fiber, dyes, chemicals, fabrics, and processes, ensures that it remains competitive in the rapidly evolving textile industry.

Employing over 2,600 people in Sri Lanka and India, Teejay fosters a culture of integrity, innovation, collaboration, and togetherness. As South Asia's largest knit fabric provider, Teejay prioritizes emerging global fashion trends to deliver high-quality products efficiently while continually advancing its workforce and operational excellence.

Project Overview

Abhivarah 2030 Strategy

The Abhivarah 2030 strategy is Teejay Lanka's bold commitment to advancing sustainability within the textile industry. As part of this strategy, the company has prioritized a robust Chemical Management System to mitigate the environmental impact of chemical use, aligning with global sustainability standards such as the Zero Discharge of Hazardous Chemicals (ZDHC) framework. This initiative encompasses every stage of the chemical lifecycle, including procurement, storage, handling, disposal, and monitoring, ensuring that Teejay's operations remain environmentally responsible and efficient.

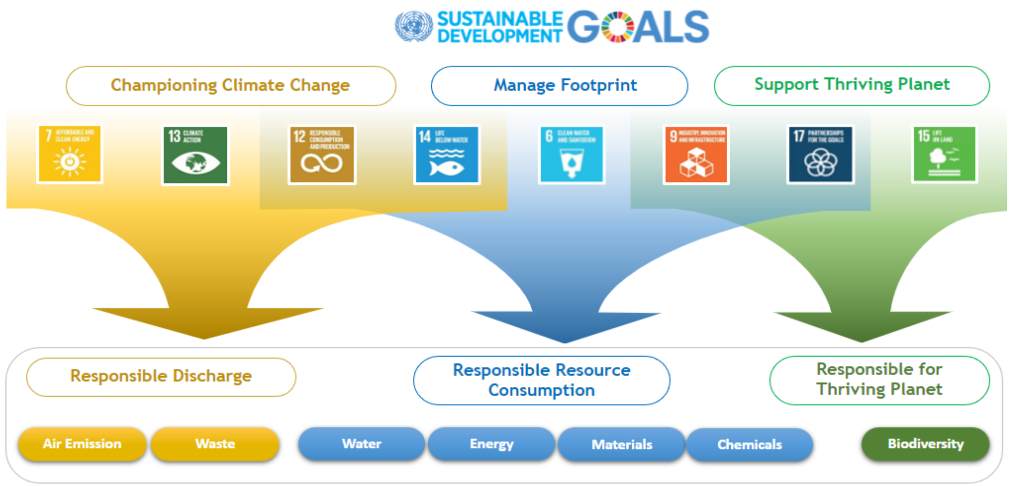

Figure: Abhivarah 2030 Strategy

Implementation and Practices

1. Procurement

The procurement phase involves selecting chemicals based on stringent criteria that emphasize environmental impact and safety. Teejay has established partnerships with suppliers who meet high standards of environmental stewardship. The company evaluates potential chemicals for their sustainability credentials, preferring those with minimal environmental impact and safer profiles. This careful selection process helps in minimizing the use of hazardous substances and promotes the adoption of greener alternatives.

2. Storage and Handling

Proper storage and handling are critical to preventing chemical spills, accidents, and contamination. Teejay has implemented advanced storage solutions that comply with best practices for chemical safety. This includes using specialized containers, implementing spill containment measures, and ensuring that all storage facilities are equipped with necessary safety features. Staff members receive comprehensive training on handling chemicals safely, further reducing the risk of accidents and ensuring adherence to safety protocols.

3. Disposal

Sustainable disposal practices are integral to Teejay’s Chemical Management System. The company has adopted procedures for the environmentally sound disposal of chemical waste, aiming to prevent contamination of soil and water sources. Teejay collaborates with certified waste management partners to ensure that chemical waste is processed and disposed of in accordance with international environmental regulations. This approach not only minimizes environmental harm but also supports Teejay’s broader sustainability goals.

4. Monitoring

Ongoing monitoring of chemical usage and its environmental impact is a key aspect of Teejay’s CMS. The company employs advanced tracking systems to monitor chemical consumption, waste generation, and overall impact. These systems provide real-time data, allowing Teejay to make informed decisions about chemical usage and management. Regular audits and inspections are conducted to ensure compliance with established practices and standards.

5. Inventory Reduction

One of the significant achievements of Teejay’s CMS is the reduction of its chemical inventory from over 600 to approximately 300. This reduction involves the careful evaluation and replacement of hazardous chemicals with safer alternatives. By streamlining its chemical inventory, Teejay not only reduces environmental risks but also enhances overall operational efficiency.

Costs and Challenges

Costs

The implementation of the Chemical Management System involves several financial considerations:

1. Initial Investment: Significant capital is required to acquire advanced machinery and technology for chemical management and monitoring. This includes investment in new storage facilities, tracking systems, and training programs for staff.

2. Supplier Updates: Updating supplier agreements and integrating new procedures into existing operations incurs additional costs. This involves renegotiating contracts, aligning with new sustainability standards, and ensuring that suppliers comply with Teejay's chemical management requirements.

3. Compliance and Certification: Achieving and maintaining compliance with international standards, such as ZDHC and Higg Facility Environmental Module (FEM), involves ongoing costs for audits, certifications, and reporting.

Challenges

Several challenges have been encountered in the implementation of the Chemical Management System:

1. Transition to Safer Chemicals: The shift from hazardous chemicals to safer alternatives required significant changes in procurement processes and supplier relationships. This transition involved extensive research, testing, and collaboration with suppliers to identify and adopt suitable alternatives.

2. Integration with Existing Operations: Integrating new chemical management practices into existing operations posed challenges in terms of operational adjustments, staff training, and ensuring continuity of production processes.

3. Supply Chain Disruptions: Socio-political and geo-political events, such as trade disruptions and economic crises, impacted the textile supply chain and added complexity to the sourcing of raw materials. These disruptions affected both the availability and cost of chemicals, requiring Teejay to adapt its strategies and manage risks effectively.

Benefits

Short-Term Benefits

1. Enhanced Environmental Compliance: The Chemical Management System has improved Teejay's compliance with environmental regulations and standards. By adopting sustainable practices and reducing hazardous chemical use, the company has mitigated the risk of environmental incidents and regulatory penalties.

2. Increased Efficiency: Streamlining the chemical inventory and optimizing chemical usage have led to operational efficiencies. The reduction in the number of chemicals and the adoption of safer alternatives have simplified inventory management and reduced waste.

3. Strengthened Supplier Relationships: Proactive engagement with suppliers has strengthened relationships and fostered collaboration. Teejay's focus on sustainability has enhanced supplier loyalty and facilitated more effective communication and problem-solving.

Long-Term Benefits

1. Reduced Environmental Footprint: Over the long term, Teejay's Chemical Management System contributes to a significant reduction in its environmental footprint. The use of safer chemicals and sustainable disposal practices helps protect natural resources and reduces pollution.

2. Reinforced Market Position: By aligning with global sustainability standards and demonstrating a commitment to responsible manufacturing, Teejay has strengthened its market position. This reputation for sustainability attracts high-profile clients and enhances the company's competitive edge.

3. Innovation and Leadership: Teejay's dedication to innovation and sustainability positions it as a leader in the textile industry. The company's focus on developing new products and practices through its business incubation and R&D divisions supports long-term growth and adaptability.

Conclusion

Teejay Lanka PLC's implementation of the Chemical Management System under the Abhivarah 2030 strategy represents a significant advancement in sustainable supply chain management. By addressing environmental challenges associated with chemical use, the company has set a new standard for responsible textile manufacturing.

The comprehensive approach adopted by Teejay, encompassing procurement, storage, handling, disposal, and monitoring of chemicals, demonstrates a commitment to minimizing environmental impact and optimizing operational efficiency. Despite the challenges and costs associated with implementing the CMS, Teejay has achieved substantial short-term and long-term benefits, including enhanced compliance, increased efficiency, and a strengthened market position.

Teejay's proactive and innovative approach to sustainability not only addresses immediate environmental concerns but also establishes a robust foundation for future growth. As the company continues to adapt to industry trends and global challenges, its commitment to sustainable practices will play a crucial role in shaping the future of textile manufacturing. Through its Abhivarah 2030 strategy, Teejay Lanka PLC has proven itself as a forward-thinking leader, dedicated to advancing sustainability and setting new benchmarks in the textile industry.

SRI LANKA'S SHIFT TOWARDS SUSTAINABLE AGRICULTURE: A CASE STUDY OF THE 2021 AGROCHEMICAL AND CHEMICAL FERTILISER IMPORT BAN

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Abstract

The Sri Lankan tea industry, integral to its economy, has historically relied on chemical fertilisers to enhance productivity. However, this reliance has led to significant environmental challenges such as groundwater contamination and soil degradation, prompting concerns regarding its long-term sustainability. To address these issues, the Sri Lankan government banned chemical fertilisers on May 6, 2021, intending to shift the country's agriculture, including tea cultivation, to organic practices. This case study examines the global shift towards sustainable agriculture, focusing on Sri Lanka's policy shift and its implications for the tea industry. Specifically, it explores strategies local tea companies adopt to transition to organic farming and promote environmental sustainability, such as agroforestry, Rainforest Alliance certifications, and rainwater harvesting. Despite the government's good intentions, the sudden transition to organic farming in Sri Lanka posed challenges for farmers, resulting in reduced crop yields, and severe economic repercussions, including heightened food inflation. Nonetheless, the industry achieved premium price payouts and maintained steady procurement, alongside notable increases in export earnings, reflecting positively on the industry's ability to adapt and thrive under new agricultural methods. Additionally, insights from countries like Sikkim and Bhutan, where successful transitions to organic farming occurred through gradual implementation and comprehensive farmer education, underscore the necessity of well-planned transition strategies and ongoing support systems. The research methodology included extensive qualitative and quantitative secondary research, utilising scholarly journal articles, reputable news articles, annual reports, and government and company websites. Moreover, data for this case study was collected through primary interviews with representatives from the Sri Lankan tea sector. Overall, this case study asserts the importance of meticulous policy planning and support systems to achieve sustainable agriculture in the long run.

Keywords: environmental sustainability, organic farming, chemical fertiliser ban, tea industry, Sri Lanka

Introduction

The tea industry in Sri Lanka plays a vital role in the country's economy, with export earnings reaching US$ 450.23 million from January to April 2024, an increase of 10.44% year-on-year (Central Bank of Sri Lanka, 2024). Historically, Sri Lanka's tea industry has heavily relied on chemical fertilisers to maintain quality standards and high yields (Alahakoon et al., 2022). This reliance underscores the sector's vulnerability to environmental issues such as water pollution and soil degradation, which have increasingly raised concerns regarding long-term sustainability (Alahakoon et al., 2022). In response to these challenges, the Sri Lankan government imposed a controversial ban on importing chemical fertilisers, aiming to transition the country to organic farming as an integral part of broader environmental sustainability efforts on May 6, 2021 (Weerahewa & Dayananda, 2023). In addition, the government perceived this large-scale chemical fertiliser import ban as an immediate opportunity to alleviate the foreign exchange shortage (Dolrach & Gunasekara, 2023). The purpose of this case study is to critically discuss the global shift towards sustainable agriculture, the implications of Sri Lanka's 2021 fertiliser ban, the strategies adopted by local tea companies to promote environmental sustainability, and the successes and challenges of the policy.

Background

A Global Shift to Sustainable Agriculture

The global shift towards sustainable agriculture represents a concerted effort to minimise the environmental impact of conventional farming practices. Research by Srivastav et al. (2023) elucidates that excessive use of chemical fertilisers within the tea industry, such as nitrogen and phosphate, can degrade environmental quality. This nutrient overload contributes to eutrophication, depleting water oxygen levels, harming aquatic life, and causing groundwater contamination (Srivastav et al., 2023). Furthermore, intensive chemical fertiliser use poses risks to soil health. Le et al. (2021) findings indicate that chemical fertilisers like ammonium nitrate significantly lower soil pH and accelerate soil acidification when exceeding 50 kg/ha/year. For instance, applying fertilisers at 2700 kg/ha results in only 18.3% of the nitrogen absorbed by the tea plants, with 52% retained in the soil and 30% lost through runoff (Le et al., 2021). Therefore, adopting sustainable agricultural practices is imperative to minimise the industry's environmental footprint.

On the other hand, organic farming is gaining recognition as a sustainable solution to these issues. By relying on natural processes, organic farming mitigates groundwater contamination and enhances soil health (Aulakh et al., 2022). This is evident in a European comparative study that found areas with intensive organic farming had 40% less nitrate in groundwater than regions with conventional farming (Panday et al., 2024). Additionally, a meta-analysis revealed that organic farms support more plant and animal species on average than conventional farms, and such practices significantly reduce soil erosion, with estimates suggesting that soil erosion potential can be reduced by over 61% with organic methods (Panday et al., 2024). Moreover, organic farming practices such as cover cropping and crop rotation minimise the prevalence of pests by disrupting the pest life cycles and creating unfavourable conditions for their proliferation (Gamage et al., 2023). Henceforth, organic farming is deemed a key approach for long-term agricultural sustainability.

Fertiliser Ban Incident

Sri Lanka's transition to organic farming was characterised by a major policy shift in 2021. From the onset of his presidency, Gotabaya Rajapaksa advocated stringent regulation of agrochemicals. In his initial address to parliament in January 2020, he outlined a vision to transform Sri Lanka's agricultural sector by adopting organic fertilisers within the next decade (Dorlach & Gunasekara, 2023). On April 27, 2021, Rajapaksa's cabinet legislated a ban on all chemical fertiliser imports (Dorlach & Gunasekara, 2023). According to Perera Bathige and Moseley (2024), this decision was integral to a strategy aimed at promoting sustainable agriculture and mitigating environmental health hazards linked to chemical usage. Nonetheless, rather than implementing the ban gradually, it took immediate effect on May 6, 2021 (Dorlach

& Gunasekara, 2023). This abrupt change posed challenges, resulting in immediate impacts on crop yields and farmers' livelihoods.

The most significant impact was observed in the tea industry, a fundamental pillar of Sri Lanka's economy. Tea farmers, who traditionally depended on chemical fertilisers to achieve high yields, struggled with the limited availability of organic alternatives, leading to a decline in tea yields (Parkin, 2023). For instance, in Ratnapura, tea pluckers' weekly yield decreased sharply from 35 kg to less than 25 kg (Wipulasena and Mashal, 2021). Moreover, when the government lifted the ban in 2021, it allowed only private companies to import fertilisers (Perera Bathige & Moseley, 2024). Consequently, smallholder farmers lost access to the subsidised fertilisers they had previously received from the government (Perera Bathige & Moseley, 2024). As a result, small-scale farmers experienced a 50% to 60% reduction in crop yields (Ellis-Petersen, 2022). Therefore, the broader implications for food security and livelihoods highlighted the urgent need for balanced policies that support environmental conservation and agricultural viability.

In terms of social implications, the tea industry's response to the fertiliser ban was multifaceted, as it involved resistance and adaptation. Firstly, numerous farmers lobbied against the ban, emphasising that the sudden shift jeopardised farmers' livelihoods. According to Ellis-Petersen (2022), over 300 farmers staged protests calling for President Rajapaksa's resignation, underscoring their discontent with the sudden change. Moreover, farmers urged the government to implement a hybrid policy that accommodates both organic and chemical fertilisers (Jayasinghe, 2021). These protests highlighted the insufficient availability of organic fertilisers and the lack of a gradual transition plan as critical issues that should have been addressed. Concurrently, the tea industry also began adapting to the new regulations and seeking organic alternatives. For example, organisations such as the Movement for National Land and Agricultural Reform (Monlar) intervened to support farmers. According to Parkin (2023), Monlar began collaborating with approximately 2,000 farmers across the nation, offering training on alternative farming techniques. These initiatives involved experimenting with organic composting and natural pest management techniques (Parkin, 2023). In essence, despite the initial resistance, these actions laid the groundwork for long-term sustainability in tea cultivation.

Discussion

Strategies Employed to Transition to Organic Farming and Promote Environmental Sustainability

One significant strategy Sri Lankan tea companies embraced to shift towards organic agriculture and boost environmental sustainability involves adopting agroforestry practices. According to Peng et al. (2024) and Zhu et al. (2020), agroforestry offers considerable promise in enhancing livelihoods, food security, and environmental conservation efforts as it integrates diverse tree species with crops, which can improve soil fertility, promote biodiversity, and mitigate climate risks. In Sri Lanka, Dilmah, a prominent tea company, has recognised the benefits of agroforestry and partnered with Kahawatte Plantations and the Agriculture Innovation Nucleus to pioneer an agroforestry model (Dilmah Family, 2024). With this model, Dilmah plans to plant commercial crops such as pepper, durian, rambutan, and garcinia alongside tea fields to improve crop yields, manage water resources, and enhance resistance to pests and diseases (Dilmah Conservation, 2024). In hindsight, these efforts underscore the industry's commitment to organic farming, fostering a resilient and ecologically balanced tea production system.

In addition to integrating agroforestry practices, the Sri Lankan tea industry has significantly bolstered environmental sustainability by adopting certifications such as the Rainforest Alliance. As per Atupola and Gunarathne (2022), the Rainforest Alliance guarantees that tea plantations adhere to rigorous global standards, encompassing the protection of wildlife habitats, environmental conservation, and the welfare of local communities. Additionally, out of the 20 privately owned companies in Sri Lanka, 18 have obtained Rainforest Alliance certification (Daily Mirror, 2023). According to the Daily Mirror (2023), this certification now covers approximately 170 estates, signalling a substantial leap forward in promoting environmental sustainability within the country's tea industry. For example, all 17 plantations under Watawala Plantations, which includes the tea brand Zesta, have earned the Rainforest Alliance certification (Fernando, 2020). Hence, such actions demonstrate the industry's proactive steps towards prioritising environmental sustainability across Sri Lanka's agricultural landscape.

Finally, the adoption of rainwater harvesting has emerged as a pivotal strategy for enhancing water conservation practices within the Sri Lankan tea industry, contributing significantly to its environmental sustainability efforts. According to Teston et al. (2022), rainwater harvesting systems are implemented in tea companies to capture and utilise rainwater effectively, minimising dependency on external water sources and enhancing overall water use efficiency. For example, the Bogawantalawa Tea Estates in Sri Lanka have integrated rainwater harvesting systems to minimise their waste footprint (Bogawantalawa, 2024). Additionally, Kahawatta Plantations, a subsidiary of the MJF Group of Dilmah, fulfils part of its water requirements through rainwater harvesting with a collective capacity of 129,799 m3, using methods such as earthen dams, gravitational dams, and rooftop collection tailored to the geographical conditions of each estate (Dilmah, 2021). Thus, these efforts showcase the tea industry's approach to integrating water management practices, marking a significant step towards environmental sustainability in Sri Lanka's tea-growing regions.

Successes and Challenges of the Policy

The policy to ban chemical fertilisers and transition to organic farming has had mixed outcomes in Sri Lanka. On the positive side, in support of smallholder tea suppliers, companies adopted sustainable farming methods and offered short-term loans to uphold the production of high-quality tea leaves (Tea Smallholder Factories, 2023). According to Tea Smallholder Factories. (2023), this approach has resulted in premium price payouts and consistent procurement from smallholders. For example, Tea Smallholder Factories PLC's facilities maintained a 5.33% price premium above the national average for low-grown tea, exceeding the previous decade-long record of 3.93% (Tea Smallholder Factories, 2023). This indicates a strong market appreciation for the quality and sustainability of organic tea, highlighting the industry's successful adaptation and resilience under new agricultural practices. Furthermore, during the 2022 macroeconomic crisis, the tea industry experienced a significant rise in export earnings driven by increased tea prices and the devaluation of the Sri Lankan rupee against the US dollar (Tea Smallholder Factories, 2023). Hence, these outcomes demonstrate the resilience and potential of Sri Lanka's tea industry to achieve sustainable growth through organic farming practices despite facing economic challenges.

However, the sudden implementation of the ban triggered notable challenges across the agriculture sector. Firstly, the sudden imposition of restrictions caught farmers off guard, leading to widespread chaos. As per Ellis-Petersen (2022), the majority of farmers were unfamiliar with effective organic farming techniques, leading many to protest by halting farming activities together. The absence of alternatives resulted in declines in crop harvests, triggering a severe economic crisis (Parkin, 2023). This turmoil culminated in Sri Lanka defaulting on $40 billion in foreign debt in 2022 (Parkin, 2023). Additionally, the combination of the fertiliser ban and adverse weather conditions further decreased crop yields, pushing inflation to a 47-month high of 8.3% in October 2021, with food inflation reaching 11.7% (Jayasinghe, 2021). Therefore, these factors collectively underscored the significant economic and environmental challenges of the abrupt transition to sustainable agriculture.

Comparatively, similar situations in other countries provide valuable lessons and perspectives. For example, Bhutan's government pursued a gradual transition to becoming the world's first organic nation by 2020 (Feuerbacher et al., 2018). Additionally, Bhutan implemented its transition to organic farming gradually to allow its farmers to adapt steadily and avoid sudden drops in agricultural output, which parallels the challenges Sri Lanka faced with its sudden fertiliser ban (Feuerbacher et al., 2018). Moreover, in 2003, Sikkim initiated a visionary plan to become India's first organic state, advocated by the former Chief Minister's announcement and supported through legislative efforts (Das, 2023). In 2015, under the National Mission on Sustainable Agriculture, subsidies were provided to local small-scale farmers for organic certification through the participatory guarantee system, with extensive financial backing from the central government (Babajani et al., 2023). As a result, Sikkim successfully converted 75,000 hectares of farmland, involving 66,000 farmers, achieving the milestone of being declared India's first entirely organic state in 2016 (Babajani et al., 2023). These examples underscore the critical role of a well-structured transition plan, robust support systems, and continuous education in guaranteeing the success of organic farming policies. As Sri Lanka continues to refine its approach, drawing insights from these global experiences can help address challenges and bolster the overall sustainability of its tea industry.

Conclusion

This case study explored Sri Lanka's shift towards sustainable agriculture after the 2021 ban on chemical fertilisers, focusing on the tea industry. Initially, the abrupt transition led to significant disruptions, including reduced crop yields, economic turmoil, and heightened inflation, creating widespread chaos among the nation's farmers. However, the industry's adoption of various strategies, such as agroforestry, Rainforest Alliance certifications, and rainwater harvesting, demonstrated resilience and potential for sustainable growth. Despite initial lapses, these sustainable approaches helped the tea industry achieve premium price payouts, steady procurement, and increased export earnings, indicating a positive adaptation to new agricultural practices. Comparative insights from other regions, like Sikkim and Bhutan, highlighted the importance of gradual implementation and robust farmer support for successful organic transitions. Overall, while the initial challenges were profound, the ongoing adaptation and strategic initiatives indicate a positive trajectory towards achieving long-term environmental sustainability in Sri Lanka's tea industry.

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EXPLORING CIRCULAR ECONOMY PRACTICES IN TEXTILE WASTE MANAGEMENT: A CASE STUDY ON TEXTILE INDUSTRY IN SRI LANKA

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Abstract

The traditional textile industry, a mainstay of the Sri Lankan economy, grapples with a growing concern: textile waste. This case study explores the socio-economic impacts of implementing circular economy (CE) principles in the Sri Lankan textile industry, focusing on strategies for managing textile waste. The key objective of this paper is to examine how the CE principles can mitigate environmental harm and enhance resource efficiency. This case study employs qualitative methodology, extracting secondary data from scholarly articles, industry reports, and relevant case studies. Findings reveal that leading textile companies within Sri Lanka, such as Teejay Lanka, MAS Holdings, and Brandix, have successfully integrated CE practices, including waste segregation, recycling initiatives, and advanced wastewater treatment. These initiatives have led to many environmental benefits, such as reduced waste generation and improved water conservation. Economically, the adoption of CE principles has enhanced resource efficiency, leading to cost savings and the creation of new business opportunities. Socially, these practices have also contributed to job creation and economic redistribution. Despite these positive outcomes, challenges remain in regulatory and political domains, which must be addressed to realize the potential of CE in the textile industry. This paper aims to underscore the transformative potential of CE practices for achieving sustainability and socio-economic development in Sri Lanka.

Keywords: Textile industry, Circular Economy, Waste Management, Sustainability, Socio Economy

Introduction

Sri Lanka's thriving textile industry plays a pivotal role in the nation's economy, due to its significant contributions. However, its success is not without environmental consequences, as the industry generates a substantial amount of diverse waste that can inflict harm on the surrounding ecosystems. Recognizing this challenge, leading textile companies are actively demonstrating a commendable commitment to environmental responsibility and are exploring a shift from the traditional linear economic model towards a circular economy framework that prioritizes minimizing waste generation and maximizing resource efficiency. As the industry shifts towards a sustainable future, companies follow general waste management strategies such as segregating waste at the source, training workers for proper waste management, implementing colored bin systems, partnering with special recyclers, and implementing advanced wastewater systems (MAS Holdings, 2022; Somarathne et al., 2023). Furthermore, leading companies in the industry, such as MAS, Brandix, and Teejay Lanka, have taken special initiatives to further contribute to a sustainable future.

Therefore, this case study delves into the current state of waste management within the Sri Lankan textile sector, by critically analyzing scholarly articles, reports, and relevant resources, to identify potential improvements by integrating CE principles. Furthermore, it will examine the environmental, economic, and resource-efficiency benefits associated with CE practices. This comprehensive analysis will provide valuable insights into the transformative potential of CE for the Sri Lankan textile industry, ultimately contributing to broader socio-economic development in the country.

Background

Textile Industry Background

The Sri Lankan textile industry is a cornerstone of the nation's economy, generating $4.86 billion in revenue, contributing to 41.82% of the Sri Lankan export revenue in 2023 (Sri Lankan Development Board, 2024). Additionally, the industry directly employs around 350,000 employees and is expected to grow its revenue export target to $8 billion by 2025 (Sri Lankan Development Board, 2024). However, the industry faces the pressing challenge of textile material wastage, and the primary culprits of raw material write-offs in the textile sector can be identified as excess fabric ordering and yield per yardage savings (Ranasinghe & Dilanthi, 2015). Furthermore, along with raw material waste, the industry produces 30,000 tons of waste annually, which includes cardboard, paper, polythene, plastic, food, metal, e-waste, and chemical waste (De Fonseka, 2023; Melan, 2023). According to De Fonseka (2023), the common disposal method of the textile industry is landfilling, where 75% of the fabric waste is discarded, while only around 25% of the fabric waste is reused or recycled, and less than 1% is closed looped back into clothing manufacturing.

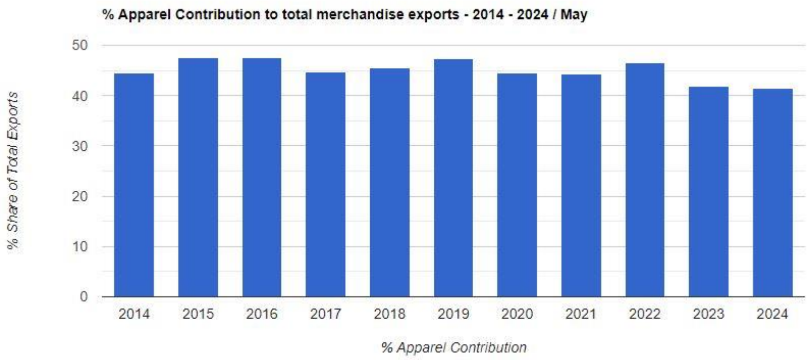

Figure 1 - Apparel Contribution to total merchandise exports 2014-2024/May (Sri Lanka Export Development Board, 2024)

The limitations of the traditional linear economy model, characterized as a "take, make, consume, and discard" approach, have significantly contributed to material waste, along with environmental degradation and depletion (Jayakodi & Thayaparan, 2021). Hence why, Jayakodi and Thayaparan (2021) propose a Circular Economy (CE) as a paradigm shift toward a more sustainable future, as a circular economy can be highlighted as a viable solution that offers a framework that minimizes waste and maximizes resource efficiency.

The CE model offers a promising alternative by emphasizing the "reduce, reuse, recycle, renew and regenerate" approach, and aims to keep materials in use for an extended period, minimizing waste generation, and reducing the need for new raw materials (Waikar & Sadgir, 2022). The study has identified several Sri Lankan textile companies such as Teejay Lanka PLC, MAS Holdings, and Brandix, have already begun integration of CE principles into their operations (Brandix Lanka (PVT) Ltd, 2024; MAS Holdings, 2023; Melan, 2023).

Implementation

According to substantial secondary research, the Sri Lankan textile sector has incorporated various circular economy methods. General initiatives such as those used by textile manufacturers include classifying generated waste at the source, storing it, and delivering it to collectors for recycling and co-processing. Different kinds of waste, including food, paper, plastic, chemicals, and toxic waste, are collected separately by each department's unique garbage collection system in apparel companies. Additionally, workers receive a period of instruction in waste management and waste disposal, considering their different educational backgrounds. (Somarathne et al., 2023)

Moreover, to make waste segregation easier at its source, a colored bin system has been implemented in Sri Lanka. Paper and cardboard go in dark blue bins, glass goes in red bins, fabric waste goes in dark green bins, and plastic and polythene go in yellow bins. While hazardous and chemical trash are kept in limited locations, specific spaces are set aside for the storage of paper and fabric waste (Somarathne et al., 2023). The majority of apparel companies send their garbage to specialized recyclers such as INSEE Eco cycle which handles mechanical and hazardous waste, Neptune Recyclers handles e-waste, and Ceylon Garbage Management handles paper waste (Somarathne et al., 2023). Another study has found common waste disposal methods used in the Sri Lankan textile industry such as open dumping, energy recovery, landfilling, reuse and recycle, as shown in Figure 1.

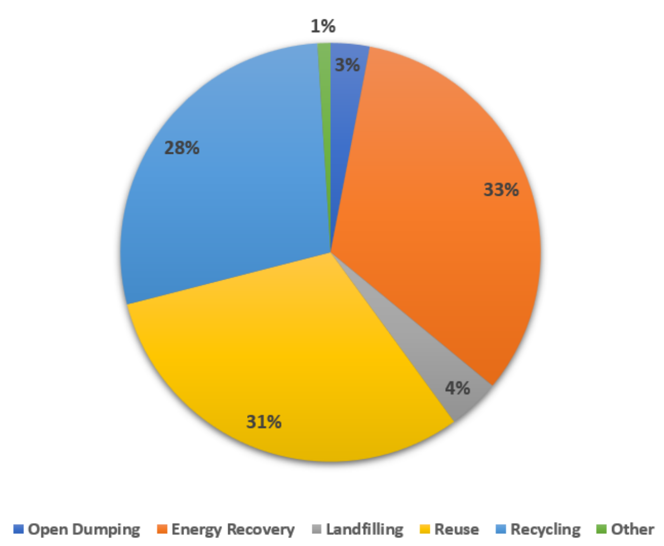

Figure 2: Waste Disposal (Edirisinghe et al., 2023)

Furthermore, a lot of businesses have also installed cutting-edge wastewater treatment facilities to turn wastewater into bilge water, which guarantees that it is safe to release back into the environment by eliminating pollutants, chemicals, bacteria, and other contaminants (Somarathne et al., 2023).

Additionally, a deeper dive into the research reveals a commitment to circular economy principles among leading textile companies such as Teejay Lanka, MAS Holdings and Brandix. Firstly, Teejay Lanka, being the biggest producer of circular knitted fabrics, represents the "reduce, reuse, recycle, renew, and regenerate" approach to solid waste management. Their goal is to minimize waste creation while achieving 100% added value (Melan, 2023). They make sure that materials and goods are used, recycled, composted, and reused by incorporating circularity ideas into every aspect of their business processes (Melan, 2023). This translates to wider disposal systems, supplier accountability, and complete disposal of waste with segregation. Notably, Teejay Lanka maximizes resource efficiency by turning fly ash from coal into natural fertilizer (Melan, 2023).

Secondly, pre-consumer waste reduction and repurposing are the main priorities of top apparel firms in Sri Lanka, such as MAS Holdings. They reduce the amount of waste produced by turning leftover fabric scraps from production into fresh yarn and fabric (MAS Holdings, 2022). By working with Eco-Spindles, MAS goes above and beyond by gathering and recycling fugitive plastic waste—such as PET bottles—from Sri Lankan coasts and permitted disposal sites. Through this project, MAS can use recycled PET in items such as the ICC Cricket World Cup shirts, while also making a positive environmental impact. With 99.9% of all trash averted from landfills and 63.8% of all trash having its value increased by recycling, reusing, or upcycling by 2022, they demonstrate their dedication to waste diversion. (MAS Holdings, 2022)

Thirdly, Brandix, another massive company, has made a stronger commitment to waste management and circularity. Approaches include efforts for energy efficiency and carbon sequestration, as well as better wastewater treatment and rainfall collection (Soysa, 2024). Brandix promotes a longer product lifecycle by giving priority to durability, reuse, recyclability, and remanufacturing while creating apparel (Soysa, 2024). Materials that are biobased and biodegradable are also investigated as sustainable substitutes. Furthermore, they repurpose 90% of cotton cut waste into new yarn and clothing during the production cycle (Soysa, 2024). Their goals go beyond waste generated before consumer use. With a focus on worn garments for possible reuse, they are aggressively investigating "post-consumer" sources. This calls for working with businesses to create mechanisms for collection and reverse logistics in order to motivate customers to participate in the circular economy. (Soysa, 2024)

These comprehensive approaches highlight the industry's commitment to sustainable waste management and circular economy principles.

Discussion

Social Implications of Circular Economy

When implementing circular economy by repurposing used clothes it can have a variety of benefits. Employment opportunities arise as the circular economy promotes reuse and recycling activities, leading to job creation in these sectors and balancing job reductions in traditional apparel production. In addition, by providing job opportunities for people it increases the quality of life by having decent and stable jobs. Furthermore, this promotes social inclusion of marginalized communities (Sulich & Sołoducho-Pelc, 2022). This was observed when MAS implemented Clean Lanka which improved waste management practices across its facilities, promoting the development of waste infrastructure and education within the community. The project extended to schools and local communities in the pursuit of a zero-waste future, which demands the involvement of a workforce dedicated to managing these activities and educating participants (MAS, 2024)

Economic redistribution is also a significant benefit, as not-for-profit firms reinvest profits into social causes, supporting marginalized individuals and fostering a more equitable distribution of economic resources. These aspects not only enhance social justice and inclusion but also contribute to a more balanced and sustainable economic system, promoting long-term socioeconomic well-being (Persson & Hinton, 2023).

Successes and Challenges of Circular Economy

It is important to understand the impact on socio-economic factors due to circular economy techniques conducted by different organizations in Sri Lanka. According to Edirisinghe et al. (2023), cotton is made up of natural fibers but has a long process of converting cotton to fabric, resulting in a negative environmental impact. They reason that material recovery methods can be utilized for energy recovery, reducing the strain on natural resources. This involves controlled burning of fabric waste to produce energy. Furthermore, the process of producing energy with material recovery methods aligns with the circular economy as garbage can be utilized to produce heat and light for the factories (Edirisinghe et al., 2023). In addition, the waste fabric can be converted to usable fabric, allowing companies to gain a projected economic value of almost USD 12.74 at present. However, after the installation of an innovation sandpit, which brings people from different fields to create systems that focused on sustainability. Furthermore, the report describes how different offcuts of materials are sectioned and how five methods can be used to utilize fabric wastes which prevents 600 tones of fabric reaching landfills (Park & Evans, 2017).

Traditionally, water is used to dye fabrics; this water is often untreated and released into rivers. Annually, the industry employs 93 billion cubic meters of water, which could be significantly reduced through methods that save 95% of the water used in traditional methods, thereby significantly reducing water contamination by chemical toxins (Dissanayake & Weerasinghe, 2022). Moreover, products in the circular economy can be redirected to nature. However, certain materials are synthetic and cannot follow this cycle, hence, companies increase product life, which further reduces the risk of unwanted clothing ending up in landfills because they cannot be repaired. Additionally, zero-waste design and utilization of demand-driven productions have reduced the amount of waste during the production process and prevented overproduction of clothing (Dissanayake & Weerasinghe, 2022)

While these methods positively impact socio-economic factors, their implementation can be challenging. This difficulty arises because the governing bodies responsible for guidelines lack control over decision-making and regulations due to political and legal constraints (Peiris & Dayarathne, 2023). Therefore, to fully realize the potential benefits of the circular economy in Sri Lanka's apparel industry, it is crucial to address these regulatory and political challenges. By doing so, the industry can make significant strides towards sustainability, economic equity, and social inclusion, aligning with global trends and contributing to overall societal well-being.

Conclusion

This case study discusses how the Sri Lankan textile industry is faced with the challenge of waste management, and is shifting towards a circular economy, from the traditional linear model to better manage their waste. Through adopting circular economy principles, companies are focused on reducing waste generation, reusing scraps, and recycling materials. Furthermore, leading companies in the industry, such as MAS Holdings, Brandix, and Teejay Lanka, have shown a deeper dedication to the circular economy concept through innovative practices like repurposing fabric scraps, using recycled materials, and exploring biobased materials.

In addition to being sustainable, a circular economy offers social benefits like job creation in the recycling sector and improved livelihoods, as well as promoting economic benefits through resource efficiency, reduced reliance on virgin materials, and reuse of fabric scraps, generating additional revenue streams.

However, challenges such as regulatory and political limitations can hinder the full potential of the circular economy, and overcoming these obstacles is crucial for the industry to fully embrace a sustainable future, and contribute to a more equitable, and socially responsible future.

Overall, the Sri Lankan textile industry is making significant progress toward a more sustainable future through adopting circular economy principles, and through continuing the process, the Sri Lankan industry can become a global leader in sustainable practices and ensure long-term success while contributing to a healthier planet and a more just society.

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INITIATING A NEW MARKETING STRATEGY FOR 'ABC' FASHION BRAND BY INTRODUCING AN EXCLUSIVE SHOPPING EXPERIENCE BY TARGETING CUSTOMERS' SENSORY INFORMATION

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Abstract

This case study proposes new marketing strategies for ABC fashion brand to address declining sales over recent years, drawing on psychological concepts and secondary research from Mistra Future Fashion's (MFF) consumer survey. Given constraints in time, resources, and budget, MFF's survey—covering clothing consumption in the USA, Poland, Germany, and Sweden—provides valuable insights for ABC. The survey, with responses from 4009 individuals (836 from the USA, 1143 from Germany, 985 from Poland, and 1045 from Sweden), highlights varying clothing consumption patterns across these countries in terms of volume, material preference, and environmental friendliness. The report evaluated MFF's results with ABC's aims and concluded new marketing strategies by justifying empirical research. It is recommended to provide a unique shopping experience to consumers by targeting their sensory information and differentiating products according to demographic segmentation such as age, gender and country. To measure the effectiveness of these strategies, further consumer surveys are suggested, addressing the current lack of data. This study underscores the importance of a multi-sensory retail experience, demographic considerations, and cultural factors in influencing fashion consumer behaviour.

Keywords: Clothing Consumption Patterns, Consumer psychology, Marketing Strategies, Multi-sensory Retail Experience, Sustainable Marketing Strategy

Rationale of the Study

ABC, a luxury fashion brand established in 2016 in the USA, employs over 600 staff, including 300 designers, and operates 15 stores across Europe, with locations in Germany, Poland, and Sweden, and its head office in New York. Renowned for its unique, high-quality products from 300 independent designers worldwide, ABC offers trendy fashion clothing for both women and men. The brand is expanding its range to include children's clothing, catering to the entire family. Committed to providing high-quality products and services, ABC leads a socially conscious business by promoting environmentally friendly clothing and adhering to a no-animal testing policy.

ABC fashion brand has experienced declining sales, prompting the need for new marketing strategies that draw on psychological concepts and existing consumer data. This study utilizes insights from Mistra Future Fashion's (MFF) consumer survey, which examined clothing consumption patterns in the USA, Poland, Germany, and Sweden, revealing variations in consumption volume, material preference, and environmental friendliness. By leveraging these insights, the study aims to identify effective strategies to enhance ABC's market positioning within its resource and budget constraints. Key recommendations include creating a unique multi-sensory retail experience and tailoring products based on demographic segmentation to appeal to diverse consumer preferences. This approach aligns with ABC's commitment to sustainability and positions the brand to better meet the evolving needs of its target markets, making it essential to conduct further consumer surveys to evaluate the effectiveness of the proposed strategies.

Problem Statement

Due to declining sales, ABC management is planning new market strategies. This case study aims to identify and introduce new marketing strategies for ABC based on psychological theories and concepts. To attract consumers, ABC has revamped its retail infrastructure to provide an exclusive shopping experience by enhancing sensory information, including colour, lighting, design, scent, music, and touch. A new suggestion involves introducing child and baby wear to promote environmentally friendly production methods, positioning the brand as a family clothing icon rather than focusing solely on women and men. Additionally, advertising and pricing strategies will be discussed along with psychological approaches. The research question of this study is how ABC Fashion can reverse declining sales by developing new marketing strategies based on demographic and sensory factors.

Research Objectives

- Analyse clothing consumption patterns in the USA, Poland, Germany, and Sweden using Mistra Future Fashion's (MFF) consumer survey data.
- Identify psychological factors influencing consumer behaviour related to sensory experiences in retail settings.
- Explore the market potential for expanding ABC's product line to include children's clothing and assess its impact on brand positioning and sustainability.
- Recommend marketing strategies for ABC fashion brand that enhance the retail experience through sensory elements like colour, lighting, and scent.

Methodology

To gather data on clothing consumption in Germany, the USA, Poland, and Sweden, Mistra Future Fashion (MFF) used secondary data from consumer surveys rather than conducting primary research, due to time and budget constraints. Consumer research is essential for marketing management, new product development, market analysis, and strategy creation (Geusen, Hultink & Eling 2013; Schöps & Jaufenthaler, 2024). Moreover, blue-chip companies favour consumer surveys for their efficiency and cost-effectiveness (Chakrabarti & Baisya, 2009). However. secondary data, while cost-saving and providing high-quality information, may not match the specific needs of a study (Lowry, 2015).

The Mistra Future Fashion (MFF) programme, initiated in 2011, involves 40 industry partners and focuses on sustainable fashion (Mistra Future Fashion, 2024). Their survey, involving approximately 1,000 respondents per country, examined cultural and market differences in consumption habits, highlighting variations in consumption volume, acceptance of new business models, preferred shopping outlets, and spending (Nielsen & Gwozdz, 2017). Significantly, the survey's instruments were validated by industry experts, targeting consumers aged 18 to 65. The validity and accuracy of the survey were determined through a pilot survey and respondents were incentivised.

Qualtrics were used for the data collection and descriptive statistics including ANOVA, Kruskal-Wallis H Test and independent t-test were analysed using SPSS statistical software to ensure accurate and statistical significance of data. Notably, the final survey results were based on 4009 respondents which overrepresented 58.19% of female respondents and the average age was 43.16 years (Nielsen & Gwozdz, 2017: 17).

The survey results showed that consumers purchased an average of 5.74 fashion items worth €153.79 in the past three months (Nielsen & Gwozdz, 2017:13), with Polish and American consumers buying the most. Shopping malls and online platforms were preferred shopping-choices, while small boutiques and swapping were less favoured. The survey also revealed a moderate level of environmentally friendly clothing consumption, surprisingly with Sweden scoring the lowest among the countries surveyed.

Findings

The MFF's research results indicate different consumer patterns among different countries, age group and gender by reviewing the applicability to ABC. MFF's research results are measured using descriptive statistics, ensuring the validity of research conclusions. Background variables such as age, gender, country, education level, region, income, marital, and employment status are considered in the survey (Nicholson & Bennett, 2008). Empirical studies suggest segmenting consumer groups by age, income, and sociological differences since older respondents provide more detailed reviews, and high-income respondents from trendy areas are more detail-oriented (Moskowitz, Gofman, & Beckley, 2006; Ting et al., 2021). Similarly, high-income respondents and respondents who live in trendy areas are driven to be more sensitive to the details of products. Thus, MFF should apply these parameters to ensure reliable and applicable findings.

Additionally, focus group interviews assess alternative business models and past fashion behaviour (Nielsen & Gwozdz, 2017), indicating that MFF employs a mixed methodology to ensure validity. MFF has explored consumer preferences for new business models, including fashion rentals, clothing libraries, online selling, traditional repairs, fashion leasing, swapping, and incentivised retake systems, with repair services and online selling being the most common (Nicholson & Bennett, 2008). Nonetheless, results did not determine the impact of sensory information on consumer buying behaviour or if the 'fashion family concept' would boost sales.

Recommendations

A robust marketing strategy is crucial for profit-making, gaining a competitive edge, and attracting consumers (Chakrabarti & Baisya, 2009). ABC's new marketing strategy focuses on providing a unique store experience, with the dwell zone (front area) highlighted for promoting 'new arrivals' or the 'season's look' (Crewe, 2015). Store layout design should effectively use colour, decorations, smell, lights, and music to influence customers (Choi & Lee, 2017). The triangular balance technique is recommended for displaying luxury items like wristwatches, jewellery, and handbags at eye level to enhance attractiveness. Bargain baskets and special offers should be placed in visible aisles.

Advertising strategy is also critical, with celebrity endorsements suggested to create an intimate perception, allowing consumers to emulate celebrities' attractiveness (Knoll & Matthes, 2016; Shah, Olya & Monkhouse, 2023). This approach can enhance consumer appeal and demand, as celebrities' values and characteristics positively influence the perception of ABC's fashion items. Informational susceptibility is also impacted, as consumers observe celebrities' behaviours to gain product information (Farber, Lee, & Nan, 2004). However, ethical considerations are vital, as using pseudo-child techniques, where children wear adult dresses and act like children, as seen in brands like Calvin Klein and Gucci, can lead to negative outcomes such as teen pregnancies and sexual exploitation (Merskin, 2004).

The branding strategy should align with the products and services offered, with appropriate wording and colour usage (Choi & Lee, 2017). Implementing the reciprocity technique, where consumers receive benefits from purchasing ABC products, can enhance branding. Promoting exclusivity by displaying a limited number of items from each category can create a perception of scarcity, making consumers feel part of an exclusive group.

Market Strategy

The MFF survey reveals distinct consumer patterns across countries. Polish consumers purchased the most clothing items at the lowest expenditure, primarily from budget stores, while German consumers bought the fewest items at the highest expenditure, mainly from premium and medium stores (Nielsen & Gwozdz, 2017). Similarly, American consumers favoured premium stores more than Swedish consumers. Therefore, reasonably-priced clothing should be introduced in Poland and Sweden, whereas luxury items should be promoted in Germany and the USA.

Additionally, the survey indicates that females acquired more clothing than males while spending less, with the average consumer age being 43.16 years (Nielsen & Gwozdz, 2017). Consequently, targeting female and mature clients could benefit ABC. The different consumption patterns across the four countries highlight the need for tailored marketing strategies.

Hofstede's cultural dimensions provide a useful framework for understanding these differences, encompassing indulgence, individualism, power distance, masculinity, long-term orientation, and uncertainty avoidance. Considering all these dimensions is essential when developing market strategies for each country (Hofstede, 2024). Figure 1 illustrates that Germany and Poland share similarities in power distance and long-term orientation, while Sweden and the USA exhibit greater similarities in individualism and indulgence.

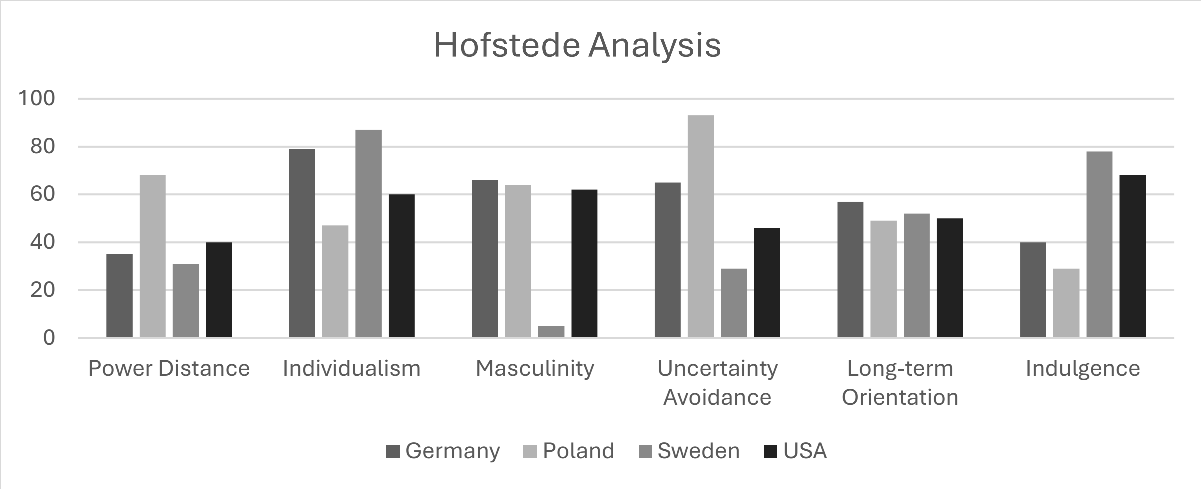

Figure 3: Hofstede Country Comparison (Source: Hofstede, 2024)

As a luxury fashion brand, ABC faces significant competition from both local and international brands, including H&M, Gap, Mango, Target, Chanel, and Zara (figure 2). To stay competitive, ABC must stay updated with the latest fashion trends.

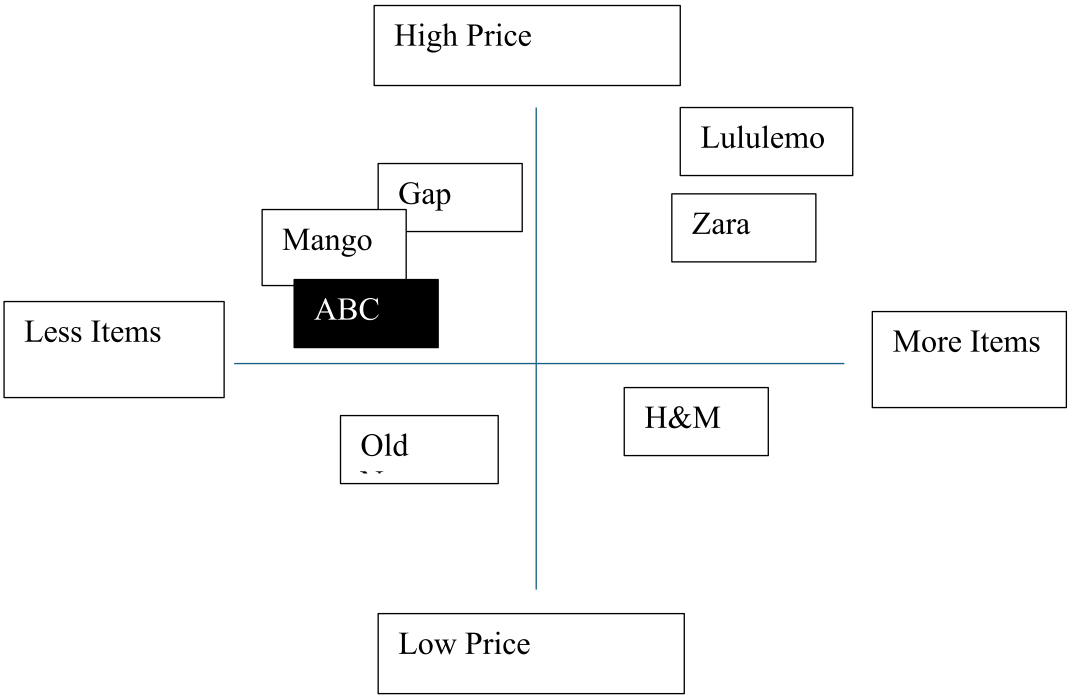

Figure 1: Brand positioning with competitors (Source: Author developed)

Pricing strategy plays a crucial role in consumer psychology; for instance, a price of €1.99 is perceived as cheaper than €2.00 (Woodside & Ko, 2013). Therefore, ABC could implement prices of €11.99 and €12.99 in Poland and Sweden, and €12.00 and €13.00 in Germany and the USA. Consumers in Germany and the USA associate higher prices with higher quality and are willing to pay more for luxury items (Woodside & Ko, 2013). Additionally, ABC can use anchoring techniques on their website by comparing product prices with competitors or alternative prices to make their products appear reasonably priced. Introducing daily value deals with countdown timers can also encourage immediate purchases (Farber, Lee, & Nan, 2004). Moreover, strategic pricing, sales, and discounts can effectively influence hedonic shopping motivation (Kim & Hong, 2011).

Advertising and Branding Strategy

Celebrity endorsement is a key advertising strategy for ABC, where selecting the right celebrity goes beyond attractiveness to include credibility, expertise, performance, product fit, and trustworthiness (Choi & Rifon, 2007; Shah, Olya & Monkhouse, 2023). To strengthen emotional appeal, ABC should focus on how their clothing enhances consumers' social lives rather than just product features. ABC's branding strategy aims to create an exceptional consumer experience by engaging sensory information such as colour, scent, temperature, layout, light, music, and decorations (Choi & Lee, 2017). Colours play a significant role as predominant visual stimulus; for example, gold, silver, and purple signify luxury, while black can denote power, style, or, conversely, poverty and evil. Sensory stimuli like music and scent also influence consumer perceptions, with women being more affected by these elements than men (Peck & Childers, 2008).

Fashion leadership, which impacts hedonic shopping motivation and consumption behaviour, is crucial. Females are often seen as fashion leaders, driven by personal and social motives such as sensory stimulation, trend learning, and social interactions (Kim & Hong, 2011; Kang & Park-Poaps, 2011, Mukendi et al., 2021; Panda & Natu, 2024). To attract female consumers, ABC should promote bargains, fashion trend information, and social interactions, while also addressing the shopping motivations of both genders.

New product or service development

ABC can introduce eco-friendly and recyclable clothing, targeting markets in the USA, Germany, and Poland, where environmentally friendly fashion is popular while offering conventional items in Sweden (Nielsen & Gwozdz, 2017). Green branding is becoming significant in the fashion industry as consumers are willing to pay premium prices for eco-friendly products (Sarkar, 2012; Zahid, Khan & Tao, 2023). Therefore, ABC should use green advertisements in the USA, Germany, and Poland, highlighting environmental characteristics to attract eco-conscious consumers.

Consumers tend to experience guilt when confronted with messages about the unsustainable nature of luxury products, as opposed to sustainable options (Amatulli et al., 2021). This guilt often drives them to warn others, resulting in negative word-of-mouth about the luxury company. Therefore, emphasising sustainability in marketing strategies is crucial for ABC. By highlighting the sustainable aspects of their products, ABC can mitigate consumer guilt, foster positive perceptions, and avoid the negative repercussions associated with unsustainable practices.

Furthermore, ABC plans to introduce child and baby wear made from organic cotton, low-impact dyes, and chemical-free textiles, reflecting the hygiene-conscious shopping patterns of consumers (Pilcher, 2011). Given the awareness of clothing brands among children under 12, ABC should offer unique styles for children's clothing.

Recently developed luxury infrastructure is based on Western consumer perception thus, they prefer high luxury colours such as black, brown and ivory because these represent strength, status, richness and sophistication (Choi & Lee, 2017). To enhance its luxury appeal, ABC should update its retail atmosphere by using high-luxury colours (figure 2).

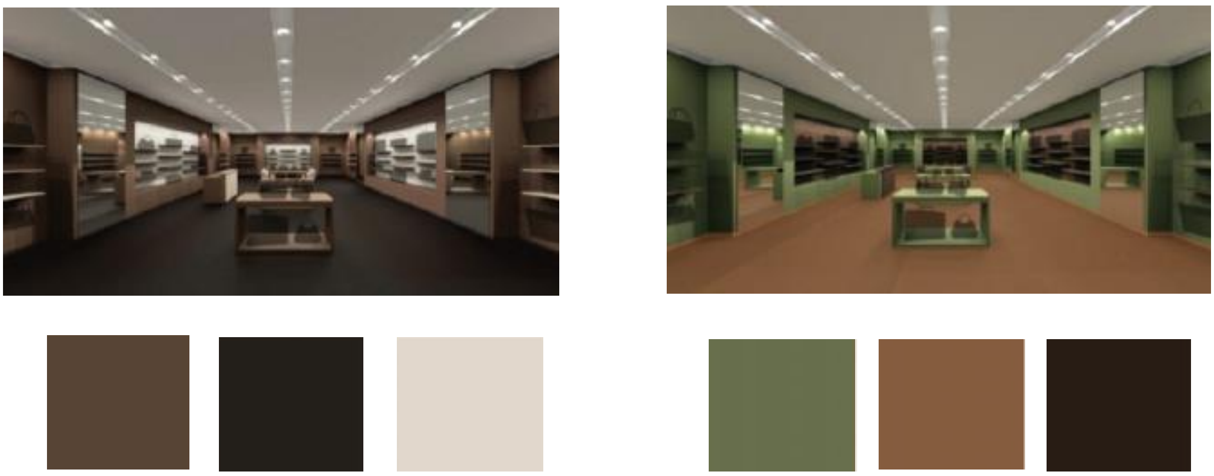

Figure 2: ABC's Retail Atmosphere (Author developed Source: (Choi and Lee 2017))

However, it is important to analyse whether the demographic groups have similar views or perceptions of colour hence Asian perceptions of colour might differ from European or American consumers. The shop window is a key to intriguing positive perception and shopping gratification. Hence, ABC should reflect its culture through shopping windows (Crewe, 2015; Wei-Chen, 2021). In retail, tangibility—such as the ability to touch and feel clothing—is essential, as e-commerce and m-commerce lack this sensory experience (Workman, 2009). Tangible information such as weight, texture, temperature and hardness will be influenced by haptic perception and sensory stimulation (Spence & Gallace, 2011; Workman, 2009). Therefore, ABC should provide tactile information online and focus on a multi-sensory retail experience to appeal to consumers.

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THE ROLE OF SOCIAL ENTERPRISES IN FOSTERING COMMUNITY DEVELOPMENT WITH GOVERNMENT AND NGOS

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Abstract

This case study examines the pivotal role of social enterprises in community development, emphasizing their unique blend of commercial and social objectives. Unlike traditional profit-driven businesses, social enterprises reinvest their profits into achieving long-term social, environmental, and economic impacts. The study explores successful partnerships between social enterprises, governments, and NGOs, focusing on initiatives such as Sarvodaya Shramadana Movement, Good Market, and Lanka Social Ventures in Sri Lanka. These partnerships significantly enhanced infrastructure, education, healthcare, and sustainability. There are several challenges faced such as ensuring goals are aligned and bureaucratic hurdles are cleared, recommendations include supportive policies, financial mechanisms, capacity-building programs, multi-stakeholder collaboration, and technological innovation. Therefore, the synergy between social enterprises and community development represents the path towards more inclusive, resilient, and prosperous communities.

Keywords: Social enterprises, community development, government – NGO partnerships, Socio-economic impact, sustainable practices

Introduction

The evolving social and economic landscape has increased attention on social enterprises and their role in fostering community development. Social enterprises are businesses that prioritize social and economic impacts alongside contributing sustainable practices and financial sustainability. Traditional business contexts are normally driven by prioritizing profit maximization whereas social enterprises are driven by the mission to generate positive social, environmental and economic outcomes.

By investing in socially sustainable practices, alongside efforts from governmental and non-governmental organizations, social enterprises play crucial roles in creating job opportunities, promoting better lifestyles, and driving economic growth. Community development is aimed to enhance the well-being and quality of life of individuals within a community. This involves principles of sustainable development, empowerment, inclusivity, social justice, human rights, participative democracy and equality (Master, 2022). Promoting community development enhances social inclusion and environmental sustainability which empowers communities to take control of their development processes. The collaboration between social enterprises and community development represents a powerful synergy of entrepreneurial innovation and empowerment. By addressing local needs and leveraging community assets, sustainable development benefits not only individuals but also wider communities. Therefore, this case study will explore the role of social enterprises in community development, examining their interactions with governmental and non-governmental organizations to promote transformative societal impacts. Understanding how social enterprises can drive economic growth, social equity and environmental sustainability is crucial. These factors influence sustainable practices towards community development and inspire social enterprises to create a more inclusive, resilient and prosperous future for communities.

Literature Review

The Role of Social Enterprises in Community Development

Social enterprises uniquely blend commercial and social objectives to enhance community development through the operationalization of business acumen coupled with social and environmental missions. The primary goal for social enterprises has been to solve societal problems by creating social values that are greater than the profit-making motive, hence committing to innovative alternatives. According to Dees (1998), social enterprises are described as organizations that apply entrepreneurial strategies and also have a heightened sense of their role in solving social problems while paying much attention to the maintenance of their financial bottom line. This hybrid approach allows social enterprises to reinvest profits into their social missions, thus ensuring long-term impact and scalability. Mair and Lanuza (2006) pointed out that, social enterprises were particularly good at covering the gaps left by traditional businesses and public sector interventions. By focusing on local needs, they foster community resilience and inclusivity, thus promoting social equity and environmental sustainability. Social enterprises often work in the areas of healthcare, education, and environmental conservation, directly affecting the well-being and furtherance of communities (Nicholls, 2006). Their ability to mobilize local resources and engage communities in their operations fosters a sense of ownership and empowerment, crucial for sustainable development practices.

Government and NGO Partnerships with Social Enterprises

Government–NGO partnerships are essential in the nurturing and scaling of social enterprises. Governments provide essential support through funding, favourable regulations, and policy frameworks that create a conducive environment for social enterprises to thrive. According to Kerlin (2009), government support may be in various forms such as grants, tax incentives, or capacity-building programs. These measures can enhance the financial sustainability of social enterprises and become signals for official support attracting additional investment by other stakeholders. Governments establish regulatory frameworks that legitimize social enterprises, such as certification programs, ensuring they receive appropriate recognition and support.

On the other hand, NGOs bring enormous experience related to interaction with and development of communities from the grassroots level. In most cases, they act as intermediaries facilitating collaboration between social enterprises and local communities. This collaboration will ensure that the initiatives of social enterprises are relevant within the community context and aligned with its needs. The NGOs also give support in a critical area for social enterprises: capacity building, monitoring and evaluation, and advocacy (Smith & Darko, 2014). Capacity-building programs enhance managerial, financial, and operational skills by improving efficiency and effectiveness within social enterprises. NGOs take part in creating robust monitoring and evaluation frameworks that help indicate the progress and impact on the stakeholders in the social enterprise. Advocacy from the NGO levels ensures that there is an enabling policy environment and that there is increased awareness on matters that pertain to social enterprises through mobilizing support from the public and private sectors. A successful partnership involves working together through joint initiatives that use each partner's strengths. Therefore, building a strong base for long-term socio- economic development needs a synergistic relationship between governments, NGOs and social enterprises.

Successful partnerships between social enterprises, governments, and NGOs

These successful partnerships illustrate the transformative impact towards providing valuable resources and support for the socio-economic impact of sustainable practices. This enhances the scalability and sustainability of social enterprises leading to significant social and economic benefits for communities.

Firstly, the Sarvodaya Shramadana Movement in Sri Lanka collaborates with various social enterprises to implement community development projects, resulting in significant improvements in infrastructure, agriculture, education, and healthcare (Sarvodaya, 2020). Sarvodaya movement's development has helped social enterprises to grow in captive markets and share markets to build strong overall brand equity. This has gained satisfaction among customers, higher employee productivity and organizational resilience to support business continuity.

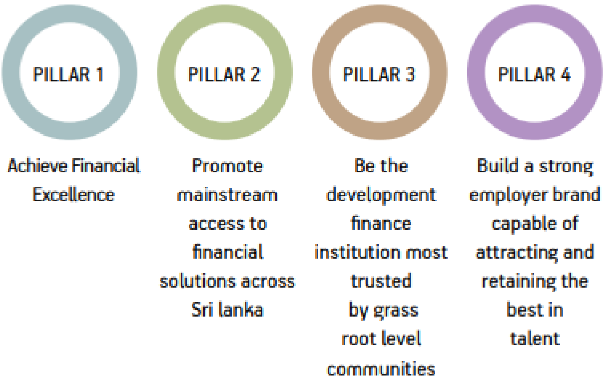

Figure 1: The four pillars (Sarvodaya, 2020)

These four pillars guide social enterprises to achieve successful initiatives in the movement. By partnering they have been able to enhance better living standards for rural communities and advance the local economy. For instance, The Horizon Lanka Foundation has provided IT education to over 10,000 students in rural areas, resulting in a 25% increase in digital literacy rates. The healthcare collaborations, such as AyuSuwaseriya, delivered mobile medical units to over 100,000 individuals and preventive health programs to the country's remote areas, improving health outcomes and reducing disparities by 15%.

Secondly, Good Market in Sri Lanka is a curated marketplace where sustainable and environmentally friendly goods and services are available. In partnership with NGOs and government agencies, Good Market was able to conduct workshops on sustainable agriculture and waste management, training farmers and small business owners. The goals of these workshops are to keep costs low and produce organic products through the following Participatory guarantee system (PGS) (Good Market, 2023). They collaborate to promote sustainable practices and community development making products accessible and affordable. These workshops have led to a 30% reduction in waste and a 20% increase in sustainable farming practices. The existence of a Good Market allows social enterprises greater chances to be able to expand their markets locally and globally by being more visible and impactful. It further offers training and business practice support for sustainability through NGO partnerships and government agencies. Good Market is also involved in connecting communities for exchanging sustainable practices and promoting the culture of sustainability and ethical consumerism.

Lastly, Lanka Social Ventures (LSV) is an organization in Sri Lanka that provides comprehensive incubation, funding, and capacity-building programs for social enterprises and entrepreneurs. LSV also enhances the capacities of social enterprises to succeed by working with government agencies and international NGOs. The incubation program is a component focused on necessary skills, resources, and mentorship on business development, financial management, and impact measurement. This program has supported over 200 social enterprises and as a result, 80% of enterprises reported an increase in revenue, and 70% expanded their operations to new regions. Moreover, LSV ensures that social enterprises are provided with investment funding and opportunities to expand their impact. LSV furnishes enormous capacity-building support in marketing, operations, and governance, which helps in developing resilience and sustainability in social enterprises (Lanka Social Ventures, 2019).

These successful partnerships highlight the transformative impact of collaborative efforts in promoting socio-economic sustainability. By leveraging these strengths and resources for social enterprises, governments, and NGOs, initiatives like the Sarvodaya Shramadana Movement, Good Market, and Lanka Social Ventures have significantly improved infrastructure, education, and healthcare. This has helped to foster sustainable practices and economic growth. Thus, suchcollaborations are essential for enhancing the scalability and sustainability of social enterprises, leading to substantial social and economic benefits for communities.

Challenges and Strategies in Partnerships

Despite the visible benefits, there are several barriers to having partnerships between social enterprises and the government or NGOs. For instance, one major challenge is objective alignment which might be elusive because social enterprises operate to bring about social impacts, whereas the government and NGOs might have other interests and may become a source of conflict leading to inefficiency (Austin et al., 2006). Other barriers include bureaucratic hurdles and policy inconsistencies that can serve as a great barrier to collaboration. Resource allocation is another barrier, and some social enterprises might not have the right fund allocation for scalability and sustainability (Hudson, 2009).

Cultural differences between organizations can result in project execution and decision-making misunderstandings and misalignments. This is because there is a lack of a standardized framework for measuring social impact, which would complicate additional partnerships given metrics are so different across different contexts (Ebrahim & Rangan, 2014). To overcome these challenges, there should be clear, precise and shared goals. This usually creates formal agreements such as memorandums of understanding (MOUs), which define roles, responsibilities, and expectations along which to operate with social enterprises (Fowler, 2000). Capacity-building programs enhance the ability of social enterprises to interact better with governmental organizations as well as NGOs. They enhance operational capacities and mutual understanding.

Therefore, dynamic partnerships are essential for both learning and adaptation. Routine reviews and feedback mechanisms help to learn from experiences and change strategy as required circumstances. Multi-stakeholder platforms facilitate dialogues in exchange for knowledge and innovation to improve themselves as a part of the community with a common purpose. Leveraging technology supports communication, coordination, and data sharing to be transparent and efficient.

Impact on social and economic outcomes

Social enterprises partnering with the government and NGOs have a profound impact on social and economic effects. These government and NGO collaborations enhance the creation of job opportunities and income-generating activities, hence enhancing the economic stability of the population. For instance, local communities benefit through this type of collaboration would give a chance to develop local industries and provide sustainable employment. This will eradicate poverty and reduce income disparities. Such initiatives will have immediate financial benefits, and also have an indirect contribution to long-term economic resilience through the diversification of local economies and lessening their dependence on aid inputs from outside (Laville, Lemaitre, & Nyssens, 2006). Access to essential services is another important aspect of these partnerships. Social enterprises, backed by government and NGOs could provide health care, education, and other crucial services. This is seen in programs such as mobile health clinics and educational outreach efforts targeted toward distant and underprivileged communities. This improves access to services and enhances the overall quality of life, promoting better health, higher educational attainment, and greater social inclusion (Kerlin, 2009).

Furthermore, environmental sustainability is a critical area impacted by these partnerships. In most cases, the practices of social enterprises will be ecologically friendly, which are further supported and amplified through government policies and NGO advocacy. The collaboration entails initiatives such as waste management programs, sustainable agriculture, and conservation projects that protect and enhance the natural environment. By promoting sustainable practices these partnerships contribute to environmental conservation. This fosters economic activities depending on the guarantee of long-term community and environmental health. Lastly, these partnerships significantly contribute to social cohesion and empowering communities. Collaboration inspires community members to get involved in different decision-making processes, helpful to them and creates a sense of belonging. People are more empowered through the building of social relations with this participatory approach and confidently participate as beneficiaries and contributors toward community development activities. It is through such empowerment that communities will be self-sustaining and able to withstand various social and economic challenges effectively (Fowler, 2000). Thus, partnerships between social enterprises, governments, and NGOs will help to mitigate socio-economic impacts and foster long-term sustainable practices.

Methodology

This study explores the role of social enterprises in fostering community development through a partnership with the government and NGOs. Through document analysis, this case study will summarize relevant documents to outline the policies of the government, reports from social enterprises and NGOs, and case studies of initiatives of social enterprises. Data extraction and interpretation were used to discuss social impacts, economic outcomes, sustainable practices, and partnership challenges. Triangulation ensures the validity of findings from cross-checked information across multiple sources, and ethical considerations, such as ensuring confidentiality and integrity. This approach provides an in-depth understanding of how social enterprises collaborate with government and non-governmental organizations for generating socio-economic and environmental benefits.

Conclusion

The synergy between social enterprises and community development offers a transformative solution to modern social and economic challenges. Social enterprises promote outcomes that are social, environmental, and economic to enhance local resilience and sustainable development. This impact is further enhanced by partnerships with governmental and non-governmental organizations that provide support, capacity building, and advocacy as evident in initiatives like Sarvodaya Shramadana Movement, Good Market and Lanka Social Ventures in Sri Lanka. There are challenges faced such as the alignment of goals and bureaucratic hurdles, clear goals and capacity-building programs for the individuals concerned can overcome these barriers. Partnerships deepen the significance of infrastructural change, education, health, and overall quality of life improvement, with the ultimate payoff of economic prosperity, social justice, and greenness. Therefore, more cooperative and integrative social enterprises with governmental and NGO efforts promise a better future, where communities are more inclusive, resilient, and economically rewarding, inspiring socio-economic progress and sustainable development.

Recommendations

Ensure Policy and Regulatory Frameworks: Governments should set up supportive policies and regulatory frameworks to enable social enterprises to be recognized and therefore grow. The policy should include giving tax incentives, simplifying administrative processes, and giving legal status to social enterprises to improve their operational environment.

Address Financial Difficulties: Social enterprises are facing difficulties in securing adequate funding. Creating specialized funding mechanisms such as grants, low-interest loans, and impact investment funds, can support early-stage social enterprises.

Enhance Capacity Building and Training: Programs for capacity building should be developed and conducted to further enhance the managerial, operational, and financial skills of their leaders and staff. Government, NGO, and education collaboration in business development, impact measurement, and sustainable training can be cultivated with follow-up personalized mentorship and coaching.

Encourage Multi-Stakeholder Collaboration: Multi-stakeholder platforms and networks could be developed that will lead to better collaboration between the social enterprise, government, NGOs, and the private sector. Such platforms can enhance knowledge sharing, innovation, and joint initiatives through regular dialogues and workshops that align objectives, build trust, and inculcate a shared vision for the development of communities.

Use of Technology and Innovation: Promote the use of new and innovative technologies for social enterprises to operate effectively and efficiently. This may be further supported by governments and NGOs with access to digital tools, data analytics, and technological infrastructures that may enhance better communication, coordination, and monitoring leading to more efficient and transparent processes.

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SAMSUNG'S CSR STRATEGIES AND ETHICS TO ENHANCE COMMUNITIES AND LEVERAGE BRAND REPUTATION

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Abstract

In today's day and age, business need to practice sustainability regardless of what the company may be. Especially, tech companies. Speaking of tech companies, there is no doubt these industries have left one of the biggest footprints in the eco-system. However, tech giants such Apple, Samsung, Sony have implemented strategies to coup with the ongoing situation. The following case study will provide an insight into Samsung's CSR goals and how it has impacted the overall change. Furthermore, by going in depth to evaluate the overall strategies Samsung has done to communities around the world by providing digital technology to enhance the life of many. Furthermore, evaluating the company's business ethics and how Samsung encourages employees to pursue their goals and foster a healthy working environment.

Keywords: Samsung, eco systems, technology, social responsibility, sustainability

Introduction

When you think of the company "Samsung" what comes to your mind…Smartphones, refrigerator's, televisions. Most people would certainly think of these as this is what the company is known for. But how many of you would even stop and think about fruits and fish. Samsung started off as a grocery store (From Fish Trader to Smartphone Maker, 2018). that exports fish, fruits and vegetables in the 1930s until they decided to venture off into a different field. This is a perfect example of "Challenging our mental models". Corporate social responsibility is practice majority of businesses need to adhere to. Moreover, organization's need to understand the impact CSR has towards the environment. That been said, Samsung is one of the organization that has been able to implement the CSR successfully. Today, Samsung is one of the leading companies for smartphones and is constantly innovating to make their consumer life's easier (Statista, 2023).

Corporate social responsibility and the impact towards society

Corporate social responsibility is a model that helps organizations to be accountable not only for themselves but for the stakeholders and the general population. CSR is not merely about adapting to it, it is a practice. By doing so, businesses are able to understand what sought of impact they have towards the external environment. A common miscomputation is that large successful organizations only do CSR. However, in reality even small business do practice CSR but their overall initiatives are rarely publicized.

Corporate social responsibility can be divided into several components (Mind Tools, 2023). such as Environmental responsibility, philanthropic responsibility, ethical responsibility and financial responsibility.

A brief history on Samsung's CSR strategies

Samsung has always been an organization that has had a significant role towards social responsibility. They believe in providing education to help empower future innovators to achieve their greatest potential and be the next generation of future leaders. Samsung's CSR goals goes (Lee, 2019). back to the 1970s. In addition to that, the organization was putting in a lot of effort to raise community enlightenment in Korea. During the first period of the CSR program, Samsung focused on establishing a diverse program in medical and education as these were part of Lee byung-Chul belief in creating a firm society in order for the company to prosper. Furthermore, in the 1990s Samsung entered a different social stage, CSR for self-satisfaction. The new phase of CSR took off when Lee Kun-hee (Lee, 2019). was appointed chairman. Furthermore, this CSR strategy focus was on human resource and technology, by doing so the ability to create more high end products and services. Moreover, by contributing to a stronger global society. Although Lee Kun-Hee had this vision, the only key difference was that the CSR strategies had become part of the company. Moreover, due to the Asian financial crisis in 1997 (Lee, 2019). the funds were reduced from 237 billion in 1996 to 45 billion in 1998, due to this most of the CSR programs were halted.

CSR to thrive

Organizations that function globally cannot neglect the basic corporate responsibility, regardless if the company did not commit any crime or unethical behavior. The CSR pyramid was developed by Archie Carroll (Mind Tools, 2023.) as a way for organization's to meet legal responsibilities. It is not sufficient enough to focus on one area. That been said the pyramid is broken down into 4 categories.

That been said, the pressure put on Samsung to adopt to the demand for environmental related issues. Led to the company publishing a CSR report (Lee, 2019). on health, environment and safety. The report mainly addressed concerns regarding the environment such as the green management system. The system objective was to adhere to international regulations. Furthermore, majority of the company's programs were implemented to fulfill social demands and the overall environmental impact. Today, Samsung has a variety of CSR programs environment and safety. Eco generation class (SAMSUNG E&A, n.d.) is a program in which adolescents around the world train environment reporters and ambassadors. As a result, they have been able to utilize low carbon construction methods which reduces the construction process in addition, it provides ways to address environmental issues and create a sustainable future. Furthermore, they plan to achieve net zero emissions by 2050.

CSR for satisfaction

Samsung has also established steps to achieve philanthropic activities. This is based on a vision Samsung had to give back to society through the profits the company made. The main programs that fall under this category are Alzheimer center Korea, Hope elementary school in China and Cambodia. From 2005 to 2015, Samsung (Lee, 2019). had plans to build a total of 300 schools in rural parts of China. Additionally, in the African region the company is constructing It centers for individuals to develop their computer literacy. CSR for satisfaction is all about fostering a positive community. However, in terms of maximizing value, the programs are not enhanced enough. Dream class, is one of the few programs conducted by Samsung, it aims to help adolescents identify what they would like to do in life. Moreover, by developing the skill set required to pursue a Career in the desired field. The program (Samsung Electronics, 2021). was launched in 2011 and as of 2023. Dream class has been recognized as an excellent education donator by the MOD. Moreover, Samsung's dream class has helped over 6000 middle school students and 700 college students. Furthermore, as the company was able to utilize their own products, their overall image increased. Such programs have also been conducted in other countries such as Russia, USA and some parts of Europe. By offering educational programs they have also been able to promote a positive brand for the company itself.

CSR for brand name and reputation

CSR for brand name is about having the same tool set in mind in terms of sustainability. In 2004, the GMI (Green marketing initiative) (Lee, 2019). was launched, which showcased how the company utilized cooperate social responsibility to enhance their brand image. One of the camping's was an environmental friendly program where they supplied packets containing herbs to consumers and dealers in Korea. However, Samsung tried to engage with consumers and sellers to enhance their marketing strategy. CSR incentives to increase brand image and reputation usually occur in countries where the market has great potential. However, in terms of infrastructure is questionable. The company become actively involved in countries such as Russia, Vietnam and Europe when they constructed a smart library and other educational programs. When the organization constructed smart library's in Vietnam, they were able to contribute modern equipment and by doing so they were not only able to help the community and improve the education quality within Vietnam but also leverage their overall presence in the country itself.

CSR for human rights

Samsung is a company that is committed to ensure people have the basic fundamental rights and freedom. The company ensures the that this practice is maintained on a daily basis. In 2023, Samsung announced their global human rights policy which aligns with the UN guiding principles on business and human rights (UNGPs). Through this policy, Samsung (Sustainability | Samsung Electronics, n.d.) was able to enhance commitments in areas relating to product responsibility, freedom of expression. Moreover, this policy focuses on crucial areas such as protection from forced labor and ensuring fair employee treatment across the supply chain. Furthermore, Samsung performs third party audits on their suppliers to ensure their overall compliance with labor laws preventing any unethical practices such as child labor. Additionally, when it comes (Sustainability | Samsung Electronics, n.d.) to the companies mineral sourcing initiatives, the organization has a relatively robust system to avoid utilizing any materials that relate to human rights abuse in certain countries. This is to ensure the company operates in a completely transparent manner.

Samsung ethics

Business ethics is the aspect in which appropriate policies and practices are conducted. Fostering a working culture where employees make decisions that adhere to the policies of the organization. Samsung is an organization that has a broad set of values that are pledged during the time been. People, excellence and change are some of the many values the business follows. Furthermore, they have established a set of ethical standards that they practice. Therefore, Samsung's business ethics can be characterized into five segments. Comply with laws and ethical standards, maintain organizational culture, Respect customers, shareholders and employees, Care for health and maintain a socially responsible corporate citizen (Ethics | Samsung SDS, n.d). Under the first category, employees at Samsung are respected regardless of one's ethnic background. Moreover, the organization itself complies with all laws associated with the country and communities. In addition to that fair competition is respected and unlawful profit is not accepted as it is a direct violation of the businesses ethics. Furthermore, Samsung is a company known for been relatively transparent in their operations. When required to present financial records, all information (Ethics | Samsung SDS, n.d). relating to the businesses operations are issued. In terms of maintaining organizational culture, property rights of the company and individuals are protected. Therefore, the company does not disclose any confidential information without approval. In addition to that, Samsung tries their best to foster a healthy working atmosphere. Therefore, any harassment, monetary exchange and violations are considered breaches of Samsung's code of conduct and will be dealt with serious consequences. At Samsung, (Ethics | Samsung SDS, n.d). customer satisfaction is the number one priority. Providing solutions that meet the overall expectations of the consumer is vital for the organization to grow. Moreover, Samsung ensure their employees maintain a good quality life. Employees are offered equal opportunities and are treated based on their overall performance. Additionally, employees are urge to pursue personal development. Additionally, in terms of maintaining the overall safety standards and environment. Samsung complies with relevant laws related to the conservation of the eco system. Recycling is a practice at Samsung and reducing the number of wastage. Although, just as much as the preserving the environment is important, Samsung also values their employee's safety. Complying with international safety rules and regulations are one of the methods the company uses to ensure individuals are operating within a safe working environment. Furthermore, the creation of products or services that pose a threat towards human health and safety are strictly prohibited. Furthermore, the organization aims at maintaining their overall relationship with other business partners. Relationships with other businesses are based on a single word "Trust".

Discussion

After analyzing the data, Samsung has shown a lot of interest in CSR starting from the very beginning by the founder to thrive. Gradually, it is evident that the organization became more involved in social programs to help societies around the globe by linking and promoting their products which eventually leads to a Win-Win situation for both. However, in terms of segment 2 there is room for improvement's. Segment 3 for brand name and reputation, mainly focuses on the policies Samsung adheres to maintain safety amongst employees and environment. Moreover, in terms of ethical standards, the company does foster a positive and healthy working environment. Samsung follows strict international laws to ensure the company functions in an ethical manner that benefits the organization itself but also minimizing their carbon footprint. Additionally, functioning in a transparent manner is one of the major aspects in which the company is able to sustain bilateral relationships.

Conclusion

In conclusion, Corporate social responsibility is an essential part for a business's operations as it almost impossible to function without maintain a CSR report especially major companies. That been said, it is evident the Samsung, practices this. The implement a variety of tactics to cater to both social and environmental needs. Been a tech giant, Samsung has contributed a lot towards society in forms of monetary and developing the minds of future generations. Inspiring globally with our breakthrough tech gadgets, products, and innovation that improve people's lives by building a new time (Samsung Mission and Vision Statement Analysis, n.d.) is the vision that drives Samsung forward and is in line with the CSR strategies. Furthermore, the business ethics Samsung follows are of international standard, maintaining a working environment where employees are treated equally and opinions are respected is one of the keys that go into the products and services the company offers. Given where the company started off and where they are today being one of the most unexpected but pursued stories I have come across. Never would have Lee Byung-Chul thought that from exporting fish and vegetables they would soon be the pioneer in Smartphones. Always think outside the box and never be afraid to challenge your mental model.

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WORKING PAPERS

ASSESSING ENVIRONMENTAL IMPACT OF TOURISM ON RUMASSALA WILDLIFE CONSERVATION AREA

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Abstract

This study aims to assess the environmental impact of tourism on the Rumassala Wildlife Conservation Area in Sri Lanka. By using a combination of questionnaire surveys and geospatial analysis of Google Earth images, the research seeks to understand the extent of the impact and the effectiveness of current conservation efforts. The findings will provide valuable insights for enhancing sustainable tourism practices and environmental management strategies.

Keywords: Environmental Impact, Tourism, Conservation, Rumassala, Geospatial Analysis

Introduction

Tourism, while providing substantial economic benefits, often presents a paradox for natural environments, offering both opportunities and risks. This dual nature is exemplified by the Rumassala Wildlife Conservation Area in Sri Lanka, a region renowned for its rich biodiversity and captivating landscapes. As a prominent tourist destination, Rumassala attracts a significant number of visitors annually, drawn by its natural beauty and ecological significance. However, the rapid growth of tourism in this area raises pertinent concerns about its potential adverse effects on local ecosystems and wildlife. The challenge lies in balancing the economic advantages of tourism with the imperative of preserving the environmental integrity of Rumassala.

This research proposal seeks to explore the complex interplay between tourism activities and conservation efforts within the Rumassala Wildlife Conservation Area. The primary objective is to conduct a comprehensive assessment of the environmental impacts associated with tourism and to evaluate the effectiveness of existing conservation measures in mitigating these impacts. To achieve this, the study will employ a mixed-methods approach, incorporating both quantitative and qualitative research methodologies. This multifaceted strategy will enable a thorough examination of the various dimensions of tourism's impact on Rumassala's environment and the effectiveness of conservation initiatives in place.

Quantitative data will be gathered through surveys administered to tourists visiting Rumassala. These surveys will be designed to capture a broad range of information, including visitor demographics, motivations for visiting, and behavioral patterns. By analyzing this data, the study aims to identify trends and patterns in tourist activities and their potential environmental consequences. For example, it will examine the frequency and intensity of visitor interactions with sensitive areas of the conservation zone, as well as the types of activities pursued by tourists, such as wildlife viewing, hiking, and beach activities. This data will be critical in understanding how different forms of tourism contribute to environmental degradation and how they might be managed to minimize adverse effects.

In addition to quantitative surveys, qualitative data will be collected through in-depth interviews with key stakeholders, including park management officials, conservationists, and local community members. These interviews will provide insights into the perceptions and experiences of those directly involved in managing and protecting the Rumassala Wildlife Conservation Area. They will also offer a perspective on the challenges and successes of current conservation strategies and the impact of tourism on these efforts. Interviews with tourists themselves will further enrich the data by providing a firsthand account of their experiences and perceptions regarding the conservation measures in place.

Observational studies will complement these data collection methods by allowing researchers to directly observe tourist behavior and its impact on the environment. This will involve monitoring visitor activities in various parts of the conservation area, assessing factors such as littering, trampling of vegetation, and disturbances to wildlife. Observational data will be crucial in identifying specific areas of concern and in evaluating the actual environmental impact of tourist activities. By combining these observational insights with survey and interview data, the study will provide a holistic view of the environmental challenges associated with tourism in Rumassala.

The research will also include a critical evaluation of the existing conservation strategies implemented within the Rumassala Wildlife Conservation Area. This will involve a detailed analysis of the management practices, regulatory frameworks, and community involvement initiatives that are currently in place. The study will assess the effectiveness of these measures in addressing the environmental impacts of tourism and in preserving the area's natural habitat and biodiversity. This evaluation will consider factors such as the adequacy of enforcement mechanisms, the level of community engagement, and the alignment of conservation practices with best practices in the field.

One of the key aspects of this evaluation will be to identify the strengths and weaknesses of the current conservation efforts. For instance, it will examine whether the existing regulations are sufficient to control tourist activities and prevent environmental damage. It will also explore the extent to which community members are involved in conservation efforts and whether their involvement contributes to more effective management of the area. By pinpointing gaps and areas for improvement, the study aims to provide actionable recommendations for enhancing sustainable tourism practices and strengthening environmental management strategies.

Furthermore, the research will explore the potential for integrating innovative conservation techniques and strategies to better manage the impacts of tourism. This might include examining the feasibility of adopting new technologies for monitoring and managing visitor activities, implementing more rigorous waste management practices, or developing educational programs to raise awareness among tourists about the importance of conservation. The study will also consider the role of partnerships between government agencies, non-governmental organizations (NGOs), and local communities in developing and implementing effective conservation strategies.

By providing a comprehensive analysis of the relationship between tourism and conservation in the Rumassala Wildlife Conservation Area, this research aims to contribute valuable insights to the field of sustainable tourism management. It will help to identify best practices and strategies for mitigating the negative impacts of tourism while enhancing the positive contributions of tourism to local economies. The findings will be relevant not only for the management of Rumassala but also for other similar conservation areas facing the challenges of balancing tourism and environmental protection.

In terms of the research process, the data collection will adhere to rigorous ethical standards to ensure the confidentiality and privacy of participants. Informed consent will be obtained from all interviewees and survey respondents, and the study will comply with relevant guidelines for conducting research involving human subjects. The data analysis will be conducted using a combination of statistical and thematic analysis techniques to ensure a robust and comprehensive examination of the research questions.

Methodology

Data for this research will be collected through two primary methods such as, questionnaire survey and analysis of google earth image. Data will be collected from 100 randomly selected local residents around the Rumassala area and foreign and local visitors by questionnaire survey. The questionnaire focuses on to the assess the tourist activities against environmental impact, understanding tourist behavior, and gauging perspectives on future conservation efforts and sustainable tourism in study area.

The past and recent Google Earth images from 2015 to 2023 will be analyzed to investigate the distribution of environmental impacts in the study area. These images will be utilized to identify changes in land use, habitat degradation, and other environmental factors over time. Data analysis will be conducted in two ways. The data from the questionnaire survey will be analyzed using SPSS software to identify trends, correlations, and significant differences in responses. The Google Earth images will be analyzed using ArcGIS software to map and quantify the environmental impacts of tourism activities.

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POSTERS

Digital Transformation in Public Bus Transportation

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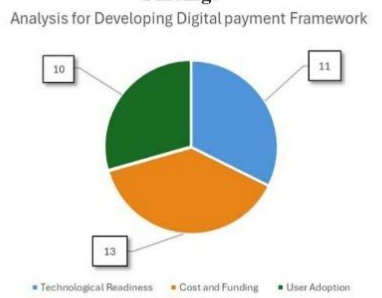
Introduction

Sri Lanka's passenger bus service started in 1907 by running a single private bus to over 7000 buses as of 2016. However, in recent times the profits of SLTB had been in decline. Instances of leaks in profit are the main reason as to why SLTB has been loosing money.

Research Objective

The objective of this research is to evaluate the impact of implementing a digital payment method in the Sri Lankan public bus transportation system to improve the operation efficiency and contribute to the economical sustainability and environmental sustainability. This research will analyze the user feedback and statistical results such as technological readiness, cost and user adaptation on the new system. The overall purpose of this study is to provide an insight in how digitalization will effect the Sri Lankan public bus transportation

Findings



Green - Technological Readiness
Orange - Cost and Funding
Blue - User Adoption

Methodology

An extensive qualitative literature review was conducted to gather in-depth insights into digitalizing monetary transactions using scholarly articles, reports, books, and online news. The study aimed to understand the perspectives and experiences of various stakeholders, including bus operators and passengers, regarding the shift to a digital payment system for public bus fares. Two interview guides were created: one for bus operators focusing on their experiences with current payment methods, challenges, and attitudes towards digital payments, and another for other stakeholders (passengers, technology providers, government institutions, financial institutions, and transport authorities) to address the benefits, drawbacks, expectations, and requirements of a digital payment system. The reason for this method of choice is to gather qualitative data in order to further understand the experiences of the interviewees and so to make better and more insightful comparisons between answers. The study was conducted in major cities like Colombo and Kandy, involving 15 bus operators, 7 passengers, and 8 other stakeholders using purposive and convenience sampling methods. The data collected will be analyzed using thematic analysis to uncover recurring issues in implementing a digital payment system. However, research gaps are present which is that not enough research papers were conducted on the topic of the digitalization of the Public bus transportation which leaves space for future improvement.

Results

The research highlights the potential for developing a new digital payment system for Sri Lankan public transport buses. Key challenges identified include the need for effective infrastructure, skill training for bus operators, and educating passengers on using the new system. Government and financial institutions must support these efforts. Awareness programs are essential to build trust among passengers. The research concludes that while a digital payment system would be efficient, convenient, and transparent, significant changes in technological readiness, funding, and user adoption are necessary. Authorities must prepare adequately before implementation to achieve success.

Recommendations

- Provide proper training and education on the new payment system.
- Develop programs to encourage bus drivers and passengers to use the new payment system
- Invest on a security system to ensure the protection of the transactions and the data.
- Collaborate with government agencies, technology providers and financial institutions such as banks or other investing companies for support on implementing the system.
- Monitor the performance of the new payment system by gathering stakeholder feedback

ESOFT Shaping Lives, Creating Futures. ESOFT METRO CAMPUS

Perceived Challenges in embracing Digital Currencies by Banking sector Organizations in Sri Lanka

Master of Business Administration | London Metropolitan University (ESOFT Metro Campus) Academic year 2024 Lecturer DR Dilina Herath

LONDON METROPOLITAN UNIVERSITY

1 INTRODUTION

Problem identification

Sri Lanka's prominence in the local bitcoin mining industry, with interactions exceeding the regional average by 1.7 times according to Microsoft (2020), suggests a growing interest in the country's bitcoin market.

Despite the legality of dealing with cryptocurrencies in Sri Lanka and the global integration of cryptocurrency payments by major companies like Microsoft, PayPal, eBay, Dell, and Expedia (Nuryyev et al., 2018), the number of bitcoin users in Sri Lanka remains relatively small.

The absence of a central authority in digital currencies like Bitcoin raises concerns about value stability and regulatory compliance, posing risks to users and transactions. Despite growing interest, Sri Lanka faces challenges such as regulatory challenges, technological challenges, and business challenges in its adoption of digital currencies.

Rationale of the study

The stability and protection of digital currency systems hinge on robust regulations and effective supervision, addressing issues such as speculation-driven value systems and unresolved user difficulties due to the lack of centralized authority. In Sri Lanka, barriers to digital currency adoption, including limited public knowledge, unclear legislation, and inadequate infrastructure, underscore the need for fundamental improvements to support their integration into the domestic financial system while mitigating risks associated with volatility and regulatory compliance.

Research Questions

Q1: What are The Technical Challenges for accepting Digital currencies by Banking sector organizations in Sri Lanka?

Q2: What are The Regularly Challenges for accepting Digital currencies by Banking sector organizations in Sri Lanka?

Q3: What are The Business Challenges for accepting Digital currencies by Banking sector organizations in Sri Lanka?

Aim & objectives.

Identify the perceived challenges encountered by banking sector organizations in Sri Lanka in accepting digital currencies.

Identify the **Technical Challenges** for accepting Digital currencies by Banking sector organizations in Sri Lanka.

Identify the **Regularly Challenges** for accepting Digital currencies by Banking sector organizations in Sri Lanka.

Identify the **Business Challenges** for accepting Digital currencies by Banking sector organizations in Sri Lanka

Propose **recommendations and strategies** based on the findings to facilitate the integration of digital currencies into the Sri Lankan banking industry more effectively.

2 LITERATURE

Industry / sector overview

Sri Lankan banks initially lagged in adopting digital technology post-1977, but now all commercial banks offer nationwide branch access and comprehensive online banking services, necessitating efforts to bridge the digital gap with other industries.

Future challenges and opportunities

At the 2021 Cyber Security Summit, Aakash Degwekar of Visa Asia Pacific emphasized Visa's dedication to enhancing digital currency security and utility for seamless money transfers.

Need for government considerations.

At the 2021 Cyber Security Event, ICTA Director Jayantha Fernando stressed the need for laws to foster consumer trust in digital currencies and blockchain, urging government action on revenue implications and updates to the Monetary Law Act.

Data protection and privacy

At the 2021 Cyber Security Event, ICTA Director Jayantha Fernando highlighted the ongoing development of the Data Protection Bill, stressing the importance of policy improvement for international compliance.

E-commerce Platform Kapruka to Introduce Crypto Payments in 2021

Kapruka, reported by Bicon.com on October 21, 2021, diversified its services, and announced intentions to accept bitcoin payments in 2021, aligning with South Asian efforts to regulate blockchain and attract cryptocurrency investments.

Central Bank to introduce digital currency by the end of 2024

The Central Bank of Sri Lanka announced plans for a digital currency launch by the end of 2024, alongside the initiation of the Lanka Pay system, following discussions with a high-level Parliament committee on internet payments, as reported by the Daily Mirror.

Digital currency Challenges framework

Business challenges

The study by Mendoza-Tello et al. (2018) reveals diverse demographic groups' inclination to invest in digital currencies, driven by financial gain expectations, shedding light on investor optimism and risk readiness. Linh Bui (2022) and Delfabbro et al. (2021) explore the intertwining of personal attributes and market dynamics in cryptocurrency investments, highlighting the importance of understanding investor behavior in navigating the bitcoin market.

Regulatory Challenges

The regulatory framework and definition of cryptocurrencies in Sri Lanka set the stage for understanding their emergence and regulation, encompassing digital or virtual forms of money based on cryptographic principles, according to the Monetary Law Act No. 58 of 1949 and the Central Bank's definition of "virtual currencies." The study aims to explore regulatory challenges surrounding cryptocurrency in Sri Lanka, including regulatory uncertainty, AML/KYC compliance, tax implications, and environmental concerns.

Technological challenges

The debate over digital currencies' nature as an innovative technology or speculative asset is explored by Adrian D. Lee's 2020 research, while Jayantha Fernando highlights the inconsistency in legal terminology surrounding cyber risks in Sri Lanka, drawing attention to challenges in cybersecurity legislation and the need for clarity and consistency in terminology.

3 CONCEPTUAL FRAMEWORK

Dependent Variable Independent Variable

Hypothesis 01

- H0: There is no relationship between the **technical challenges** faced by banking sector organizations in Sri Lanka, to adopt digital currencies.
- H1: There is a relationship between the **technical challenges** faced by banking sector organizations in Sri Lanka, to adopt digital currencies.

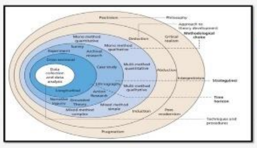
Hypothesis 02

- H0: There is no relationship between the **regulatory challenges** perceived by banking sector organizations in Sri Lanka to adopt digital currencies.
- H2: There is a relationship between the **regulatory challenges** perceived by banking sector organizations in Sri Lanka to adopt digital currencies.

Hypothesis 03

- H0: There is no relationship between the **business challenges** perceived by Sri Lankan banking sector organizations to digital currencies.
- H3: There is a relationship between the **business challenges** perceived by Sri Lankan banking sector organizations to digital currencies.

4 RESEARCH METHODOLOGY



Research Philosophy	Positivism
Research Approach to theory Development	Deductive
Methodical Choice	Mono Method Quantitate
Strategy	Survey and Cause study
Time horizon	Cross - sectional
Techniques and procedures	Questionnaire Method

The research sample frame targets employees from select divisions of Sri Lankan banking organizations, notably those in IT and digital banking, interacting with finance and privilege banking clients, using judgmental sampling with a total of 121 participants,

Categories	No of Persons
Bank Executive	52
IT professional	43
Business Clients	26

Total Sample : 121

The Likert scale items in the questionnaire, distributed via Google Forms through email, aid in gathering valuable insights.

Reliability, Validity, and Generalizability

Reliability: Reliability ensures consistent and dependable research findings across repeated testing, crucial for validity.

validity: ensures questionnaires accurately capture all relevant aspects of the research goals.

Generalizability: The research findings primarily pertain to the Sri Lankan banking industry, particularly its IT and digital banking sectors.

Ethical considerations

- Participants were informed of the research objectives and their roles, ensuring informed consent and confidentiality of their information throughout the study.
- Stringent measures were implemented to maintain participant anonymity and protect sensitive information, ensuring compliance with data protection laws and guarding against data breaches.
- The research prioritized the well-being of participants, adhering to ethical standards and ensuring integrity in data collection, analysis, and reporting to prevent harm and bias.

5 FINDING AND ANALYSIS

Descriptive statistical Analysis

Technological Challenges	robust and secure infrastructure	not readily adaptable	integration of digital currencies	interoperability between digital currencies and current banking system	inherently vulnerable to cyberattacks	robust security and cyber threats	for raises significant privacy concerns for users	data protection regulations due to privacy concerns
Mean	4.51	4.53	4.50	4.49	4.55	4.54	4.54	4.59
Median	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Mode	5	5	5	5	5	5	5	5
Std.Deviation	.697	.709	.672	.776	0.707	.646	.708	.641
Regulatory Challenges	regulatory environment	uncertainty in digital currency regulation	AML and KYC regulations	money laundering and other financial crimes	tax treatment	tax implications	environmental concerns	
Mean	4.07	4.26	4.40	4.49	4.42	4.38	4.27	
Median	4.00	4.00	5.00	5.00	5.00	5.00	5.00	
Mode	5	4	5	5	5	5	5	
Std.Deviation	1.055	.842	.861	.807	.824	.870	.904	
Business Challenges	significant threat to traditional banking business models	decreased revenue and profitability for traditional banks	public trust	significant investment in education and marketing	risks to the overall stability of the financial system	impacting market liquidity	diversity of protocols and features	lack of standardization
Mean	4.31	4.32	4.46	4.49	4.40	4.37	4.40	4.47
Median	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Mode	5	5	5	5	5	5	5	5
Std.Deviation	.876	.951	.742	.765	.814	.0907	.770	.797

Inferential Statistical Analysis

Independent Variable	Person Correlation	Remarks	Chi Square	Remarks
Technological Challenges	.278	Small / weak correlation	.000	Alternative hypothesis accepted
Regulatory Challenges	.381	Medium / moderate correlation	.000	Alternative hypothesis accepted
Business Challenges	.241	Small / weak correlation	.000	Alternative hypothesis accepted

6 CONCLUTION AND RECOMENDATIONS

Conclusion

The challenges hindering the adoption of digital currencies in Sri Lanka's banking sector is essential for fostering innovation, ensuring legal compliance, and maintaining competitiveness in the evolving financial landscape.

Limitations

The research acknowledges limitations stemming from a small sample size focused on specific banking sectors in Sri Lanka, potentially constraining the generalizability of findings. Additionally, the deductive mono-method quantitative approach employed may limit the depth of insights gained, warranting consideration of alternative methodologies for future research.

Recommendations

- Upgrade IT infrastructure
- Enhance Interoperability
- Collaboration with Fintech Partners
- Streaming Regulatory compliance Process
- Education and awareness programs
- Investing in Research and Development

Suggestions for future Research

Exploring new developments in digital currency, conducting cross-cultural comparative studies, and longitudinal research to understand adoption trends. Additionally, advocating for user perception studies, policy analysis, impact assessments, and interdisciplinary collaborations to comprehensively evaluate the adoption and integration of digital currencies in Sri Lanka's banking sector.

Contribution to Knowledge

- Good opportunity for coordinate with industry professionals
- Research helps to develop industry related knowledge.
- Opportunity for using SPSS statistical analysis software.

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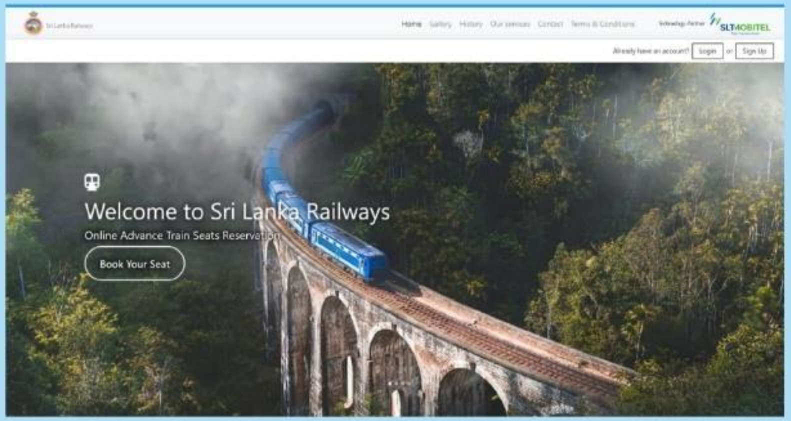
Sri Lanka Railway: Toward a Sustainable Business Model

Introduction

Sri Lanka's railway system, one of the oldest in South Asia, has been an essential mode of public transportation and freight movement since its inception. However, over the years, it has faced growing challenges related to inefficiency, financial instability, and environmental concerns. The need for modernization is evident, but it must be approached in a way that promotes sustainability. This research focuses on exploring the viability of adopting a sustainable business model for Sri Lanka Railways that addresses operational, financial, and environmental challenges. By implementing strategic reforms, the railway system can not only enhance its services but also contribute to the country's broader goals of economic development and environmental conservation.

Objectives

The research aims to assess the current state of Sri Lanka Railways, analyze challenges, and propose sustainable strategies. These strategies will focus on improving operational efficiency, profitability, and environmental impact, benefiting the country's economic, social, and environmental landscape.



Sustainable Business Model Framework

By Madura Thivanka Pathirana - Edith Cowan University Sri Lanka

To create a sustainable future for Sri Lanka Railways, we propose a multi-faceted business model focused on green infrastructure investments, public-private partnerships (PPP), enhanced freight services, and a customer-centric approach. Transitioning from diesel to electric or hybrid locomotives can significantly reduce the railway's carbon footprint. Green infrastructure projects, such as installing energy-efficient technologies in stations and investing in railway electrification, will further enhance environmental sustainability. By fostering public-private partnerships, Sri Lanka Railways can attract private investment for infrastructure development and service optimization. A focus on improving freight services can boost revenue by offering eco-friendly logistics solutions to industries. In addition, enhancing passenger services with smart ticketing systems and modernizing the overall travel experience will improve customer satisfaction and increase ridership.

Financial Sustainability

Revenue can increase through dynamic pricing, enhanced freight services, and tourism-focused routes. Cost savings will result from green technologies and infrastructure investments. Public-private partnerships will support the financial viability of the railway, improving overall operational efficiency.

Socio-economic Impact

Railway modernization will create jobs, improve rural connectivity, and support tourism. Scenic routes, like Kandy to Ella, will attract tourists, driving economic growth. A modern railway system will ensure inclusive development and contribute to equitable social progress in Sri Lanka.

Current Situation of Sri Lanka Railways

Sri Lanka's railway, established in 1864, spans 1,500 km, but faces outdated infrastructure, frequent delays, and financial deficits. High maintenance costs, low fares, and competition from road transport further strain the system, leading to inefficiencies and environmental concerns due to diesel-powered locomotives.

Recommendations

The transformation of Sri Lanka Railways requires a strategic approach that prioritizes both environmental and financial sustainability. Immediate efforts should focus on electrifying major railway lines, enhancing freight services, and implementing green technologies in station operations. Public-private partnerships (PPP) should be pursued to access the funding and technological expertise necessary for modernization. A customer-centric approach, with smart ticketing systems and improved passenger amenities, will enhance the user experience and increase ridership. By adopting this sustainable business model, Sri Lanka Railways can become a profitable, eco-friendly, and customer-oriented transportation network that contributes to the nation's development and environmental goals.

Success Case Study: Sri Lanka's Apparel Manufacturing Industry

Madura Thivanka Pathirana
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Introduction

Sri Lanka's apparel sector has maintained a significant position in the global market, building a reputation for high-quality, ethically-produced garments. This research poster presents a case study of Sri Lanka's apparel industry, analyzing its growth, challenges, and opportunities.

It will draw lessons from the success of Bangladesh and offer strategies for further improving Sri Lanka's competitiveness in the sector.

Background

Sri Lanka has positioned itself as a leader in ethical and sustainable apparel manufacturing. Primarily caters to high-end and mid-range markets. Tax exemptions and duty-free access, though further support is needed.

A Comparative Analysis & Strategic Recommendations

Key Factors Contributing to Sri Lanka's Success

Sri Lankan apparel manufacturers have earned a strong reputation for consistently delivering premium-quality products that meet international standards. This focus on quality has allowed the country to secure a competitive position in the global market, particularly in high-end and mid-range segments. Additionally, Sri Lanka's investment in innovation and technology, such as automation and digital solutions, has significantly enhanced production efficiency, enabling manufacturers to meet evolving market demands. The country is also a pioneer in environmental sustainability, with numerous factories embracing green manufacturing practices and gaining certifications for eco-friendly operations. This commitment to sustainability has not only helped Sri Lanka reduce its environmental footprint but has also made it an appealing choice for ethically-minded consumers and brands worldwide.

Comparison to Bangladesh's Success Factors

Bangladesh's apparel industry benefits significantly from a low-cost workforce, making it an attractive destination for global brands seeking cost-effective production, whereas Sri Lanka faces higher labor costs, which can be a challenge in maintaining competitiveness. Additionally, Bangladesh enjoys extensive government support, including special economic zones and favorable trade policies, whereas Sri Lanka's governmental support, though present, is still developing and requires further strengthening. In terms of workforce development, Bangladesh has invested heavily in training and upskilling its labor force, which has boosted productivity and innovation. While Sri Lanka boasts a strong and skilled workforce, there is still room for improvement, particularly in enhancing technical expertise and efficiency. Furthermore, Bangladesh has successfully diversified its export markets, reaching a wide array of global regions, whereas Sri Lanka primarily targets high-end markets, limiting its potential for broader market expansion.

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Recommendations for Sri Lanka's Apparel Sector

To enhance the competitiveness of its apparel industry, Sri Lanka should prioritize expanding workforce development by investing more in training programs that improve skills and productivity. This will not only boost efficiency but also drive innovation in manufacturing processes. Additionally, the government should strengthen its policies by offering stronger incentives for both local and foreign investors, fostering an environment that attracts more investment and stimulates industry growth. Sri Lanka can further capitalize on its global reputation for sustainability by leveraging ethical branding, which will appeal to environmentally-conscious consumers and brands. Finally, market diversification is essential—by reducing dependence on North American and European markets,

Sri Lanka can explore emerging markets in Asia, Africa, and beyond, broadening its export base and reducing market-related risks.