



Assessing the Integration of Sustainable Business Models in Optimizing financial Performance and Corporate Social responsibility of Selected Online Businesses in Metro Manila as Basis for a Strategic Framework

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Abstract

This study assessed the extent to which selected online businesses in Metro Manila integrated sustainable business model components and corporate social responsibility practices to optimize financial performance. It also examined the relationship between sustainable business model integration and CSR practices, identified the effectiveness, challenges, and strategies related to sustainability implementation, and proposed a strategic framework to strengthen sustainable business practices among online businesses. The study employed a convergent parallel mixed methods design and utilized 387 registered online business owners in Metro Manila and 15 among them for qualitative data. The study concluded that online businesses in Metro Manila have strongly integrated sustainable business model components and corporate social responsibility practices, with a significant positive relationship between sustainability integration, financial performance, and CSR outcomes. However, challenges such as balancing profitability with sustainability goals, limited resources, and environmental concerns remain areas that require further improvement. It is recommended that online business owners, government agencies, business support organizations, and other stakeholders collaborate in implementing a Strategic Sustainable Online Business Integration Framework to enhance long-term business performance and social responsibility.

Keywords: *Integration of Sustainable Business Models, Financial Performance, Corporate Social Responsibility, Strategic Framework*



Introduction

The rapid expansion of online businesses in the Philippines has created a critical tension between the pursuit of financial performance and the imperative of corporate social responsibility (CSR). The growth of digital commerce has transformed the way entrepreneurs create value, reach customers, and generate revenue. In the Philippines, the e-commerce sector has been expanding rapidly, contributing approximately USD 17 billion to the national economy and growing at an annual rate of about 24% (Google–Temasek–Bain, 2023). Metro Manila serves as the epicenter of this digital entrepreneurship boom, hosting the largest concentration of registered online businesses in the country. Despite these opportunities, sustainability integration remains a significant concern. Studies indicate that only approximately 32% of Philippine online businesses have integrated CSR practices into their core operations, while the majority continue to treat social responsibility as a peripheral or optional activity rather than a strategic priority (Pamfilo, 2024). This gap between financial performance goals and social responsibility obligations presents a major challenge for online businesses seeking long-term viability and sustainable growth.

Financial performance remains essential for the survival, competitiveness, and growth of online businesses. Optimizing financial performance involves generating sufficient revenue and returns while managing resources efficiently and making strategic decisions that support long-term viability. Sustainable business models provide a mechanism for achieving these objectives through the integration of value proposition, value delivery, and value capture. These components align what customers value, how products and services are delivered, and how businesses retain value over time. When effectively integrated, sustainable business models enable firms to deliver differentiated offerings, serve customers efficiently, and secure sustainable revenue streams while maintaining competitiveness in dynamic digital markets.

Beyond financial performance, online businesses are increasingly expected to contribute to society and the environment through responsible business practices. Corporate social responsibility encompasses activities that address human, social, economic, and environmental concerns, including employee welfare, community engagement, economic inclusion, and environmental stewardship. Pamfilo (2024) found that Philippine companies that embed stakeholder welfare and environmental stewardship into their online platform strategies strengthen customer trust and brand loyalty. Similarly, Costales et al. (2024) reported that small and medium enterprises adopting sustainability practices and green marketing initiatives improved their financial performance and competitive positioning. Furthermore, Chua and Byun (2024) observed that social responsibility and environmental initiatives contribute to sustainable finance frameworks and long-term organizational resilience among Philippine firms, although the magnitude of these effects may vary across industries and organizational contexts. Collectively, these studies suggest that sustainability-oriented practices can generate benefits for both organizational performance and stakeholder relationships.

Despite growing scholarly attention to sustainability and corporate social responsibility, important gaps remain in the literature. Existing studies have demonstrated the benefits of sustainability-oriented practices, green marketing initiatives, and CSR activities; however,



limited empirical evidence exists regarding the extent to which online business owners integrate the core components of sustainable business models—value proposition, value delivery, and value capture—in ensuring financial performance. Likewise, there remains insufficient understanding of how online businesses integrate the four pillars of sustainability, namely the human, social, economic, and environmental dimensions, in practicing corporate social responsibility.

Furthermore, sustainability and corporate social responsibility have often been examined as separate organizational constructs. As a result, limited empirical evidence exists regarding whether a significant relationship exists between sustainable business model integration and corporate social responsibility practices among online business owners. This gap is particularly evident within the context of digital entrepreneurship in developing economies, where business operations are influenced by rapidly changing technologies, evolving customer expectations, resource constraints, and increasing stakeholder demands for responsible business conduct.

Another important gap concerns the practical implementation of sustainable business models. Existing literature provides limited evidence regarding the effectiveness of various online business model types, including brokerage, advertising, infomediary, merchant, manufacturer, affiliate, community, subscription, and utility models, in simultaneously optimizing financial performance and corporate social responsibility. Moreover, little is known about the challenges encountered by online business owners when integrating sustainable business model components and the strategies they employ to address these challenges. Consequently, there remains limited guidance for developing evidence-based strategic frameworks that can strengthen sustainability integration among online businesses.

Addressing these gaps is important because online businesses play a significant role in economic development, employment generation, and digital innovation in the Philippines. Understanding how online business owners integrate sustainable business model components and sustainability pillars can provide valuable insights into how financial performance and corporate social responsibility can be pursued simultaneously. Such knowledge may assist entrepreneurs, policymakers, and development organizations in promoting sustainable and competitive online enterprises while supporting broader sustainable development goals.

Therefore, this study examines the integration of sustainable business models in optimizing financial performance and corporate social responsibility among selected online businesses in Metro Manila. Specifically, it investigates the extent to which online business owners integrate sustainable business model components and sustainability pillars, examines the relationship between sustainable business model integration and corporate social responsibility practices, assesses the effectiveness of various online business model types, identifies challenges encountered in sustainability integration, explores strategies employed to address these challenges, and develops a strategic framework to strengthen the integration of sustainable business models for optimized financial performance and corporate social responsibility.



Specifically, it seeks to answer the following research questions:

1. To what extent do online business owners integrate the following components of sustainable business model in ensuring the financial performance of their business:
 - 1.1 Value Proposition;
 - 1.2 Value Delivery; and
 - 1.3 Value Capture?
2. To what extent do online business owners integrate the following four pillars of sustainability in practicing corporate social responsibility:
 - 2.1 Human;
 - 2.2 Social;
 - 2.3 Economic; and
 - 2.4 Environmental?
3. Is there a significant relationship between the extent of sustainable business model integration in ensuring financial performance and the extent of corporate social responsibility practice of the online business owner-respondents?
4. What is the level of effectiveness of the following online business model components in optimizing financial performance and corporate social responsibility as assessed by the business owner-respondents:
 - 4.1 Brokerage;
 - 4.2 Advertising;
 - 4.3 Infomediary;
 - 4.4 Merchant;
 - 4.5 Manufacturer;
 - 4.6 Affiliate;
 - 4.7 Community;
 - 4.8 Subscription; and
 - 4.9 Utility?
5. What are the challenges encountered by online business owners in integrating sustainable business model components to optimize financial performance and corporate social responsibility?
6. What strategies do online business owners employ to address the challenges in integrating sustainable business models for optimized financial performance and corporate social responsibility?
7. Based on the findings of the study, what strategic framework can be developed to strengthen the integration of sustainable business models in optimizing financial performance and corporate social responsibility of selected online businesses in Metro Manila?



Methodology

Research Design

The study employed a convergent parallel mixed methods design as the primary research approach, which entails the simultaneous collection and analysis of both quantitative and qualitative data, followed by the comparison and integration of findings. According to Dawadi et al. (2021), this approach enables researchers to capitalize on the strengths of each method while offsetting their limitations, resulting in a richer and more comprehensive understanding of the research problem. The mixed methods design was justified in this study because the research questions required both measurable, statistically analyzed data to determine the degree of integration and correlation among variables and narrative, contextual data to capture the experiences and perspectives of online business owners regarding sustainability challenges and strategies. Neither quantitative nor qualitative approaches alone would be sufficient to address the full scope of the study objectives; together, they provide convergent evidence that strengthens the validity and credibility of the findings (Creswell & Creswell, 2018).

The quantitative strand served as the dominant component of the study. It employed a descriptive-correlational research design to measure the extent to which sustainable business model components are integrated in ensuring financial performance, how the four sustainability pillars are practiced in corporate social responsibility, and whether a statistically significant relationship exists between these variables. The qualitative strand utilized open-ended interview questions to contextualize and deepen the quantitative findings, particularly with respect to challenges and strategies in sustainable business model integration. According to Shinija (2024), descriptive research systematically collects, organizes, and presents information about a phenomenon as it naturally occurs without manipulating variables, making it appropriate for measuring current integration practices among online business owners in Metro Manila.

Research Locale

The study was conducted in Metro Manila, Philippines. Metro Manila serves as the center of digital entrepreneurship in the country and hosts the largest concentration of registered online businesses engaged in e-commerce and digital trade. The target population consisted of registered online business owners operating within the seventeen cities and municipalities of Metro Manila.

Respondents and Sampling Technique

The target population consisted of registered online business owners operating in Metro Manila. Based on records from the Department of Trade and Industry National Capital Region (DTI-NCR, 2023), the estimated population was approximately 15,000 registered micro and small online businesses.

The required sample size was determined using the Raosoft Sample Size Calculator (Raosoft, Inc., 2004) with a population of 15,000, a margin of error of 5%, a confidence level of 95%, and

a response distribution of 50%. The computation yielded a minimum required sample of 375 respondents. Applying a 3% non-response adjustment, the final target sample was increased to 387 respondents.

For the quantitative strand, 387 respondents were surveyed using a structured questionnaire corresponding to Statements of the Problem 1, 2, 3, and 4. To ensure geographic representativeness across Metro Manila, respondents were proportionally allocated among the seventeen cities and municipalities based on the proportion of registered online businesses in each area relative to the total population.

The quantitative strand utilized a combination of purposive sampling and snowball sampling. Purposive sampling deliberately selected participants based on specific characteristics relevant to the study (Nyimbili & Nyimbili, 2024), while snowball sampling expanded the participant pool through referrals from qualified respondents (Ting et al., 2025).

Table 1
Proportional Allocation of Respondents by City/Municipality Metro Manila

City / Municipality	Est. Registered Online Businesses (N_i)	Proportion (%)	Allocated Sample (n_i)
Caloocan City	1,200	8.00%	31
Las Piñas City	750	5.00%	19
Makati City	1,500	10.00%	39
Malabon City	450	3.00%	12
Mandaluyong City	750	5.00%	19
Manila City	1,650	11.00%	43
Marikina City	600	4.00%	15
Muntinlupa City	750	5.00%	19
Navotas City	300	2.00%	8
Parañaque City	900	6.00%	23
Pasay City	600	4.00%	15
Pasig City	900	6.00%	23
Pateros	150	1.00%	4
Quezon City	1,950	13.00%	50
San Juan City	300	2.00%	8
Taguig City	900	6.00%	23
Valenzuela City	600	4.00%	15
TOTAL	15,000	100%	387

Note: Estimated figures are based on proportional distribution derived from DTI-NCR (2023) records. Exact per-city figures will be verified with DTI Metro Manila and relevant LGUs prior to data collection

For the qualitative strand, 15 key informants were purposively selected from the 387 quantitative respondents. According to Guest, Bunce, and Johnson (2006), thematic saturation is typically achieved between six and twelve interviews; therefore, fifteen key informants were considered sufficient to provide thematic depth and richness.



Inclusion and Exclusion Criteria

For the quantitative phase, respondents were required to satisfy all of the following criteria: (1) the business had been operating online for at least one year; (2) the business was registered with the Department of Trade and Industry or a relevant Local Government Unit in Metro Manila; (3) the respondent was the owner or principal manager of the business; and (4) the respondent had direct experience implementing or planning practices related to financial performance and corporate social responsibility. Respondents who did not meet all four criteria were excluded from the study.

For the qualitative phase, key informants were selected from the quantitative respondents and were required to satisfy the following additional criteria: (1) the business had been operating online for at least three years; (2) the respondent had actively implemented at least one sustainability practice under the human, social, economic, or environmental pillar; (3) the respondent was available and willing to participate in an in-depth interview lasting approximately 30 to 45 minutes through face-to-face interaction or video call; and (4) the respondent provided informed consent for interview recording and transcription.

Research Instrument

A researcher-made survey questionnaire served as the primary research instrument for this study to gather the necessary data related to the integration of sustainable business models in optimizing financial performance and corporate social responsibility among selected online businesses. The questionnaire was carefully constructed based on the research title, statement of the problem, and a thorough review of related literature and studies. Each survey item was designed to address the specific objectives of the study, ensuring alignment between the questions and the problem areas identified in the research.

The questionnaire consisted of five major parts. Part I assessed how online business owners integrate the components of sustainable business models, specifically value proposition, value delivery, and value capture, in ensuring financial performance. Part II examined how online business owners integrate the four pillars of sustainability—human, social, economic, and environmental—in practicing corporate social responsibility. Part III evaluated the effectiveness of brokerage, advertising, infomediary, merchant, manufacturer, affiliate, community, subscription, and utility business models in optimizing financial performance and corporate social responsibility. Part IV identified the challenges encountered by online business owners in integrating sustainable business models, while Part V consisted of open-ended interview questions designed to capture qualitative insights regarding strategies employed to address such challenges.

To ensure validity and reliability, the questionnaire underwent a two-stage validation process. First, the instrument was evaluated by three expert validators with expertise in business administration, sustainability, and research methodology who assessed its content validity in terms of clarity, relevance, and alignment with the objectives of the study. Second, a pilot test was conducted among 20 to 30 online business owners who were not included in the final sample.



Reliability was assessed using Cronbach's Alpha, with a coefficient of 0.70 or higher considered acceptable (Nunnally, 1978).

Data Collection Procedure

Upon the validation and finalization of the survey questionnaire, formal letters of permission were prepared and submitted to selected online business owners and organizations. These letters requested authorization to conduct the study and gather data from qualified respondents.

Each respondent was provided with an informed consent form attached to the survey questionnaire. The consent form clearly explained the objectives of the study, the voluntary nature of participation, and the assurance that all information provided would be treated with strict confidentiality and used solely for academic purposes.

The researcher provided clear instructions before administering the survey. For face-to-face participants, a brief orientation was conducted to explain each section of the questionnaire. For online respondents, concise written instructions were included in the survey instrument. Data collection was conducted through both online and face-to-face survey administration to maximize accessibility and convenience among online business owners throughout Metro Manila.

After data collection, responses were organized, tabulated, and prepared for quantitative and qualitative analyses. Quantitative data were analyzed using appropriate statistical tools, while qualitative responses were subjected to thematic analysis to capture deeper insights regarding sustainability integration practices.

Statistical Treatment of Data

The gathered data were summarized, classified, and tabulated using both quantitative and qualitative analysis techniques. Weighted Mean and Standard Deviation were utilized to determine the extent of integration of sustainable business model components, sustainability pillars, and the effectiveness of online business model types. Responses were interpreted using a five-point Likert scale.

To determine the significant relationship between sustainable business model integration and corporate social responsibility practices, the Pearson Product-Moment Correlation Coefficient (Pearson r) was employed at the 0.05 level of significance.

Qualitative data obtained from open-ended interviews were analyzed using Braun and Clarke's (2006) six-phase thematic analysis framework. The process included familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. This approach enabled the identification of recurring patterns and themes related to the challenges and strategies associated with sustainable business model integration.

Ethical Considerations

Ethical standards were strictly observed throughout the research process. Informed consent was obtained from all participants, who were informed about the purpose of the study, their right to withdraw at any stage of participation, and the confidentiality of their responses. The researcher guaranteed the anonymity and confidentiality of all information collected and assured participants that the data would be used solely for academic purposes.

Throughout the data-gathering process, honesty, respect, privacy, and confidentiality were maintained. Proper research etiquette was observed, and all ideas, concepts, and materials derived from previous works were properly cited and acknowledged to ensure academic integrity and respect for intellectual property rights.

Results

Table 1

Assessment of how Online Business Owners Integrate the Components of Sustainable Business Model in Ensuring Profitability of their Business

INDICATORS	MEAN	SD	INTERPRETATION	RANK
1. Value Proposition	4.26	0.99	To a Great Extent	1
2. Value Delivery	4.08	1.16	To a Great Extent	3
3. Value Capture	4.20	0.97	To a Great Extent	2
Overall Mean	4.18	1.04	To a Great Extent	

LEGEND: TO A VERY GREAT EXTENT (=4.51-5.0); TO A GREAT EXTENT (=3.51-4.50); TO A MODERATE EXTENT (=2.51-3.50); TO A SLIGHT EXTENT (=1.51-2.50); NOT AT ALL (=1.0-1.50)

Table 1 determines the assessment of how online business owners integrate the components of sustainable business model in ensuring profitability of their business. The findings reveal an overall mean of 4.18 and a standard deviation of 1.04, interpreted as “To a Great Extent.” Among the three dimensions, Value Proposition obtained the highest rank with a mean of 4.26 and a standard deviation of 0.99, interpreted as “To a Great Extent.” In contrast, Value Delivery ranked lowest with a mean of 4.08 and a standard deviation of 1.16, although it remained interpreted as “To a Great Extent.”

Table 2

Assessment of how Online Business Owners Integrate the 4 Pillars of Sustainability in Practicing their Social Responsibility

INDICATORS	MEAN	SD	INTERPRETATION	RANK
1. Human	4.21	1.00	To a Great Extent	2
2. Social	4.23	1.00	To a Great Extent	1
3. Economic	4.20	0.95	To a Great Extent	3
4. Environmental	4.11	1.09	To a Great Extent	4
Overall Mean	4.19	1.01	To a Great Extent	

LEGEND: TO A VERY GREAT EXTENT (=4.51-5.0); TO A GREAT EXTENT (=3.51-4.50); TO A MODERATE EXTENT (=2.51-3.50); TO A SLIGHT EXTENT (=1.51-2.50); NOT AT ALL (=1.0-1.50)

Table 2 depicts the assessment of how online business owners integrate the 4 pillars of sustainability in practicing their social responsibility. The results reveal an overall mean of 4.19 and a standard deviation of 1.01, interpreted as “To a Great Extent.” Among the four pillars, the Social dimension obtained the highest rank with a mean of 4.23 and a standard deviation of 1.00, interpreted as “To a Great Extent.” In contrast, the Environmental dimension recorded the lowest rank with a mean of 4.11 and a standard deviation of 1.09, also interpreted as “To a Great Extent.”

Table 3 shows the significant relationship between the extent of sustainable business model integration in ensuring financial performance and the extent of corporate social responsibility practice of the online business owner.

Table 3

Significant Relationship between the Extent of Sustainable Business Model Integration in Ensuring Financial Performance and the Extent of Corporate Social Responsibility Practice of the Online Business Owner

Variable Tested		R-Value	Degree of Correlation	Sig Value (2 tailed)	Decision on HO	Interpretation
Sustainable Business Model Integration	Corporate Social Responsibility Practices	.400		.000	Reject/Not Supported	Significant

The results show a positive and statistically significant relationship between Sustainable Business Model Integration and Corporate Social Responsibility (CSR) Practices, with an r-value of .400 and a p-value of .000 (2-tailed).

Table 4

Assessment of the Business Owner-Respondents on the Effectiveness of the Following Components of Online Business Model in Optimizing Business Financial Performance and Corporate Social Responsibility

INDICATORS	MEAN	SD	INTERPRETATION	RANK
1. Brokerage	4.18	0.98	Effective	7
2. Advertising	4.23	1.02	Effective	4
3. Infomediary	4.31	0.94	Effective	1
4. Merchant	4.15	0.95	Effective	8
5. Manufacturer	4.19	0.98	Effective	5.5
6. Affiliate	4.19	0.98	Effective	5.5
7. Community	4.26	0.93	Effective	2
8. Subscription	4.08	1.04	Effective	9
9. Utility	4.25	4.25	Effective	3
Overall Mean	4.20	1.34	Effective	

LEGEND: VERY EFFECTIVE (=4.51-5.0); EFFECTIVE (=3.51-4.50); MODERATELY EFFECTIVE (=2.51-3.50); SLIGHTLY EFFECTIVE (=1.51-2.50); NOT EFFECTIVE (=1.0-1.50)

Table 4 displays the assessment of the business owner-respondents on the effectiveness of the following of online business model in optimizing business financial performance and corporate social responsibility. The results reveal an overall composite mean of 4.20 with a standard deviation of 1.34, interpreted as “Effective.” Among the indicators, the highest-ranked component was Infomediary with a mean of 4.31 and standard deviation of 0.94, interpreted as “Effective,” meaning strong agreement that data-driven decision-making and responsible information use are central to business effectiveness. In contrast, the lowest-ranked component was Subscription with a mean of 4.08 and standard deviation of 1.04, interpreted as “Effective,” indicating comparatively weaker and more variable perceptions.

The thematic analysis generated five major themes describing the challenges encountered by online business owners in integrating sustainable business models to optimize financial performance and corporate social responsibility. These themes and their recurrences are presented in Table 5.

Table 5

Summary of Challenges Encountered by Online Business Owners in Integrating Sustainable Business Models

Theme	Recurrence
1. Resource Constraints	15
2. Market Competition and Regulatory Pressures	15

3. Technology Gaps, System Limitations, and Digital Constraints	15
4. Balancing Profitability and Sustainability Goals	14
5. Stakeholder Support, Alignment, and Engagement Challenges	14

The thematic analysis identified five major challenges encountered by online business owners in integrating sustainable business models to optimize financial performance and corporate social responsibility. Resource constraints emerged as a dominant challenge, with respondents reporting limitations in budget, manpower, time, and technological capacity that hinder sustainability implementation. Market competition and regulatory pressures were also consistently identified, highlighting the influence of external business environments on sustainability efforts. Likewise, technology gaps, system limitations, and digital constraints were frequently reported, particularly in relation to data management, automation, and sustainability monitoring. Respondents also emphasized the challenge of balancing profitability and sustainability goals, reflecting tensions between financial performance and responsible business practices. Finally, stakeholder support, alignment, and engagement challenges were identified, particularly in securing stakeholder commitment, maintaining communication, and aligning diverse interests toward sustainability objectives.

Table 6

Summary of Strategies Employed by Online Business Owners to Address Sustainability Integration Challenges

Theme	Recurrence
1. Resource Optimization, Efficiency, and Cost-Effective Solutions	14
2. Digital Transformation, Automation, and Operational Efficiency	14
3. Communication, Collaboration, and Relationship Building	14
4. Strategic Planning, Goal Alignment, and Continuous Improvement	13
5. Regulatory Compliance and Market Adaptation	13



The thematic analysis generated five major themes describing the strategies employed by online business owners in addressing sustainability integration challenges. These themes and their recurrences are presented in Table 6.

Resource optimization, efficiency, and cost-effective solutions emerged as one of the most frequently reported strategies, emphasizing waste reduction, process improvement, and efficient resource utilization. Digital transformation, automation, and operational efficiency were also widely adopted, with respondents utilizing digital tools, automation systems, and data-driven platforms to improve business operations. Communication, collaboration, and relationship building likewise emerged as an important strategy, highlighting the role of stakeholder engagement and partnership development in supporting sustainability initiatives. Strategic planning, goal alignment, and continuous improvement were reported as mechanisms for integrating sustainability objectives into business decision-making processes. Finally, regulatory compliance and market adaptation were identified as strategies for responding to changing regulations, customer expectations, and competitive market conditions.

Discussions

Sustainable Business Model Integration in Ensuring Financial Performance

As shown in Table 1, online business owners integrate the components of a sustainable business model to a great extent, with an overall mean of 4.18. Data shows that respondents strongly acknowledge the importance of sustainable business model integration as a strategic mechanism for achieving long-term profitability and competitiveness. The highest rating assigned to value proposition indicates that online business owners prioritize understanding customer needs, developing relevant offerings, and continuously enhancing customer value. This finding reflects the realities of the digital marketplace, where businesses must consistently differentiate themselves to attract and retain customers amid intense competition. A strong value proposition serves as the foundation upon which customer loyalty, market positioning, and financial performance are built. According to Futre (2025), sustainable business models generate competitive advantage when organizations effectively communicate and translate value into meaningful benefits for customers and stakeholders, thereby strengthening consumer engagement and purchase intentions. Meanwhile, the relatively lower rating for value delivery does not imply weakness but rather highlights the operational challenges associated with ensuring consistent and efficient delivery mechanisms across diverse business settings. Factors such as logistics constraints, technological limitations, supplier coordination, and customer service management may affect the extent to which value can be delivered effectively. Lüdeke-Freund et al. (2024) emphasized that sustainable business models require the integration of value creation, delivery, and capture activities through coordinated design themes and organizational processes to achieve sustainable outcomes. The findings imply that respondents understand profitability not merely as revenue generation but as the result of successfully creating, delivering, and capturing value in a balanced and sustainable manner. The relatively high ratings across all dimensions further mean that online entrepreneurs are increasingly adopting strategic and customer-centered approaches that support both short-term financial performance and long-term business sustainability.



It is observed that respondents perceive the integration of sustainable business model components into their business operations to a great extent, demonstrating that sustainable business practices are highly applicable within the context of online entrepreneurship in Metro Manila. The prominence of value proposition highlights the importance of customer-focused innovation and differentiation, while the positive ratings for value delivery and value capture underscore the necessity of operational efficiency and financial sustainability. The findings affirm that profitability is achieved not through isolated business activities but through the effective alignment of value proposition, value delivery, and value capture mechanisms. Therefore, the sustainable business model framework is highly applicable to online businesses because it provides a comprehensive approach for generating customer value, ensuring effective delivery, and converting that value into sustainable financial returns. As online markets continue to evolve, businesses that effectively integrate these components are more likely to maintain competitiveness, adaptability, customer loyalty, and long-term profitability.

Integration of the Four Pillars of Sustainability in Practicing Corporate Social Responsibility

As presented in Table 2, online business owners integrate the four pillars of sustainability in practicing corporate social responsibility to a great extent, with the social pillar obtaining the highest rating and the environmental pillar receiving the lowest rank. The dominance of the social dimension suggests that respondents prioritize community engagement, transparency, ethical conduct, and stakeholder relationships as key elements of responsible business practice. This means that online business owners in Metro Manila prioritize the social aspect of sustainability, likely because it directly strengthens customer trust, brand reputation, and community relationships in highly competitive digital markets. The dominance of the social pillar implies that businesses are more responsive to visible and immediate stakeholder concerns such as ethical conduct, transparency, and community involvement. This aligns with the findings of Zaman et al., (2025), who emphasized that social sustainability practices significantly enhance stakeholder trust and organizational legitimacy, particularly in small and medium enterprises operating in digital economies. Similarly, Jaroensombut et al. (2025) found that firms tend to prioritize social sustainability initiatives because they generate immediate reputational benefits and strengthen customer engagement. On the other hand, the lower ranking of the environmental pillar implies that ecological practices such as resource efficiency and environmental innovation are still developing among online businesses. This may be attributed to financial constraints, limited access to green technologies, and the perception that environmental initiatives require higher investment compared to social initiatives. According to Durranu et al. (2024), environmental sustainability adoption among SMEs is often slower due to cost barriers and limited institutional support, despite increasing awareness of environmental responsibility. Likewise, Hassan et al. (2024) noted that environmental practices are frequently the last to be fully integrated in sustainability frameworks, especially in developing digital economies where businesses prioritize immediate operational survival and social legitimacy over long-term ecological investments. The results therefore indicate that while sustainability is broadly embraced, its implementation remains uneven across the four pillars, with social sustainability leading and environmental sustainability lagging in terms of depth of integration.

Data demonstrate that respondents integrate the four pillars of sustainability to a great extent, reflecting a generally high level of awareness and commitment to sustainable business practices

among online business owners. However, the variation in rankings highlights that sustainability implementation is not uniform, with social and human dimensions being more strongly emphasized than economic and environmental aspects. This implies that while businesses recognize sustainability as a holistic concept, practical constraints influence how each pillar is prioritized in real operations. Therefore, the integration of the four pillars is highly applicable to online businesses in Metro Manila because it supports balanced growth, stakeholder satisfaction, and long-term business resilience. Strengthening environmental and economic sustainability practices, alongside already strong social and human initiatives, will further enhance the overall sustainability performance and competitiveness of online businesses in an increasingly dynamic digital economy.

Relationship Between Sustainable Business Model Integration and Corporate Social Responsibility Practices

As reflected in Table 3, the study found a significant positive relationship between sustainable business model integration and corporate social responsibility practices ($r = .400$, $p = .000$). This indicates a moderate positive correlation, meaning that as organizations strengthen the integration of sustainable business models into their operations, their CSR practices tend to improve as well. The rejection of the null hypothesis further confirms that this relationship is not due to random chance but reflects a meaningful association between the two variables. Practically, this implies that firms embedding sustainability principles such as environmental stewardship, ethical sourcing, and stakeholder inclusivity are more likely to institutionalize CSR activities in a structured and consistent manner.

This finding aligns with recent sustainability and CSR literature emphasizing that sustainable business model innovation serves as a strategic driver of CSR enhancement. Integrating sustainability into core business models shifts CSR from a peripheral or philanthropic function into a value-creating organizational strategy embedded in decision-making, operations, and supply chain processes. Studies in the cleaner production and sustainability management fields also highlight that firms adopting sustainable business models tend to exhibit higher levels of transparency, stakeholder engagement, and social responsibility performance. (Mu et al., 2024) Overall, the result supports the view that CSR is not isolated from business model design but is significantly strengthened when sustainability is embedded at the strategic and operational levels of the organization.

Effectiveness of Online Business Model Components in Optimizing Financial Performance and Corporate Social Responsibility

As shown in Table 4, respondents assessed the online business model components as effective in optimizing financial performance and corporate social responsibility, with an overall mean of 4.20. It is noted that online business owners prioritize information management, community engagement, and utility-based service delivery as the strongest enablers of integrating financial performance with corporate social responsibility. The dominance of the infomediary component highlights the central role of data analytics, transparency, and responsible information sharing in optimizing both profitability and ethical decision-making in digital business environments. In contemporary online ecosystems, data-driven insights allow firms to better understand customer



behavior, improve targeting efficiency, and support sustainability-oriented decisions. This aligns with Verhoef et al. (2021), who emphasized that data-driven business models significantly enhance organizational performance and customer value creation through improved decision-making and personalization. Similarly, Davenport and Bean (2022) found that infomediary and analytics-driven systems strengthen both operational efficiency and responsible innovation when firms effectively manage and ethically use data resources. On the other hand, the lower ranking of the subscription component implies that recurring-revenue models are less consistently perceived as integrating CSR with profitability, possibly due to implementation complexity, market variability, or limited sustainability framing in subscription-based offerings. The moderate variability in responses across components also indicates that while businesses generally recognize the value of integrated online business model components, the depth of implementation differs across firms. This reflects a transitional stage where digital businesses are still aligning traditional revenue models with sustainability-oriented frameworks.

Results indicate that the components of the online business model are perceived as effective in supporting both financial performance and corporate social responsibility, with particular strength in data-driven and community-centered mechanisms. The findings imply that online business owners increasingly rely on infomediary functions, community engagement, and utility systems as strategic foundations for sustainable competitiveness. However, variations in subscription, merchant, and brokerage perceptions mean that full integration across all components is not yet uniform. Therefore, this integrated model is highly applicable to online businesses in Metro Manila because it reflects the realities of digital commerce where information, engagement, and service utility drive both profitability and social impact. Strengthening weaker components particularly subscription and merchant systems may further enhance the holistic integration of sustainability into online business models, ensuring long-term resilience and competitive advantage in the evolving digital economy.

Challenges Encountered in Integrating Sustainable Business Models

As presented in Table 5, the thematic analysis identified five major challenges encountered by online business owners in integrating sustainable business models to optimize financial performance and corporate social responsibility. Resource constraints, market competition and regulatory pressures, and technology gaps, system limitations, and digital constraints emerged as the most frequently reported challenges. The findings indicate that balancing profitability and sustainability goals remains a major challenge among online business owners. Respondents consistently expressed difficulties in aligning short-term financial objectives with long-term sustainability commitments, ethical sourcing practices, and corporate social responsibility initiatives. This finding supports Hahn et al. (2022), who emphasized that sustainability integration often creates paradoxical tensions where economic and sustainability objectives compete rather than complement one another. Likewise, Bansal et al. (2023) explained that organizations frequently struggle to reconcile profitability goals with sustainability transitions, particularly under competitive and resource-constrained environments.

Resource constraints also emerged as a significant challenge. Respondents highlighted limited budgets, manpower, time, and technological capabilities as barriers to implementing sustainability initiatives. These limitations reduce the ability of businesses to invest in



environmentally friendly technologies, employee training, and long-term sustainability programs. This finding is consistent with Halkos and Gkampoura (2021), who identified financial limitations as one of the most critical barriers to sustainability adoption, particularly among small and medium-sized enterprises. Similarly, Bocken and Short (2021) noted that resource constraints often hinder the transition toward sustainable business models due to high implementation costs and limited organizational capacity.

The findings further revealed that market competition and regulatory pressures significantly affect sustainability integration efforts. Respondents noted that intense competition, changing customer preferences, and strict regulatory requirements often force businesses to prioritize cost reduction and operational survival over sustainability investments. Porter and Kramer (2023) emphasized that highly competitive markets may discourage sustainability investments when firms face pressure to maintain price competitiveness. Likewise, Kolk (2022) highlighted that regulatory complexity and policy uncertainty create additional barriers to sustainability implementation.

Technology gaps, system limitations, and digital constraints were also identified as major obstacles. Respondents reported limited access to advanced digital tools, fragmented systems, and difficulties in tracking sustainability-related information. According to Vial (2021), inadequate technological infrastructure restricts organizational ability to integrate processes and achieve sustainability objectives. Similarly, Warner and Wäger (2022) found that outdated and fragmented systems hinder digital integration and sustainability performance.

Finally, stakeholder support, alignment, and engagement challenges were frequently reported. Respondents noted difficulties in obtaining stakeholder commitment, aligning diverse interests, and maintaining effective communication regarding sustainability initiatives. Freeman et al. (2020) emphasized that stakeholder misalignment often results in fragmented sustainability implementation, while Mio et al. (2022) argued that successful sustainability initiatives require coordinated stakeholder participation and support.

Overall, the findings indicate that sustainability integration is influenced by a combination of internal organizational limitations and external environmental pressures. Addressing these challenges requires not only financial and technological resources but also strategic alignment, stakeholder cooperation, and organizational readiness.

Strategies Employed in Addressing Sustainability Integration Challenges

As shown in Table 6, the thematic analysis generated five major strategies employed by online business owners to address sustainability integration challenges. Resource optimization and cost-effective solutions, digital transformation and automation, communication and collaboration, strategic planning and goal alignment, and regulatory compliance and market adaptation emerged as the most frequently reported approaches.

The findings indicate that strategic planning, goal alignment, and continuous improvement serve as primary mechanisms for balancing financial performance and corporate social



responsibility objectives. Respondents emphasized careful planning, sustainability integration into decision-making processes, performance monitoring, and continuous refinement of business practices. This finding supports Teece (2022), who highlighted that strategic agility and dynamic capabilities are essential for integrating sustainability into core business operations. Similarly, Sroufe (2021) emphasized that organizations utilizing structured sustainability planning and performance monitoring systems are more effective in achieving both financial and sustainability objectives.

Resource optimization, efficiency, and cost-effective solutions also emerged as important strategies. Respondents reported adopting waste reduction initiatives, process improvements, efficient resource allocation, and incremental innovations to maximize available resources. Dyllick and Muff (2022) argued that resource efficiency is a central element of sustainable business practice, particularly for organizations operating under resource constraints. Likewise, Porter and van der Linde (2021) emphasized that innovation-driven efficiency improvements can simultaneously enhance profitability and sustainability performance.

Digital transformation, automation, and operational efficiency were likewise identified as important strategies. Respondents reported utilizing digital tools, automation systems, data management platforms, and technological innovations to improve communication, streamline processes, and enhance sustainability monitoring. This finding aligns with Vial (2021), who found that digital transformation improves organizational performance through enhanced process integration and operational responsiveness. Verhoef et al. (2021) further emphasized that digital technologies strengthen organizational agility and support data-driven decision-making.

Communication, collaboration, and relationship building also emerged as critical strategies. Respondents highlighted transparent communication, stakeholder involvement, collaborative decision-making, and partnership development as essential practices for strengthening sustainability initiatives. Sachs and Kujala (2022) emphasized that sustainability outcomes are enhanced through continuous stakeholder dialogue and collaborative governance mechanisms. Similarly, Arenas et al. (2023) found that organizations that prioritize stakeholder collaboration are more likely to achieve sustainable and long-term organizational outcomes.

Finally, regulatory compliance and market adaptation were identified as important approaches for responding to external pressures. Respondents reported staying updated with regulations, monitoring market trends, adapting business strategies, and maintaining compliance with industry standards. Pache and Santos (2022) argued that organizations operating under institutional pressures must continuously adapt to maintain legitimacy and competitiveness. Likewise, Oliver and Holzinger (2023) found that proactive regulatory adaptation enhances organizational resilience and long-term stability.

Overall, the findings demonstrate that successful sustainability integration requires a combination of strategic planning, operational efficiency, technological adaptation, stakeholder engagement, and responsiveness to external environmental conditions. These strategies enable online business owners to balance profitability objectives with corporate social responsibility commitments while maintaining long-term business sustainability.



Conclusion

Based on the summary of findings, the following conclusions are drawn:

1. The findings conclude that the majority of respondents are engaged in retail-based online businesses and primarily utilize major social media and e-commerce platforms, particularly Shopee and Facebook. This indicates that online entrepreneurship in the study area is largely driven by accessible, consumer-facing retail activities supported by mainstream digital platforms.
2. The results conclude that online business owners demonstrate a strong integration of sustainable business model components in ensuring profitability, with all dimensions rated to a great extent. Value proposition emerged as the strongest area, indicating that businesses prioritize continuous product improvement and customer-centered offerings, while value delivery represents the main area for improvement.
3. The findings conclude that respondents extensively integrate the four pillars of sustainability into their CSR practices, with social responsibility being the most emphasized and environmental sustainability the least. Overall, this demonstrates a well-balanced but socially driven approach to sustainability in online business operations.
4. The results conclude that there is a statistically significant moderate positive relationship between sustainable business model integration and CSR practices. This confirms that stronger adoption of sustainable business practices is associated with improved corporate social responsibility performance among online businesses.
5. The findings conclude that all online business model components are perceived as effective in enhancing both financial performance and CSR outcomes, with infomediary functions being the most effective and subscription models the least. This indicates that data-driven decision-making plays a central role in business effectiveness, while subscription-based strategies require further strengthening.
6. The findings conclude that profitability in online businesses is primarily driven by customer-centered value creation, efficient delivery systems, and strong value retention through customer loyalty. However, long-term strategic sustainability considerations are less emphasized, meaning a focus on immediate operational performance over long-term planning.
7. The findings conclude that CSR integration is strongly reflected in employee welfare, community engagement, and economic contributions, while environmental sustainability remains relatively less emphasized. This indicates that online businesses prioritize social and economic responsibility over environmental initiatives in their CSR practices.
8. The findings conclude that all components of the online business model are effective in supporting both profitability and CSR, with stakeholder connectivity, ethical practices, and sustainable production being the most dominant drivers. Overall, businesses prioritize relationship-building and ethical operations over purely financial or reputational outcomes.
9. The findings conclude that the primary challenge in integrating sustainable business models is the difficulty of balancing profitability with sustainability goals, compounded by limited resources, external pressures, technological gaps, and stakeholder engagement issues. This indicates that sustainability integration is constrained more by systemic and structural barriers than by isolated operational issues.
10. The findings conclude that businesses primarily address sustainability integration challenges through strategic planning, resource optimization, regulatory compliance, and digital



transformation. This demonstrates that adaptability, efficiency, and technology adoption are key enablers in overcoming barriers to sustainable business integration.

11. The findings of the study indicate that a strategic framework can be developed to strengthen the integration of sustainable business models in optimizing both financial performance and corporate social responsibility (CSR) among selected online businesses in Metro Manila.

Recommendation

Based on the conclusions, the following recommendations are created:

1. Strengthen the utilization of diverse online platforms by online business owners through targeted digital literacy and platform optimization training conducted by local business development offices and e-commerce platform partners, to enhance effective use of underutilized platforms such as websites and emerging digital channels.
2. Enhance value delivery systems among online business owners through capacity-building programs facilitated by business support agencies and online marketplace providers, focusing on customer feedback integration, logistics improvement, and service evaluation mechanisms to improve operational effectiveness.
3. Promote balanced sustainability practices by encouraging government agencies, business associations, and CSR advocates to implement training and awareness programs that strengthen environmental sustainability practices alongside existing strong social and economic initiatives through workshops and sustainability benchmarking tools.
4. Encourage stronger integration of sustainable business models and CSR practices by policy-makers and business development organizations through incentives, sustainability certification programs, and technical assistance to ensure continuous alignment of profitability and social responsibility goals.
5. Improve weaker business model components such as subscription systems through training and digital business mentoring programs led by e-commerce platforms and entrepreneurship agencies, focusing on data analytics, customer engagement, and service optimization strategies.
6. Strengthen long-term strategic planning among online business owners through structured coaching programs provided by business incubators and government SME offices, emphasizing sustainable value creation, strategic marketing communication, and customer relationship management systems.
7. Reinforce environmental sustainability practices by implementing green business initiatives led by environmental agencies and local government units, including training on waste reduction technologies, eco-friendly packaging, and sustainable sourcing practices for online businesses.
8. Optimize online business model performance by encouraging collaborative partnerships between platform providers, business owners, and CSR organizations to strengthen stakeholder engagement, ethical business practices, and sustainability-driven operational strategies.
9. Address integration challenges by developing comprehensive support programs from government agencies, financial institutions, and technology providers that offer funding assistance, digital infrastructure support, and stakeholder engagement frameworks to reduce barriers in sustainability implementation.
10. Sustain and expand effective strategies such as digital transformation and resource optimization through continuous training programs, government-led innovation support schemes,



and private sector partnerships to ensure long-term improvement in sustainable business integration.

11. Develop and institutionalize a Strategic Sustainable Online Business Integration Framework through collaboration among higher education institutions, local government units, business development agencies, and e-commerce platforms by designing a structured model that aligns value creation, delivery, and capture with the four pillars of sustainability (economic, social, environmental, and human).

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