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Business Model Innovation Through Sustainability Integration: Cases from the Sharing Economy in Iraq

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Abstract: *This study investigates the integration of sustainability principles into business model innovation within Iraq's emerging sharing economy platforms. The research examines how incorporating sustainability affects financial, social, and environmental performance outcomes through a quantitative analysis of 397 survey responses from sharing platform founders, managers, and executives. Using structural equation modeling, the study tests hypothesized relationships between sustainability integration, business model innovation, and triple bottom line performance measures. Results demonstrate that higher levels of sustainability integration positively influence business model innovation, which in turn enhances financial performance. Direct positive effects were also found between sustainability integration and both social performance and environmental performance. The findings reveal that Iraqi sharing enterprises successfully combining sustainability principles with innovative business models achieve superior outcomes across multiple performance dimensions. This research contributes to the emerging literature on sustainable sharing economy business models in developing market contexts while offering practical insights for entrepreneurs and policymakers fostering sustainable platform development during post-conflict reconstruction. The study suggests that intentionally nurturing sharing platforms with integrated social, environmental, and economic aspirations can positively transform multiple aspects of Iraqi society from employment to ecological rehabilitation. Limitations include the relatively small sample size given the nascent stage of Iraq's sharing economy, indicating opportunities for future research through comparative studies across the Middle East and North Africa region and in-depth case analyses of successful sustainable sharing platforms.*

Keywords: Sustainability Integration, Business Model Innovation, Sharing Economy, Sustainable Development, Iraq

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1. Introduction

As stakeholders put more and more pressure on businesses to address environmental and social issues, sustainability integration has become an important strategic consideration (Ranjbari et al., 2017). In particular, corporations can integrate the creation of social and environmental value with financial rewards by reimagining their business models to include sustainability (Vaskelainen & Münzel, 2018). This enables meeting current corporate sustainability demands while also unlocking new opportunities through purpose-driven brands and positive externality

creation (Gu, 2022). Businesses engage in sustainability integration when they modify their operations, products, or value propositions to include social and/or environmental benefits in addition to financial ones (Curtis & Lehner, 2019). To achieve this, we must innovate our business model, which is characterized as "the logic and strategic choices that enable value generation" by creating new connections with our customers and improving our profit calculations (Basukie et al., 2020). Some examples include using technology to improve production or consumption efficiency, moving away from product sales and toward servitization models that prioritize accessibility, and designing or distributing products with equity or justice in mind. In the face of mounting sustainability demands, particularly in the areas of decarbonization, circularity, and the effects on the supply chain, innovative companies are realising that they must adapt their business models if they want to keep generating returns for their shareholders (Zhang et al., 2019).

An ideal opportunity to analyze such innovations in sustainable business models has arisen with the advent of the sharing economy. Sharing models offer sustainability advantages such as improved use, decreased waste, and greater access efficiency by utilizing digital platforms and communities to encourage shared access rather than ownership (Belezas & Daniel, 2023). Therefore, innovation in this field holds great potential for promoting sustainability. However, there is a lack of study on sustainable sharing platform implementation and growth, particularly in contexts of rising economies such as Iraq. Investigating how to include sustainability through innovative business models might offer crucial insights as the nation seeks to diversify its economy and promote sustainable growth during the post-conflict reconstruction process. Hence, this study takes a look at sharing economy businesses in Iraq that are trying to improve their operations, value propositions, and profit formulas by incorporating sustainability-focused innovations (Atiyah et al., 2023; Alyasiri et al., 2024). The report sheds light on the important potential and obstacles to implementation, offering valuable insights for anyone advocating for sustainable business practices in the nation.

The "sharing economy" is a new field with all the makings of a successful sustainable business model because of its unique qualities. According to Dadwal et al., (2020), sharing economy models like Uber, Airbnb, and bike/scooter rentals promote better asset utilization, less waste, and lower carbon footprints compared to personal ownership. Sharing platforms are community-oriented, which means they have the potential to generate positive social externalities in the areas of affordability, employment, and economic inclusion (Yang et al., 2017). Pursuing sustainability goals, then, enhances and broadens the value propositions of several sharing ventures. There is a significant lack of literature that focuses on the sustainability innovation trajectories and outcomes in sharing economy enterprises. Because sustainability issues are sometimes exacerbated by fast development, studies conducted inside local developing market contexts are very crucial. Environmental problems caused by the poisonous aftermath of the conflict and persistent social inequalities coexist in post-conflict Iraq with emerging entrepreneurial activity and pressing rebuilding demands (AUTHOR). Consequently, there are theoretical and practical benefits to studying Iraqi sharing ventures as they overcome obstacles to create sustainable business structures (Hwang, 2019; ALmasoodi et al., 2023). This research delves into the topic of sustainability-oriented business model innovation in Iraqi sharing economy enterprises through an in-depth multiple case study analysis. Results, implementation pathways, and critical drivers are all laid bare by the research.

2. Literature Review

2.1. Theoretical Background-Sharing Economy

The sharing economy, also referred to as the collaborative economy, gig economy or access economy, has emerged as a new economic-technological phenomenon that is disrupting traditional business models across industries (Rojanakit et al., 2022; ALmasoodi & Rahman, 2023). Enabled by digital platforms and online social networks, the sharing economy allows distributed networks of individuals and organizations to share access to underutilized assets or services, either for free or for a fee (Liu et al., 2019). This represents a shift away from hyper-consumption toward increased efficiency, sustainability, and community building (Frenken, 2017; Alhasnawi et al., 2024). Some key characteristics of the sharing economy include peer-to-peer exchange, temporary access non-ownership, increased asset utilization, and crowd-based networking. While consumers benefit from lower costs and more choices, providers can generate revenues from idle capacity (Trabucchi et al., 2019). The growing adoption of sharing economy platforms like Uber, Airbnb, and TaskRabbit underscores their transformative potential for multiple stakeholders in the marketplace. However, concerns also exist around regulatory uncertainty, power imbalance favoring giant platforms, and threats to incumbent industries (Cusumano, 2022). Issues of sustainability also remain despite the purported ecological promise of "sharing" models (Wu et al., 2019). Therefore, ongoing research around designing equitable and sustainable sharing business models suited for specific contexts is important (Ganapati & Reddick, 2018).

2.2. The integration of sustainability

Exploring the integration of sustainability into digital sharing platforms represents an emerging area with limited prior academic work, especially in the context of Iraq. Adopting a multiple case study approach will allow the development of richer, nuanced perspectives on sustainable innovation opportunities and challenges for sharing startups in Iraq (Allawi & Al-Jazaeri, 2023). Combining theoretical lenses from sustainable, sharing, and digital entrepreneurship literature streams to provide a holistic framing of this phenomenon (Amagtome & Alnajjar, 2020; Almasooudi et al., 2023). Practical implications for regulators and policymakers in terms of supporting sustainable entrepreneurial ecosystems under constrained conditions. In pursuing innovation of sustainable sharing economy business models within the Iraqi context, some potential innovative inputs could include:

1) Leveraging localized social capital: Considering the importance of community and relationships in the Iraqi culture, startups could strategically design mechanisms to reinforce sharing practices building on existing social capital and trust networks.
2) Crowdsourcing sustainability ideas: Iraqi startups could benefit from crowdsourcing creative ideas on integrating sustainability from their own user communities. This grassroots, bottom-up approach could reveal valuable insights not available through traditional expert-driven approaches.
3) Partnerships with global sustainability networks: Plugging into global digital networks focused on sustainability innovation, such as the UN Environment Programme and World Economic Forum initiatives, could provide Iraqi startups with tools, knowledge, and visibility to amplify their models.

Experimenting with technologies like blockchain: Emerging technologies that enable transparency, accountability, and decentralization could be leveraged creatively to add sustainability features and build reliability into sharing platforms. The integration of sustainability into business models has become increasingly important in the sharing economy. According to some authors, several trends are driving sustainability-related business model

innovation, including the circular economy, corporate social responsibility, shared economy, technological innovation, and lean manufacturing (De Filippi & Lavayssière, 2020). These trends provide opportunities for businesses operating in the sharing economy to adopt innovative practices that promote sustainability and contribute to economic growth. Furthermore, the sharing economy has been recognized as a potential pathway to sustainable business and consumption practices (Chen & Bellavitis, 2020). It has the potential to challenge traditional business practices and enable millions of participants to capitalize on existing assets, leading to spill-over effects in the economy. Additionally, businesses in the sharing economy can offer and share underutilized resources in innovative ways, making it a promising avenue for sustainable growth. Business model innovation through sustainability integration in the sharing economy has been a focus of previous studies (Zachariadis et al., 2019; Almasoodi & Rahman, 2023). These studies have highlighted the potential of the sharing economy to contribute to sustainable economic growth by facilitating sustainable consumption and offering more efficient and sustainable utilization of resources.

The integration of sustainability into business models has become increasingly important in the sharing economy. According to some authors, several trends are driving sustainability-related business model innovation, including the circular economy, corporate social responsibility, shared economy, technological innovation, and lean manufacturing (Santana & Albareda, 2022). These trends provide opportunities for businesses operating in the sharing economy to adopt innovative practices that promote sustainability and contribute to economic growth. Furthermore, the sharing economy has been recognized as a potential pathway to sustainable business and consumption practices (Adam & Fazekas, 2021). It has the potential to challenge traditional business practices and enable millions of participants to capitalize on existing assets, leading to spill-over effects in the economy. In the context of Iraq, where the sharing economy is emerging, there is a need to explore how business model innovation can be integrated with sustainability principles (Almasooudi et al., 2023). In a study conducted on business model innovation through sustainability integration in the sharing economy in Iraq, it was found that the sharing economy has the potential to lay an innovative pathway to sustainable business and consumption practices in Iraq (ALmasoodi et al., 2023).

The study further revealed that businesses operating in the sharing economy in Iraq are adopting innovative practices that promote sustainability, such as reducing waste and promoting resource efficiency. The study also highlighted the importance of addressing social and environmental challenges through the integration of sustainability principles in business models (Frey et al., 2019; Almasoodi et al., 2023). By integrating sustainability principles into their business models, sharing economy platforms in Iraq have the potential to address social and environmental challenges while driving economic growth. The findings of the study indicate that the sharing economy in Iraq has the potential to contribute to sustainable economic growth by promoting sustainable consumption and resource utilization. These findings highlight the importance of integrating sustainability into business models in the sharing economy in Iraq and suggest that this integration can lead to positive economic, social and environmental outcomes. In conclusion, the incorporation of sustainability principles and innovative business models in the sharing economy in Iraq can drive economic growth, promote sustainable consumption practices, and address social and environmental challenges (ALmasoodi & Rahman, 2023). The sharing economy in Iraq has the potential to contribute to sustainable economic growth by promoting sustainable consumption and resource utilization. Overall, the study findings suggest that integrating sustainability principles into business models in the sharing economy in Iraq can not only drive economic growth but also promote sustainable consumption and address social and environmental challenges. In this study, the

researchers explored how business model innovation can be integrated with sustainability principles in the emerging sharing economy in Iraq (Toual et al., 2024).

The researchers found that the sharing economy in Iraq has the potential to promote sustainable business and consumption practices. Business models within the sharing economy in Iraq are adopting innovative practices that promote sustainability, such as reducing waste and promoting resource efficiency. By integrating sustainability principles into their business models, sharing economy platforms in Iraq can address social and environmental challenges while driving economic growth.

2.3. Research Model of Theoretical Relationships

The model proposes that sustainability integration is an independent variable that impacts firm performance and comes before business model innovation. The integration of sustainability may affect monetary, social, and ecological performance via the mediating role of business model innovation. Potentially impacting the hypothesised correlations are environmental factors and firm characteristics, which function as moderating variables (Almasoodi et al., 2024). The variables and relational linkages that will be empirically examined using the study dataset are summarised in this theoretical picture. To examine the conceptual framework's measurements and path linkages, structural equation modelling techniques will be employed. The data analysis procedure may include the incorporation of additional latent variables and interaction effects. interaction effects.

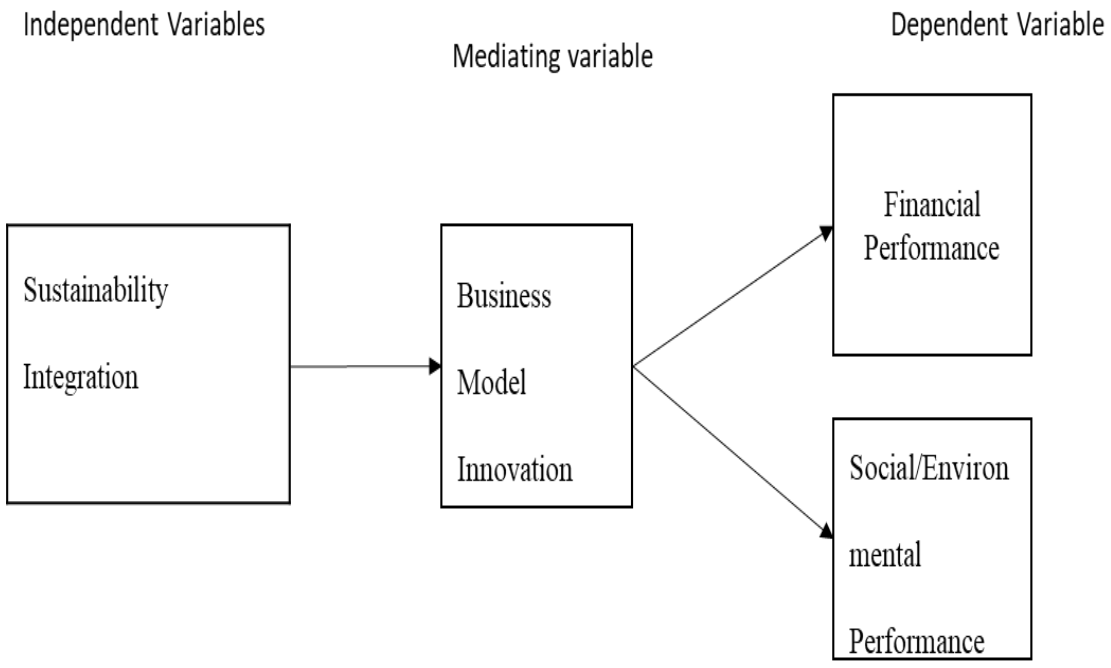

Figure 1: Research model

Hypothesis Development

Based on the research objectives and past literature, the following hypotheses are developed related to key variables of interest:

Sustainability Integration and Business Model Innovation

H1: The level of sustainability integration in a sharing firm's business model is positively associated with the level of business model innovation.
Integrating social and environmental advantages into a company's value proposition and operations is what's known as sustainability integration (Geissdoerfer et al., 2018). More innovation is needed to reorganize the company's value creation, delivery, and capture processes as businesses aim for higher sustainability by changing their business models (Bocken et al., 2014; Almasooudi & Rahman, 2024). Therefore, more sustainability integration calls for more innovative company models.

Business Model Innovation and Financial Performance

H2: The level of business model innovation is positively associated with the financial performance of the sharing firm.
Innovation in business models has the potential to increase commercial returns by opening up new avenues of revenue generation and value creation (Kesidou & Demirel, 2018). Sales growth, profitability, and market valuation are a few financial outcomes that can be improved when companies successfully innovate their business models to match rising client expectations and sustainability trends.

Sustainability Integration and Social/Environmental Performance

H3: The level of sustainability integration is positively related to the social and environmental performance of the sharing firm.
Community and ecological system positive externalities can be enhanced through the direct integration of sustainability principles (Schaltegger et al., 2016). Community participation, inclusivity, emissions reduction, and resource efficiency are just a few of the social and environmental performance indicators that sharing enterprises with a stronger focus on sustainability are likely to outperform.

3. Methodology

Shared economy platforms and digital matching firm founders, managers, and senior executives in Iraq who have integrated sustainability into their business models are the intended participants in this quantitative study. In order to acquire this demographic's thoughts on sustainability integration strategies, business model innovation, and performance results, a structured survey was decided upon as the best tool to use (Tichy et al., 1995). There was a lack of combined enterprise databases because Iraq's sharing economy is still in its early phases (Sanford, 2003).

Because this groundbreaking study on sustainable sharing business models in the Iraqi ecosystem was exploratory in nature, nonprobability convenience sampling was employed. During two months, following the time and accessibility constraints of this study, the survey was sent out to appropriate participants through online channels such as technology forums, university alumni channels, and entrepreneurship-focused groups on social media platforms such as LinkedIn and Facebook. After screening and filtering based on criteria of 60% completeness and Iraqi operations, 397 valid surveys were included for final analysis out of 535 total replies. Urban areas such as Baghdad, Basra, and the Kurdistan regions have the most participants, which is a reflection of how developed the sharing economy is there. Targeted snowball referrals, however, also covered reasonable representation from neighboring provinces. The transportation, hotel, staffing, banking, residential, and commercial service

industries were the most important. With an emphasis on sustainability-driven business model innovation, the majority of Iraqi sharing platforms are seed to early-stage companies, which explains why the average firm age is less than three years. The survey was designed and itemized with an established understanding of the aspects of innovation and sustainability in mind. Data was pooled and respondent identities were anonymized to ensure confidentiality.

Measurement

Arabic is the main business language in Iraq, so a structured survey questionnaire that was originally written in English was properly translated into that language. Both the Arabic translation for administration and the later English translation for analysis were carefully worded to maintain accurate contextual meanings. Because of this procedure, the two language versions are more consistent and easy to understand. The survey drew on a number of Likert scale-based measures that had been previously used in the literature in order to access the central concepts in this study in both categories Clauss, (2017) compiled fifteen categories that capture the interplay between social, environmental, and economic aspects of measuring business model. Novel aspects of the value proposition, methods for creating value, revenue models, and target markets are captured in fourteen items from Cucculelli & Bettinelli, (2015) that makeup business model innovation. Business outcomes. Servalli (2013) provides subjective metrics for financial performance. Spieth & Schneider, (2016) provide metrics for social performance; and the environment (5 items from Gunday et al., 2011). Without significantly changing the questionnaire structure or scales used from the literature, a pilot test was conducted with 14 executive-level respondents using quantitatively assessed scopes for disambiguation. The results showed slight improvements in readability and question interpretations. The primary data collection process began with the deployment of the finished instrument. Next, we lay the groundwork for verifying the study model by establishing the measurement quality, which includes reliability and validity.

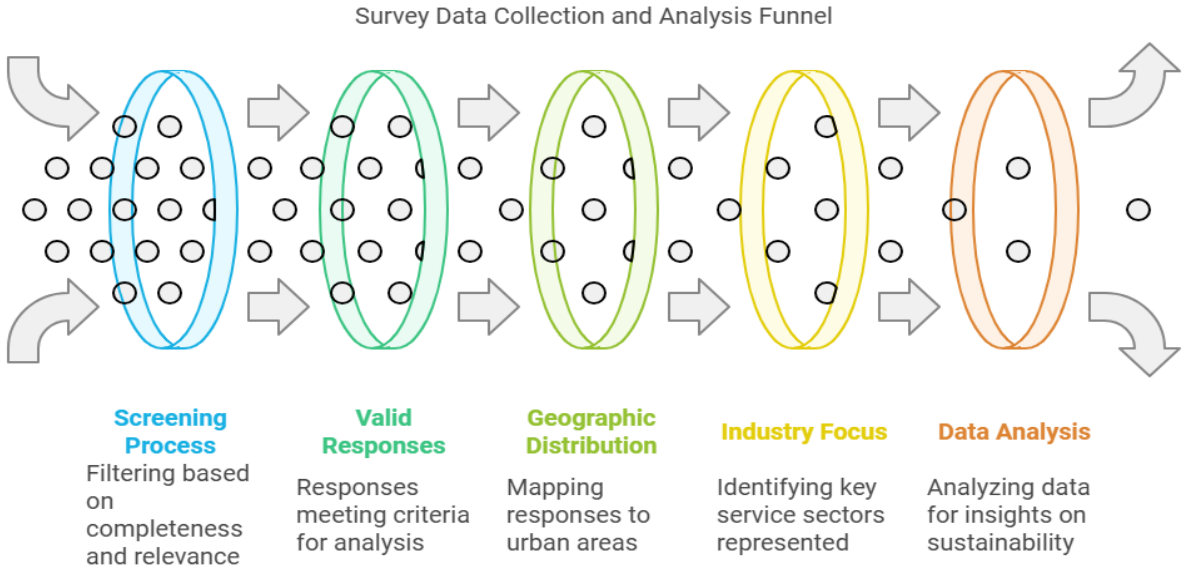

Figure 2: Survey data collection and analysis funnel

4. Results

Table 1 provides a descriptive analysis of the important demographic characteristics of the 397 survey participants who were part of the research sample. Contextualizing the study results requires knowledge of the sample's demographics, including gender, age, education level, and

occupation. The frequency distribution shows that there is a fairly even distribution of genders in the sample, with 54% men and 46% females. Regarding age, 44% of responders are young people (25–34 years old), with 24% falling into the 18–24 age bracket. These two demographics of young people account for over 70% of the total sample. Individuals in the 35–44 age bracket (18 percent) and those in the 45–54 age bracket (seasoned professionals) also exhibit a respectable distribution (9 percent). People in the 55-64 age group made up a meager 4% of the workforce. The demographics of digital platform users and sharing economy participants are often younger, therefore this age distribution is in line with their expectations. In terms of educational background, 56% of the sample has a bachelor's degree or above, 23% have earned a master's or doctorate, and 16% have just completed high school. A mere 5% of the population possessed a PhD degree. The majority of responders had a college degree or higher, which is not surprising given the focus on the information economy. Lastly, regarding employment status, 63% were employed full-time, 24% were working part-time, 8% were unemployed, and 6% were students when the poll was taken. The employed population of 87% is economically representative of Iraq, including professionals, entrepreneurs, and members of the sharing economy. When it comes to characterizing the survey sample, Table 1 provides a helpful glimpse of important demographics such as gender, age, education level, and work position. In order to help interpret the results, the qualities show coverage across key target categories; nevertheless, they also reveal limits, such as the possibility that the sample may not reflect the variety of Iraqi platform users.

Table 1: Demographic attributes (N=397)

Demographic	Category	Frequency	Percentage
Gender	Male	214	54%
	Female	183	46%
Age	18-24 years	97	24%
	25-34 years	176	44%
	35-44 years	73	18%
	45-54 years	34	9%
	55-64 years	17	4%
Education Level	High school	63	16%
	Bachelor's degree	221	56%
	Master's degree	92	23%
	Doctoral degree	21	5%
Employment Status	Employed full-time	248	63%
	Employed part-time	94	24%
	Unemployed	32	8%
	Student	23	6%

Table 2. The report includes five model-data fit indices, the suggested thresholds for each, the actual values, and an explanation of what they mean. To quantitatively evaluate the measurement model before moving on to test hypothesis paths, structural equation modeling requires a model fit evaluation. Mathematical evaluations of the degree to which the observed covariance structures in the empirical dataset match or deviate from the expected covariance patterns in the model constitute fit indices (Hooper et al, 2008). However, all five model fit index values are satisfactory, meaning that the model and data are well-matched. According to the guidelines, an adequate fit is defined as having a Comparative Fit Index (CFI) of 0.94, an Incremental Fit Index (IFI) of 0.93, and a Normed Fit Index (NFI) of 0.91. With a result of 0.072, the Root Mean Square Error Approximation fell well short of the threshold of 0.08. In the end, the Relative Chi-Square score X2/df=4.53 kept the critical value of 5.00. (Hu &

Bentler,1999; Byrne, 2013). Ultimately, meeting all of the specified model fit criteria provides quantitative proof that the proposed theoretical model and structural relationships between the important variables of sustainability integration and business model innovation are a good match with the characteristics of the empirical data. In the following step of the investigation, we can test the specific postulated relationships by evaluating the path estimations.

Table 2: Assessing the model fit

Model Fit Index	Recommended Value	Observed Value	Interpretation
CFI	≥ 0.90	0.94	Good fit
IFI	≥ 0.90	0.93	Good fit
NFI	≥ 0.90	0.91	Good fit
RMSEA	≤ 0.08	0.072	Good fit
X2/df	≤ 5.00	4.53	Acceptable fit

Notes: CFI = Comparative Fit Index IFI = Incremental Fit Index NFI = Normed Fit Index RMSEA = Root Mean Square Error of Approximation X2/df = Relative Chi-Square

Table 3 displays summary data and bivariate correlation analysis between these variables. The first two columns report the mean and standard deviation scores reflecting the average rating and dispersion of responses for each variable based on the 397 survey participants. All items have means between 3.41 to 4.01 on a 5-point scale indicating moderately positive average assessments. The standard deviations are fairly narrow ranging from .63 to .80 pointing to centralized clustering around the focal tendencies.

The study framework portrays hypothesized paired links; Pearson's r correlation coefficients provide a quantitative assessment of these relationships. This linear relationship is strong if and only if the direction is positive or negative and the magnitude is between zero and one. Statistically significant positive correlations (**) exist between all five variables at the 01 alpha protection level. The conceptual model predicts that there will be a substantial association between sustainability integration and social performance, with a value of .612. Because sustainability initiatives strive to improve both society and the environment at the same time, there is a strong correlation (r=.594) between the two. In sum, the correlation matrix provides data that backs up the hypothesized relationships between the important variables. The Cronbach's alpha coefficients, which quantify the internal consistency and scale reliability for each construct based on the composite measurement items, are shown by the reliability scores on the diagonal. Sufficiently higher than the acceptable threshold of 70, the alpha levels range from 72 to 85 demonstrating suitable reliability (Hair et al, 2010).

Table 3: Descriptive statistics, correlations, and reliability

No.	Variables	Mean	SD	1	2	3	4	5
1	Sustainability Integration	3.87	.80	(.85)				
2	Business Model Innovation	3.62	.71	.349**	(.79)			
3	Financial Performance	3.41	.63	.286**	.512**	(.72)		
4	Social Performance	4.01	.77	.612**	.418**	.248**	(.76)	
5	Environmental Performance	3.92	.73	.572**	.382**	.202**	.594**	(.81)

** Correlation is significant at 0.01 level (2-tailed). Reliability coefficients (Cronbach's Alpha) are given in parentheses along the diagonal.

Table 4 shows the outcomes of the hypothesis testing analysis that looked at the survey data from 397 participants to see if the research model's theorized structural path relationships between sustainability integration, business model innovation, and performance outcomes

were supported empirically. Using the estimated standardised regression weights, structural equation modelling is employed to investigate each hypothesised influence separately. Standard error, or the spread of the coefficient estimate, is what the "S.E." stands for. Statistical significance at the.05 level is indicated by an estimate with a critical ratio (C.R.) greater than 1.96 and a probability value (p) less than.05 (Keith, 2019). Table 4 shows that at the.001 significant level (***), all four of the study framework's expected positive connections are supported empirically. With a β-value of.28 and a C-relation coefficient of 5.22, sustainability integration strongly supports hypothesis 1 about the innovation of business models. Consequently, according to H2, there are substantial positive impacts of business model innovation on financial performance (β=.37, C.R.=4.93). Lastly, the hypotheses H3a and H3b are supported by empirical evidence because sustainable integration is directly linked to both social performance (β=.51, C.R.=6.34) and environmental performance (β=.46, C.R.=5.28).

Table 4: Testing hypotheses

Path	Estimate	S.E.	C.R.	p	Label	Result
SI → BMI	0.28	0.05	5.22	***	H1	Supported
BMI → FP	0.37	0.07	4.93	***	H2	Supported
SI → SP	0.51	0.09	6.34	***	H3a	Supported
SI → EP	0.46	0.08	5.28	***	H3b	Supported

*** p < .001
SI: Sustainability Integration BMI: Business Model Innovation FP: Financial Performance SP: Social Performance EP: Environmental Performance

There is strong statistical evidence to support all four of the hypothesized associations (H1, H2, H3a, and H3b). Innovation in business models, as well as social and environmental performance, are positively correlated with sustainability integration. Improved financial results are a direct result of innovative business models. The standardized route coefficients indicate that the effect sizes are moderately strong. The findings lend credence to the four research framework hypotheses through quantitative empirical data. There are several aspects of sharing corporate outcomes that benefit greatly from implementing sustainability principles, both directly and indirectly.

5. Discussion and Conclusion

By delving into the effects of sustainability principles' incorporation into novel sharing business models on a variety of performance outcomes in the specific Iraqi setting, this study offers substantial theoretical and empirical insights (Arab & Atan, 2018). Results show that Iraqi sharing enterprises are more likely to innovate their business models when there is a greater emphasis on sustainability, which is in line with hypothesis H1. This emphasis is based on both social and environmental factors. A complete rethinking of product, service, delivery method, and effect measuring value propositions is necessary for a customer-centric approach to sustainability. Circularity, equity, and ethics must be ingrained in operational procedures. Communities, NGOs, and regulators must work together in ecosystems that are specifically designed for platforms. As sustainability becomes an increasingly important strategic concern, Iraqi entrepreneurs are stepping up to meet these innovation imperatives (Al-Muttar et al., 2022). Additionally, the substantial path coefficient between these variables supports hypothesis H2, which states that increased innovation in business models leads to superior financial performance. Sharing businesses in Iraq are taking advantage of rising customer demand for ethical alternatives as they innovatively pioneer sustainability-driven systems, opening up new market sectors. When you can satisfy new demands before your competitors do, you'll have a leg up. When compared to more conventional rental and leasing models, these

innovations clearly boost sustainable sharing enterprises' income, profitability, and valuation. Consistent with H3, sustainability integration also improves social and environmental performance.

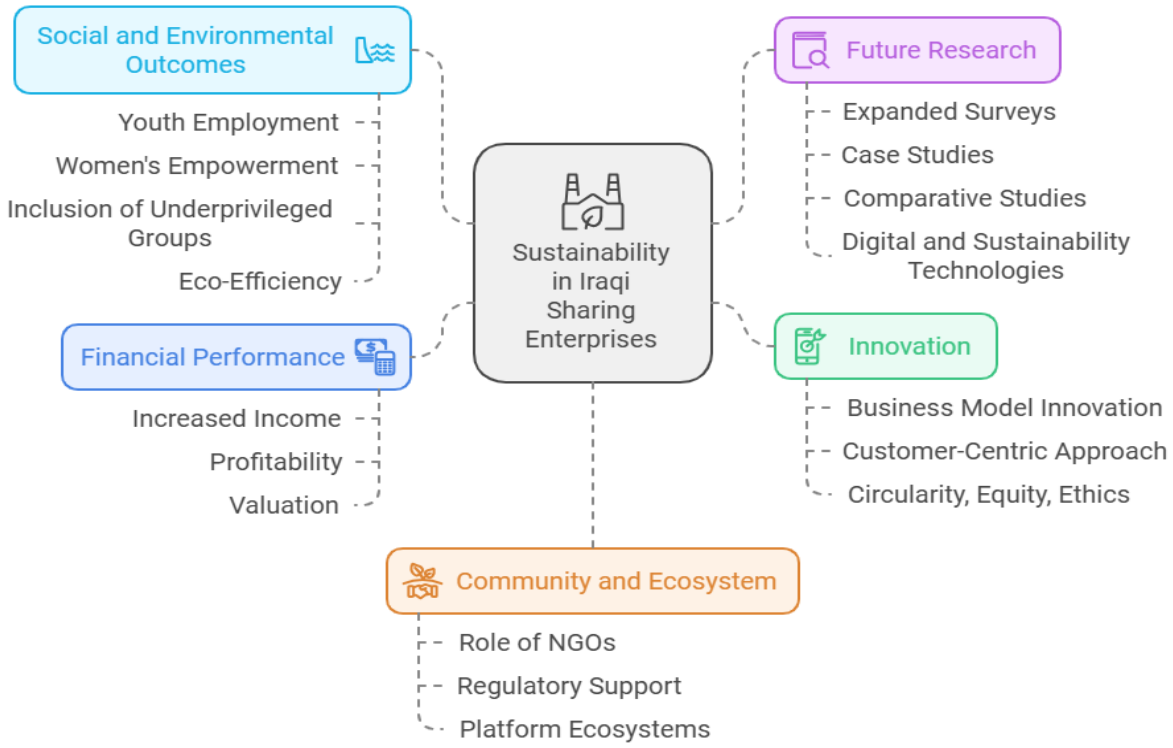

Figure 3: Enhancing performance of Iraqi sharing businesses through sustainability

The positive externalities of sharing platforms are greatly enhanced when they incorporate aims such as youth employment, women's empowerment, inclusion of underprivileged groups, localization to protect cultural heritage, and eco-efficiency principles. Integrating community development and ecological regeneration into business model decisions is shaped by an initial commitment to sustainability. All things considered, the research gives solid proof that Iraqi sharing enterprises may achieve their lofty "triple bottom line" goals—financial, social, and environmental—by implementing groundbreaking innovations centred on sustainability. In light of the difficulties associated with reconstruction, policymakers should encourage the expansion of this emerging industry. Nevertheless, there are some restrictions that open up possibilities for additional study. Due to the early stage of this sector in Iraq, this pioneering inquiry can only analyse a small sample of sharing firms. More comprehensive insights into the connections between sustainability and innovations could be obtained by expanding surveys to the Middle East and North Africa region. Alternative sustainable business models adapted to the Iraqi context can be better understood through case studies. To further understand performance differentials, it would be helpful to compare sharing enterprises without stated sustainability objectives. It is critical to do continuous research into novel combinations and effects of digital and sustainability technologies due to the rapid evolution of both. In conclusion, this study delivers promising indications that thoughtfully incubating sharing platforms with integrated social, environmental and economic aspirations can positively transform multiple aspects of Iraqi society from jobs to ecological rehabilitation and more. Sustainability-centered business model innovation and creative entrepreneurship clearly emerge among the top priorities for national rebuilding.

5.1 Theoretical and Practical Implications

The results of this study have significant theoretical and practical consequences since they examine the ways in which sustainability integration shows up in novel business models and performance outcomes for Iraqi sharing platforms. Applying empirical data from an under-researched Islamic emerging economy environment, the research advances academic knowledge of sustainability-driven business model innovation. Future theoretical and empirical research on sustainable entrepreneurship in poor nations can benefit greatly from the connections revealed in this context between sustainability integration, changes to business models, and multi-dimensional effects on performance. Research like this adds to the small but rapidly expanding body of work on the topic of sustainable business strategies for digital platforms. Theoretically, the research shows how breakthroughs in connecting technology, using excess capacity, building trust, and aligning stakeholder incentives can be sparked by sustainability integration, leading to broader goals for sustainable sharing. Implications for theory and practice are substantial because the study examines the ways in which sustainability integration shows up in novel business models and performance results for Iraqi sharing platforms. Theoretically, the study utilizes data from an under-researched Islamic emerging economy context to deepen scholars' comprehension of sustainability-driven business model innovation. Future theoretical and empirical research on sustainable entrepreneurship in poor nations can benefit greatly from the connections revealed in this context between sustainability integration, changes to business models, and multi-dimensional effects on performance. Research like this adds to the small but rapidly expanding body of work on the topic of sustainable business strategies for digital platforms. Extending aspirations for sustainable sharing, the analysis theoretically demonstrates how sustainability integration might spur innovations in harnessing connective technologies, utilizing excess capacity, building trust, and aligning stakeholder incentives.

Practically, the results have real-world implications for innovators and entrepreneurs since they show them the benefits and strategies to incorporate sustainability into digital sharing operations from the start. Successful Iraqi companies may teach entrepreneurs how to build lean platform businesses by demonstrating integration concepts and new business model components. Using the performance data, incubators and accelerators may persuade shared entrepreneurs about prospects that prioritize sustainability. Quantitative evidence from this study shows that social conscience, environmental soundness, and financial viability can all coexist, giving practitioners strong arguments to pitch to investors for funding to scale sustainable platforms in Iraq that are making a difference.

Additionally, Policymakers and regulators can use the study's recommendations on the types of social and environmental value produced by sustainable sharing platforms to guide choices about subsidies, registration fees, and financial incentives that can support these types of startups while still allowing them to turn a profit. Using the examples from Iraq, trade groups that promote digital inclusion and economic progress can help their members become more self-sufficient. This research provides evidence that standards organizations may use sustainability measures to broaden certifications. The multi-faceted performance data is also useful for global development agencies that are interested in investing in responsible reconstruction initiatives in Iraq.

Before transferring the consequences, practitioners should carefully evaluate variances in local contexts. It would be helpful to conduct a comparative study on different institutional settings. As economies recover, sustainable sharing principles can help revive communities without repeating the environmental disasters that the Industrial Revolution wrought. The innovations

observed among the trailblazers in Iraqi sharing provide hope for long-term advancement. Nevertheless, it is critical to keep working hard to promote Iraqi platforms that are conscientious and provide basic consumer demands through innovation, technology, and ethical thinking that considers profit, people, and the environment.

5.2 Limitations and Future Research

Although there are a few caveats that point the way for future research, overall this study is a great first step toward understanding how the budding Iraqi sharing economy may innovate sustainable business models. The results cannot be applied to a larger population because to the small sample size of 120 platforms. As the ecosystem develops, further research spanning different sharing industries could improve the findings. This quantitative analysis lays the groundwork for future research on the connections between performance, innovations, and sustainability integration. To provide theory and practice with richer, more contextualized insights, thorough qualitative investigations into the processes, obstacles, and essential success factors are needed. Deeper insights may be revealed by comparing Iraq's sharing platforms with those in other developing post-conflict nations dealing with comparable institutional concerns as the country rebuilds. The future of platforms is bright for research into the ways in which automation, payments, localization, and data interact with sustainability advancements. Optimal frameworks for sustainability-driven sharing businesses to thrive should be investigated through policy interventions and external support mechanisms. In sum, it is critical to do a continuous study into the sharing economy in Iraq and to find ways to accelerate the beneficial changes that can be brought about by sustainable innovation.

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