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Synergy of Creative Industries and Architectural Design: Business Sustainability Strategies in Bali, Indonesia

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Abstract

This study analyzes the synergy between the creative industry and architectural design in supporting business sustainability strategies in Bali. By integrating traditional Balinese architectural elements with innovative design approaches, this research highlights how local cultural identity can serve as a critical driver for economic, social, and environmental sustainability. Using qualitative and quantitative methods, the findings reveal that 75% of creative industry players in Bali leverage traditional design elements to strengthen product identity and enhance consumer appeal. The synergy has been proven to improve business sustainability by creating economic value, preserving cultural heritage, and reducing environmental impact. This research contributes to the local context and offers a replicable model for other regions seeking to integrate cultural heritage with modern business practices. By addressing challenges such as high initial investment costs and limited collaboration networks, the study provides actionable strategies for fostering cross-sector partnerships. The insights gained from Bali's unique approach to sustainability have the potential to inspire global applications in cultural tourism and creative economy development.

Keywords: Creative Industry Synergy, Architectural Design, Business Sustainability, Bali, Cultural Innovation

1. Introduction

1.1. Background

Bali is renowned as a global hub of culture and tourism, attracting millions of visitors annually. In 2019, before the COVID-19 pandemic, the island welcomed over 6.3 million foreign tourists, contributing approximately 40% of Indonesia's total tourism revenue (BPS Bali, 2020). However, heavy reliance on mass tourism poses significant economic vulnerabilities, particularly during global crises like the recent pandemic. To mitigate these risks, the creative industry has emerged as a key economic pillar, complementing the tourism sector and enhancing Bali's resilience.

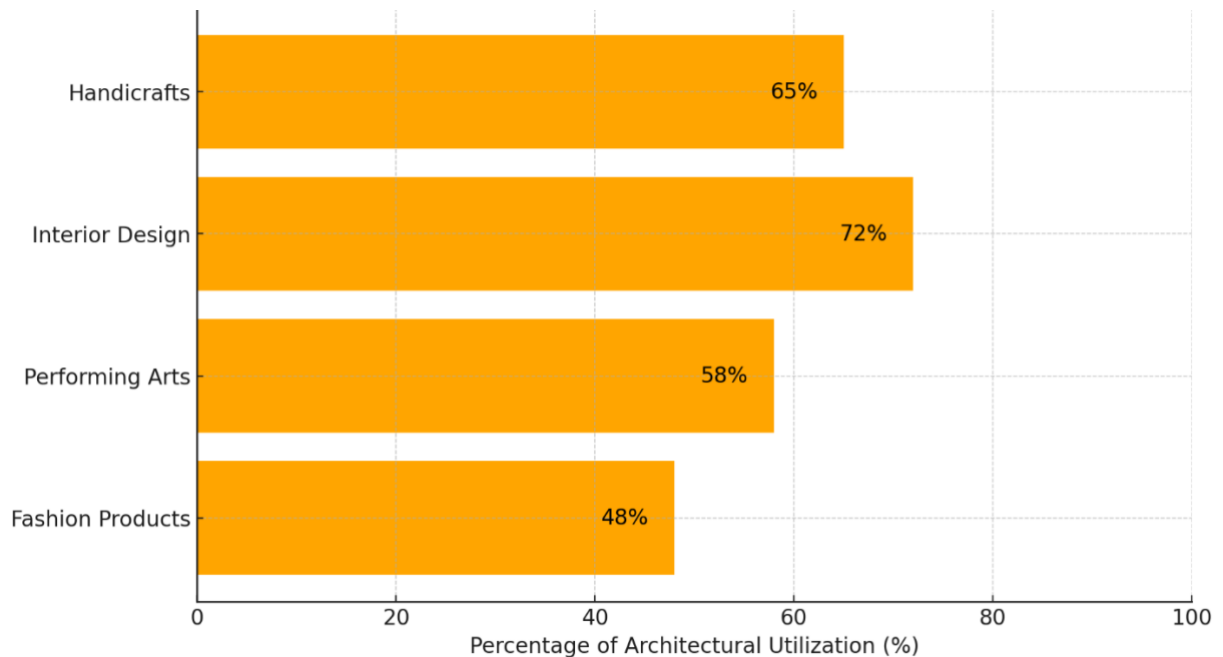
The creative industries in Bali encompass diverse sectors, including handicrafts, performing arts, interior design, and architecture. According to the Indonesian Creative Economy Agency (2019), this sector contributed 10.6% to Bali's GDP, with handicrafts and cultural arts leading the way. Beyond economic contributions, the creative

industry reinforces Bali's cultural identity, sustaining its appeal as a world-class destination. However, maintaining competitiveness requires integrating sustainable practices and innovative approaches into these industries.

1.1.1 The Role of Architecture in Supporting Creative Industries and Business Sustainability

In modern tourism and creative industries, architecture transcends aesthetic and functional dimensions to become a strategic driver of sustainability. Traditional Balinese architectural elements, such as those rooted in the Tri Hita Karana philosophy, exemplify the integration of cultural, environmental, and spiritual values. This approach not only attracts environmentally conscious global travelers but also enhances local cultural identity and sustainability efforts.

A study by Setiawan (2022) showed that 72% of foreign tourists in Bali preferred accommodations with sustainable designs, demonstrating the importance of architecture in shaping consumer perceptions. Moreover, collaboration between architecture and creative industries, such as using local crafts in interior decoration, amplifies the value of both sectors. For example, 50% of Bali's creative entrepreneurs market their products through partnerships with hotels and resorts (BEKRAF, 2019).



Graph 1: The Level of Utilization of Architectural Design in the Creative Industry in Bali

Source: *Disperindag Bekraf Bali Province, 2020*

Graph 1 shows that Interior Design has the highest percentage of architectural utilization, with 72%, followed by Handicrafts (65%), Performing Arts (58%), and Fashion Products (48%). This graph illustrates the variation in architectural design use in various creative industry sectors in Bali.



Figure 1: Synergy of Architecture and Creative Industry

Source: *thehoteljournal.com*, 2024.

Figure 1 shows a modern resort in Bali that blends traditional architecture with contemporary elements. It uses natural materials such as bamboo and wood, is furnished with furniture and decorations made by local artisans, and has a tropical garden that blends in with the building's design to reflect the concept of sustainability and creativity.

However, although the interconnectedness between architecture and the creative industry offers great potential, several obstacles hinder the optimization of this synergy. One is the lack of formal collaboration between architects, designers, and innovative entrepreneurs, leading to innovation potential not being fully utilized. In addition, the initial investment cost in adopting sustainable design is still considered high, especially for small and medium enterprises (SMEs), so many business people are reluctant to implement this strategy (Creswell, 2014).

1.1.2. Scope and Challenges of Business Sustainability in Bali

Bali's big challenge is maintaining economic competitiveness while maintaining environmental and social sustainability. Bali has been under pressure due to urbanization, land conversion, and declining environmental quality, especially in major tourist areas such as Kuta and Ubud. In this context, the synergy between architecture and the creative industry plays a vital role as a solution to support sustainability.

Architectural designs that adopt circular economy principles—where building materials are recycled and energy use is efficient—can reduce a business's carbon footprint. For example, some hotels in Ubud have adopted bamboo and rattan materials as part of their eco-friendly architecture. Using local materials and traditional techniques also creates opportunities for creative industry players to be involved in the construction and decoration.

However, according to data from the Bali Hotel Association (2023), only about 30% of hotels and resorts consistently implement sustainable architectural practices. Many business people still do not realize the long-term importance of synergy between architecture and the creative industry.

1.1.3. Research Gaps and the Relevance of This Study

While previous studies have explored sustainable architecture and creative industries separately, limited research addresses the synergy between these sectors. This gap is particularly significant in Bali, where such integration holds the potential to drive sustainability across economic, social, and environmental dimensions. Furthermore, existing literature often lacks actionable frameworks for fostering collaboration between architects and creative industry players, leaving much of their potential untapped.

This research addresses these gaps by analyzing the synergy between architectural design and the creative industry as a strategy for sustainable business. It examines practical approaches to collaboration and identifies challenges such as high investment costs and limited formal networks. The findings aim to establish Bali as a replicable model for integrating cultural heritage into modern sustainable practices, offering valuable insights for other regions seeking to balance tradition and innovation.

1.2. Research Question

In the context of global economic challenges and tourism development, the synergy between the creative industry and architectural design is crucial to advancing sustainable business strategies. Despite its potential, this collaboration remains underutilized in Bali due to barriers such as limited formal partnerships and high costs of sustainable design adoption. This study aims to address the following questions:

1. How do creative industries in Bali utilize architectural design in their business operations?
2. What are the obstacles in building synergy between these sectors?
3. How does this synergy contribute to business sustainability in Bali?

This research is urgent because Bali faces economic challenges due to excessive dependence on tourism. Collaboration between architecture and the creative industry is believed to be an alternative solution to strengthen the local economic sector and improve business sustainability. The results of this research are expected to be able to provide concrete guidance for creative industry players and architectural designers to collaborate optimally, increase innovation, and create added value for their respective businesses.

1.3. Research Objectives and Benefits

This study aims to analyze the synergy practices between architectural design and the creative industry and identify barriers and opportunities for building sustainable business models. By providing actionable insights, this research aims to benefit creative entrepreneurs, architects, and policymakers, contributing to the literature on sustainability and offering a framework that can inspire global applications.

1.4. Research Gaps and Novelty

Based on a literature review, previous research focuses on the creative industry and architecture separately. Hence, this research gap opens up opportunities to explore the synergy between the two sectors in depth. This research offers novelty by developing concrete strategies to create mutually beneficial collaborations between creative industry players and architectural designers, especially in the context of sustainable business in Bali. In addition, this study also identifies specific constraints and relevant opportunities in Bali as a tourism destination and cultural center of the world.

With this approach, the research is expected to provide new insights into how the synergy between architecture and the creative industry strengthens business sustainability. This collaboration model is expected to be relevant not only for Bali but also as an example for other regions that want to develop a creative economy based on sustainable culture and architecture.

2. Literature Review

2.1 Theoretical Studies

2.1.1. Business Sustainability Theory

Elkington (1997) introduced the Triple Bottom Line (TBL) framework, which emphasizes the integration of economic, social, and environmental dimensions as the foundation of sustainable business practices. This approach is closely aligned with the United Nations' Sustainable Development Goals (SDGs), particularly Goal 8 (Decent Work and Economic Growth) and Goal 12 (Responsible Consumption and Production), which highlight the

importance of sustainable economic practices and innovation. The creative industry and architectural design synergy reflects these principles by fostering cultural preservation, economic growth, and environmental stewardship.

2.1.2. Architectural Design Theory

Cuff (1992) emphasized cross-disciplinary collaboration as a critical factor for innovation in architecture. In the Balinese context, this is evident in how traditional architectural elements are reimagined through collaboration with local artisans and creative entrepreneurs. For instance, the integration of traditional materials like bamboo and rattan with contemporary design techniques exemplifies this synergy. Recent studies, such as Rapoport (2005), also emphasize that integrating conventional values with modern practices enhances both cultural identity and sustainability, aligning with SDG 11 (Sustainable Cities and Communities).

2.2 Conceptual Framework

2.2.1. Sustainable Design

Sustainable design seeks to balance current needs with those of future generations (McLennan, 2004). In Bali, this principle is deeply rooted in the *Tri Hita Karana* philosophy, which promotes harmony between people, nature, and spirituality. Sustainable architecture in Bali often incorporates local materials and low-impact construction techniques, contributing to SDG 13 (Climate Action) by reducing carbon emissions and promoting renewable resources. For example, eco-friendly materials such as bamboo and recycled wood have become a hallmark of sustainable design in Bali's tourism sector.

2.2.2. Creative Industries

The creative industry is defined by its reliance on innovation and cultural expression (Howkins, 2001). In Bali, sectors such as crafts, performing arts, and design contribute significantly to the local economy while preserving cultural heritage. The synergy between creative industries and architectural design fosters innovation and sustainability, as seen in the increasing use of custom-made furniture, sculptures, and decorations inspired by traditional Balinese motifs. Recent trends also show the rise of "eco-tourism design," where creative industries contribute to sustainable hotel interiors and public spaces, creating unique consumer experiences while reducing environmental impact.

2.3 Recent Trends in Integrating Traditional Design with Modern Practices

Recent research highlights the growing importance of integrating traditional architectural elements with contemporary design to address sustainability challenges. For example, a study by Vale and Vale (2013) emphasized that combining modern energy-efficient technologies with traditional building techniques can significantly reduce energy consumption and carbon footprints. In Bali, this is exemplified by resorts that blend traditional open-air layouts with solar panels and water recycling systems, addressing both aesthetic and environmental considerations.

Moreover, global trends in cultural tourism suggest an increasing preference for authentic, locally inspired experiences. Florida (2002) noted that the creative class of travelers seeks destinations offering cultural and artistic uniqueness, which aligns with Bali's emphasis on preserving traditional architectural elements. This convergence of tradition and innovation is critical in positioning Bali as a global leader in sustainable cultural tourism.

2.4 Research Gaps and Novelty

Although there is substantial research on sustainable architecture and creative industries, few studies address their combined impact on business sustainability. Most existing literature explores these sectors independently, overlooking the synergies that can drive innovation and sustainability. This study fills the gap by focusing on

collaborative practices that integrate traditional Balinese design with modern business strategies. Furthermore, it provides actionable insights aligning with global sustainability goals, contributing to the creative economy and architectural innovation literature.

3. Research Methods

3.1 Data Collection Methods

This study employs a mixed-methods approach to comprehensively examine the synergy between architectural design and the creative industry in supporting business sustainability in Bali. The quantitative component involves a survey distributed to 50 creative industry players, while the qualitative component consists of in-depth interviews with selected architects and creative entrepreneurs.

3.1.1. Justification of Sample Size

The sample size of 50 respondents was selected based on its representativeness of Bali's creative industry. According to the Bali Creative Economy Agency, there are approximately 200 registered creative businesses operating in Bali, making 50 respondents a statistically significant and manageable sample (25%) for exploratory research. This sample size balances the need for depth and breadth in capturing trends while accommodating the limitations of time and resources typical of qualitative-quantitative studies (Creswell, 2014).

3.1.2. Quantitative Data Collection

The survey included structured questions using a Likert scale (1-5) to measure perceptions on the use of architectural design in business, the benefits of collaboration, and barriers to adopting sustainable practices. Respondents were selected through purposive sampling to ensure diverse representation across key creative sectors, such as interior design, crafts, and performing arts.

3.1.3. Qualitative Data Collection

Ten key informants, architects, and creative industry leaders were in-depth interviewed. The interviews explored themes such as the collaborative process, challenges in aligning sustainability with business goals, and the perceived value of traditional design elements. The interviews followed Kvale's (2007) framework, emphasizing open-ended questions and reflective dialogue to capture rich, subjective insights. Each session was audio-recorded (with consent) and transcribed for thematic analysis.

3.2 Analysis Methods

3.2.1. Quantitative Analysis

Survey data were analyzed using SPSS to identify trends and correlations. Descriptive statistics were employed to present data distribution, and linear regression analysis evaluated the impact of architectural design on business sustainability. For instance, the relationship between collaboration and business performance was quantified to assess its statistical significance.

3.2.2. Qualitative Analysis

Thematic analysis was applied to the interview transcripts following Braun and Clarke's (2006) guidelines. Key themes, such as collaboration practices, cultural integration, and barriers to sustainable design, were identified through iterative coding. Alignment with Kvale's (2007) method ensured that the analysis was both systematic and reflective. For example:

1. Initial coding identified recurring ideas across the transcripts, such as "investment barriers" and "cultural branding."

2. Pattern identification linked these codes to broader themes, such as "synergy challenges" and "value creation."
3. Theme refinement ensured relevance to the study's objectives and alignment with theoretical frameworks like the Triple Bottom Line.

3.2.3. Data Triangulation

To enhance validity, findings from the quantitative survey were cross-checked with qualitative insights. For instance, the high adoption rate of traditional architectural elements (75%) from the survey was supported by interview narratives describing their role in strengthening cultural identity.

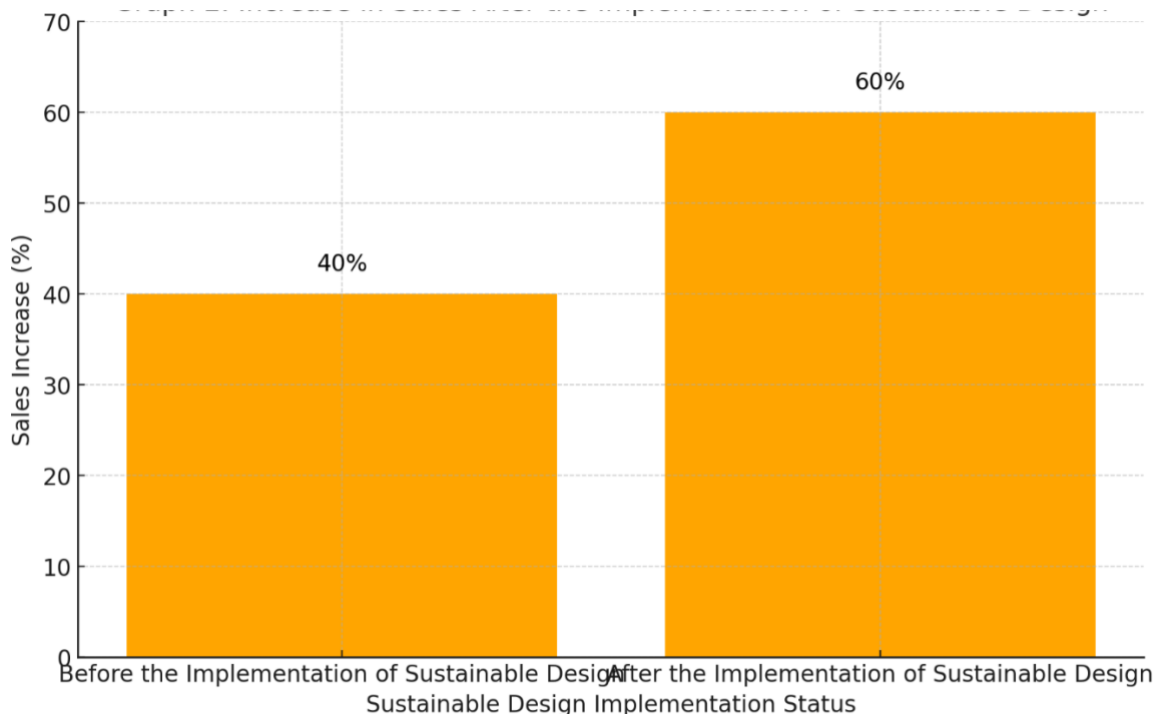
This mixed-method approach allows for a holistic understanding of how architectural design and creative industries intersect, addressing both "what" (quantitative trends) and "why/how" (qualitative insights) questions (Creswell, 2014). By integrating these perspectives, the study provides actionable recommendations for fostering cross-sector collaboration and sustainability in Bali.

4. Results and Discussion

4.1. Results

The study revealed that 75% of creative industry players in Bali incorporate traditional architectural design elements into their products and services, demonstrating a strong synergy between architecture and creative industries. This integration enhances aesthetic and cultural value and drives business sustainability, with 60% of respondents reporting an increase in sales after adopting sustainable design principles. However, several barriers hinder full optimization, including high initial investment costs, limited collaboration networks, and a lack of awareness about long-term benefits.

Graph 2 illustrates a notable increase in sales among businesses adopting sustainable design, confirming that consumers increasingly value sustainability. These findings underscore the economic viability of integrating sustainable practices, even as financial and logistical challenges remain prevalent.



Graph 2: Increased sales after the implementation of sustainable design

Source: Author's Analysis, 2024.

4.2. Discussion

The findings of this study align with Elkington's (1997) business sustainability theory, which integrates economic, social, and environmental dimensions. In the context of this research, traditional architectural design serves as a vital contributor to social and economic sustainability by reinforcing cultural identity and enhancing business profitability. The results demonstrate that adopting sustainable design principles effectively increases sales, indicating a growing consumer preference for sustainability values. This supports the argument that businesses focusing on sustainability hold a significant competitive advantage in the long term.

Despite these promising outcomes, significant challenges remain particularly the high initial investment costs and a lack of formalized collaboration between architects and creative industry players. These barriers highlight potential and implementation gaps, underscoring the need for stronger partnerships and resource-sharing frameworks. This aligns with Cuff's (1992) concept of collaboration in architecture, emphasizing that cross-disciplinary interaction fosters innovation. In the Balinese context, greater collaboration between architects and creative entrepreneurs has the potential to create solutions that are not only aesthetically compelling but also economically and socially impactful.

Furthermore, the findings emphasize the strategic importance of integrating environmentally friendly materials and traditional elements into sustainability-based marketing strategies (green marketing). These approaches resonate with McLennan's (2004) concept of sustainable design, which advocates for adaptive design practices that respect both environmental and social contexts. By aligning with modern consumer awareness of environmental issues, this synergy enhances the aesthetic value of products while contributing to a more holistic vision of business sustainability.

As illustrated in Table 1, key architectural elements—such as Balinese traditional designs, eco-friendly materials, open space layouts, and local furniture—play critical roles in supporting marketing strategies. For instance, traditional designs help strengthen products' cultural branding, while eco-friendly materials appeal to sustainability-conscious consumers. This multidimensional approach differentiates products in a competitive market and aligns with the principles of cultural preservation and environmental stewardship.

Table 1: The Relationship between Architectural Elements and Marketing Strategy

Architectural Elements	Marketing Strategy
Traditional Balinese Design	Branding of local products and cultural tourism
Eco-Friendly Materials	Sustainability-based marketing (green marketing)
Open Space Design	Improved on-site consumer experience
Local Furniture and Decorations	Product differentiation and strengthening of cultural image

Source: Author's Analysis, 2024.

Overall, the study contributes to bridging the gap in previous research, which predominantly addressed the creative industry and architecture as separate entities. Focusing on their synergy, this research provides new insights into how these sectors can collectively drive sustainable business strategies. To address existing challenges, key recommendations include policy interventions and financial incentives for small and medium enterprises (SMEs) to adopt sustainable practices. Fostering formal collaboration frameworks between architects and creative entrepreneurs is essential for optimizing innovation and resource sharing.

The findings also have broader implications for regional and global sustainability. On a local scale, strengthening the synergy between architecture and creative industries can solidify Bali's position as an international cultural and creative hub. Globally, Bali's model offers a replicable framework for regions seeking to integrate cultural heritage with modern business practices. Addressing challenges such as investment costs and collaboration gaps is critical to realizing the full potential of this synergy, enabling Bali to serve as a benchmark for economic, social, and environmental sustainability.

By overcoming these barriers, the synergy between architectural design and the creative industry has the potential to transform local business practices and contribute meaningfully to global discourses on sustainability, cultural preservation, and innovative economic models.

5. Conclusion and Recommendations

5.1 Conclusion

This study highlights the pivotal role of the synergy between the creative industry and architectural design in advancing business sustainability in Bali. Traditional architectural elements have proven effective in reinforcing local cultural identity, enhancing consumer appeal, and elevating business competitiveness. Moreover, sustainable design practices not only contribute to a positive brand image but also align with growing consumer preferences for eco-conscious products and services. These findings affirm the relevance of the Triple Bottom Line theory (Elkington, 1997), which underscores that true business sustainability must integrate economic, social, and environmental dimensions.

Despite these advantages, significant challenges persist. High initial investment costs in sustainable architectural practices, especially for small and medium enterprises (SMEs), remain a critical barrier. Furthermore, the lack of formal collaboration networks between architects and creative industry players limits the realization of the synergy's full potential. These barriers highlight a disconnect between the opportunities identified and their practical implementation. Addressing these gaps requires targeted strategies that foster collaboration, reduce financial barriers, and enhance innovation across sectors.

5.2 Further Research Recommendations and Suggestions

To address these challenges and optimize the synergy between architecture and the creative industry, several actionable recommendations are proposed:

1. **Policy and Incentives:** Local governments must actively promote sustainable practices by introducing targeted policies, such as grants or tax incentives for SMEs adopting sustainable architecture. Such initiatives can reduce financial barriers and encourage broader adoption of sustainable design principles.
2. **Collaboration Platforms:** Establishing formal forums or networks for architects and creative industry players can facilitate knowledge exchange, resource sharing, and innovation. These platforms could also serve as incubators for cross-disciplinary projects that align with both cultural and sustainability goals.
3. **Alternative Financing Models:** To mitigate high investment costs, alternative financing mechanisms such as green bonds, low-interest loans, or partnerships with social investors should be explored. Collaborative financing models could enable businesses to access capital more easily while fostering shared responsibility for sustainable outcomes.
4. **Capacity Building and Training:** Educational programs and workshops focusing on sustainable design practices and innovation should be developed for creative entrepreneurs and architects. By enhancing technical and strategic competencies, these initiatives can strengthen cross-sector collaboration.
5. **Future Research Directions:** Further research is needed to develop a comprehensive collaborative business model that integrates architects and creative industry players. Such a model should outline practical frameworks for mutually beneficial partnerships. Additionally, future studies could explore global comparisons, examining how Bali's synergy model can be adapted to other regions with rich cultural heritage. Research into financing strategies tailored to the creative industry, such as crowdfunding or community-based funding, could also provide valuable insights.

5.3. Holistic Contribution and Broader Impact

The synergy between architectural design and the creative industry offers immense potential to support Bali's economic, social, and environmental sustainability. Strengthened collaboration and targeted policy interventions can unlock this potential, transforming the creative economy into a more resilient and innovative sector. Beyond

Bali, the insights from this study contribute to the global discourse on sustainable development, showcasing how traditional cultural practices can be harmonized with modern sustainability principles.

By overcoming existing obstacles, Bali's creative economy sector is well-positioned to serve as a model for other regions seeking to integrate cultural heritage with sustainable business strategies. This alignment of tradition and innovation not only ensures economic growth but also fosters cultural preservation and environmental stewardship, reinforcing Bali's status as a global leader in cultural tourism and creative economy development.

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References

- Bali Hotel Association. (2023). *Annual Report: Sustainability Implementation in the Hospitality Sector*. Denpasar: AHB.
- BPS Bali. (2020). *Bali Province Tourism Statistics 2019*. Central Statistics Agency of Bali.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Sage Publications.
- Cuff, D. (1992). *Architecture: The Story of Practice*. Cambridge: MIT Press.
- Elkington, J. (1997). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Oxford: Capstone.
- Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). Sage Publications.
- Florida, R. (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community, and Everyday Life*. Basic Books.
- Howkins, J. (2001). *The Creative Economy: How People Make Money from Ideas*. Penguin Books.
- Indonesian Creative Economy Agency (BEKRAF). (2019). *Creative Economy Report: Performance and Policy Direction 2020*. Jakarta: BEKRAF.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson Education.
- Kvale, S. (2007). *Doing Interviews*. Sage Publications.
- McLennan, J. F. (2004). *The Philosophy of Sustainable Design: The Future of Architecture*. Kansas City: Ecotone Publishing.
- Rapoport, A. (2005). *Culture, Architecture, and Design*. Springer.
- Setiawan, B. (2022). *Tourism and Creative Industries in Bali*. Jakarta: Gramedia.
- Sih Darmi Astuti, & Suryani, N. K. (2024). Job satisfaction of Indonesian workers: An analysis and forecasting using STAR model. *Problems and Perspectives in Management*, 22(2), 443-452. [https://doi.org/10.21511/ppm.22\(2\).2024.34](https://doi.org/10.21511/ppm.22(2).2024.34)
- Tashakkori, A., & Teddlie, C. (2010). *Mixed Methodology: Combining Qualitative and Quantitative Approaches* (2nd ed.). Sage Publications.
- Vale, B., & Vale, R. (2013). *Living within a Fair Share Ecological Footprint*. Routledge.
- Brown, T. (2009). *Change by Design: How Design Thinking Creates New Alternatives for Business and Society*. Harper Business.
- UNDP. (2015). *Sustainable Development Goals*. Retrieved from <https://www.undp.org/sustainable-development-goals>
- thehoteljournal.com. (2024). Example of sustainable architecture in Bali. Retrieved from <https://www.thehoteljournal.com>