



SUSTAINING ENTREPRENEURIAL BEHAVIOR: COMMUNITY ENGAGEMENT OF BAMBOO CRAFTSMEN IN TIGAWASA VILLAGE, BULELENG, BALI

Ida Ketut Kusumawijaya^{1*}, Partiwi Dwi Astuti², I Made Hedy Wartana³, I Ketut Yudana Adi⁴

^{1,3,4}Department of Management, Triatma Mulya University

²Department of Accounting, Warmadewa University

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ABSTRAK

Pengrajin bambu di Desa Tigawasa, Buleleng, Bali, merupakan aset budaya dan ekonomi yang penting, namun menghadapi tantangan yang mengancam keberlanjutan kerajinan mereka. Inisiatif pengabdian masyarakat ini bertujuan untuk meningkatkan perilaku kewirausahaan melalui aktivitas, ketahanan, dan proaktivitas, yang dirancang untuk membekali para pengrajin dalam memenuhi tuntutan pasar, melestarikan warisan budaya, dan mencapai kestabilan ekonomi. Menggunakan pendekatan penelitian tindakan partisipatif. Lokakarya mencakup pelatihan praktis dalam pengembangan produk, analisis pasar, strategi ketahanan, dan pemecahan masalah, didukung oleh umpan balik dan pembelajaran kolaboratif. Hasil menunjukkan peningkatan signifikan dalam perilaku kewirausahaan, dengan skor rata-rata komposit naik dari 1,542 menjadi 4,190. Temuan ini menegaskan keberhasilan intervensi dalam menggeser pengrajin dari praktik tradisional menuju strategi kewirausahaan modern. Dengan mengatasi hambatan sistemik seperti kesenjangan gender dan generasi serta mengintegrasikan dukungan berkelanjutan, inisiatif ini memposisikan kerajinan bambu Tigawasa sebagai aset budaya dan ekonomi yang berkembang.

Abstract. *The bamboo craftsmen of Tigawasa Village, Buleleng, Bali, serve as a vital cultural and economic resource but face challenges threatening their craft's sustainability. This community service initiative aimed to enhance entrepreneurial behavior through activities, resilience, and proactivity, equipping craftsmen to meet market demands, preserve heritage, and achieve economic stability. Using a participatory action research approach. Workshops included practical training in product development, market analysis, resilience, and problem-solving, reinforced by feedback and collaborative learning. Results indicated marked improvements in entrepreneurial behavior, with the composite mean score rising from 1.542 to 4.190. These outcomes highlight the intervention's success in transitioning craftsmen from traditional to modern entrepreneurial strategies. By addressing systemic barriers like gender and generational disparities and integrating sustained support mechanisms, this initiative positions Tigawasa's bamboo craftsmanship as a thriving cultural and economic asset, advancing community well-being and contributing to rural entrepreneurship scholarship.*

1. PENDAHULUAN

Tigawasa Village, situated in Banjar District, Buleleng Regency, Bali, is known for its intricate bamboo crafts. Geographically located on a highland approximately 5 kilometers from the coastline, Tigawasa has a long-standing tradition of bamboo weaving. This craftsmanship is embedded in the socio-cultural fabric of the community, with a significant portion of the population engaged in producing bamboo crafts such as sok, kukusan, and decorative items like bamboo bowls and lamp holders. Despite this rich heritage, the village faces geographic and economic limitations that constrain its craftspeople to small-scale, family-operated businesses. Most bamboo craftsmen work without formal organizational support or structured management, producing goods based on customer orders. However, this traditional system struggles to keep pace with modern economic demands, presenting both opportunities and challenges for sustainable development (Kusumawijaya & Astuti, 2023).



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The bamboo craftsmen of Tigawasa faces several pressing issues. Chief among them is the scarcity of high-quality bamboo, particularly the specialized "bambu taluh" and "bambu bali," leading many craftsmen to rely on more expensive imports. This raises production costs, eroding the profitability of their craft. Compounded by inadequate business management skills and limited access to broader markets, craftsmen often lack the entrepreneurial behavior critical for small and medium enterprise (SME) sustainability (Akande et al., 2021). Entrepreneurial behavior—characterized by activities such as overcoming failure and proactive behavior—is crucial for addressing these challenges (Akumbom, 2025). The craftsmen's failure to separate personal and business finances further hampers their ability to reinvest in growth, reflecting gaps in management practices often observed in SME contexts.

Despite these challenges, the bamboo craftsmen of Tigawasa hold tremendous potential. The unique designs, patterns, and high-quality craftsmanship of their products distinguish them in the marketplace. These crafts have cultural significance and the potential to attract both local and international buyers. However, limited marketing channels and the absence of craftsmen groups to advocate for collective interests restrict the reach and visibility of their products (Syahroni & Priatna, 2021). Additionally, the youth in Tigawasa often show little interest in continuing the craft, perceiving it as a low-income endeavor. This generational disinterest, coupled with inadequate training in

entrepreneurial practices, poses significant challenges to sustaining the craft's cultural and economic contributions (Widiastini et al., 2023).

Sustainability for Tigawasa's bamboo craftsmen hinges on addressing systemic issues while leveraging their unique strengths. Efforts must focus on creating a conducive ecosystem that fosters innovation, entrepreneurial behavior, and market expansion (Kusumawijaya & Astuti, 2023). Strategic interventions, such as training in modern business practices, establishing craftsmen cooperatives, and improving access to financial resources, are imperative (Ketut, 2023). Furthermore, instilling entrepreneurial behavior—through fostering proactive decision-making, innovation, and resilience—can significantly enhance the craftsmen's ability to adapt to changing market demands. If nurtured effectively, these crafts can not only preserve Tigawasa's cultural heritage but also contribute meaningfully to its economic growth, offering a pathway to improved community welfare

2. METODE

Community service initiatives are vital in fostering innovation and advancing economic development in local communities. This discussion examines the strategies employed in a community service project aimed at maintaining the entrepreneurial behavior (EB) of bamboo craftsmen in Tigawasa Village, Buleleng, Bali. The initiative sought to resolve challenges encountered by the craftsmen, such as limited product design variety, slow production processes, and restricted market access, utilizing a participatory action research approach. The project engaged 24 craftsmen from a village celebrated for its bamboo craftsmanship heritage. Despite its cultural richness, the community faces economic hardships arising from outdated production methods and constrained market growth. The village's geographic positioning presents a distinctive opportunity to enhance economic development through craft-centered entrepreneurship, making it a suitable context for such community service efforts. The project primarily aimed to sustain the craftsmen's entrepreneurial behavior to ensure the longevity of their craft and improve their economic well-being. Based on participatory action research (Afandi et al., 2022), the methodology facilitated active involvement of the craftsmen in pinpointing challenges and devising solutions. This participatory model ensured the interventions' pertinence and cultivated a sense of ownership among the participants, a critical factor for the project's enduring success. By prioritizing creativity and innovation in the production processes, the initiative addressed technical and managerial issues affecting the craftsmen. The program implementation was organized into four sequential sections:

Section 1: Target Community and Context

This community service project was conducted with bamboo craftsmen in Tigawasa Village, Buleleng, Bali. The village, is home to 24 craftsmen known for their traditional bamboo weaving skills. Tigawasa is a prominent center for bamboo craftsmanship, where over 50% of the population engages in producing woven bamboo products such as baskets, trays, and decorative items. Despite its cultural significance, the craft faces challenges, including stagnant production techniques, limited access to broader markets, and declining interest among younger generations. These constraints pose significant risks to the sustainability of the craft, making the village an ideal setting for a community service initiative aimed at addressing these issues and sustaining entrepreneurial behavior.



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This initiative specifically targeted the craftsmen, many of whom operate family-run businesses. Most of these businesses lack formal organizational structures or access to financial and marketing resources. The goal was to empower the craftsmen to overcome these challenges by adopting entrepreneurial behaviors that sustain entrepreneurial activities (Ea), overcoming failure (Of), and proactive behavior (Pb). By applying a participatory action research (PAR) approach, the project aimed to address the craftsmen's immediate needs while promoting long-term sustainability.

Section 2: Objectives of the Community Service Program

The overarching objective of this community service initiative was to sustain and enhance the entrepreneurial behavior (EB) of the bamboo craftsmen in Tigawasa Village. Entrepreneurial behavior, as defined in this context, encompasses three dimensions: entrepreneurial activities (Ea), overcoming failure (Of), and proactive behavior (Pb), following the framework adapted from Wang & Sahid (2024). This approach aimed to address specific

challenges, such as the lack of design innovation, inadequate marketing strategies, and insufficient technical skills among the craftsmen.

To achieve this objective, the program focused on:

- a. Empowering craftsmen through capacity-building workshops tailored to their needs.
- b. Establishing a structured framework for continuous innovation in product development.
- c. Expanding their market reach through partnerships with local and regional stakeholders.
- d. Ensuring the sustainability of their businesses by fostering a culture of proactive and resilient entrepreneurial behavior.

The program emphasized participatory action to ensure that solutions were co-created with the craftsmen, enhancing their sense of ownership and commitment. By addressing the root causes of the challenges faced by the craftsmen, the initiative sought to create lasting economic and cultural benefits for the community.

Section 3: Implementation Phases

The community service program was implemented in three key phases:

Phase 1: Pre-Test and Initial Assessment

An initial pre-test was conducted to evaluate the craftsmen's baseline knowledge and application of entrepreneurial behavior. This assessment utilized a nine-item instrument, measuring dimensions such as entrepreneurial activities (Ea), overcoming failure (Of), and proactive behavior (Pb). Responses were recorded on a five-point Likert scale ranging from 1 ("really don't know and don't understand") to 5 ("strongly know and understand"). The pre-test provided insights into the craftsmen's strengths and areas needing improvement, forming the basis for subsequent interventions.

Phase 2: Capacity Building and Empowerment

Based on the pre-test results, a series of workshops were designed to address identified gaps. These workshops focused on:

- a. Idea Generation: Encouraging craftsmen to develop innovative designs that appeal to diverse markets.
- b. Idea Promotion: Enhancing marketing and communication skills to better position their products.
- c. Idea Realization: Improving technical skills for producing high-quality products efficiently.

Workshops were conducted in a participatory format, allowing craftsmen to share experiences and collaborate on solutions. Partnerships with local universities facilitated the integration of academic expertise into the training programs, ensuring a robust learning experience. Craftsmen were encouraged to develop prototypes and receive feedback, fostering a cycle of continuous improvement.

Phase 3: Post-Test Evaluation and Sustainability Planning

Following the capacity-building phase, a post-test was administered using the same instrument as the pre-test to measure improvements in entrepreneurial behavior. Results demonstrated significant progress in the craftsmen's ability to generate and promote ideas and implement innovative solutions. To ensure long-term impact, a sustainability plan was developed, including the establishment of a local Innovation Hub for ongoing training and collaboration. Partnerships with local tourism and cultural agencies were also initiated to expand market opportunities.

Section 4: Monitoring and Continuous Feedback

Monitoring and feedback mechanisms were integral to the success of this initiative. Regular feedback sessions were conducted throughout the project, allowing craftsmen to share their experiences and provide input on the program's effectiveness. These sessions also served as platforms for facilitators to address concerns and adapt training modules as needed.

On-site visits by program facilitators provided real-time support and ensured that training was effectively implemented. Craftsmen were encouraged to document their progress and challenges, fostering a culture of reflection and learning. These continuous feedback loops strengthened the relationship between facilitators and participants, enhancing the program's overall impact.

The monitoring process highlighted the craftsmen's increased confidence in applying entrepreneurial behavior, as evidenced by their ability to independently develop and market new products. This approach ensured that the project remained responsive to the craftsmen's evolving needs, ultimately contributing to the sustainability of their businesses and the preservation of Tigawasa's bamboo weaving tradition

3. HASIL DAN PEMBAHASAN

Pada umumnya hasil pengabdian dideskripsikan terlebih dahulu, kemudian ada bagian pembahasan. The demographic profile of the bamboo craftsmen in Tigawasa Village highlights critical factors influencing the outcomes of community service initiatives. While the majority

male and experienced demographic provided a stable foundation for skill enhancement, the limited representation of younger and female participants underscored the need for more inclusive approaches. The significant progress observed in the post-test evaluations reflects the efficacy of the program's participatory approach and targeted interventions. However, addressing generational and gender gaps remains imperative for ensuring the long-term sustainability and broader impact of entrepreneurial behavior in the community. Strategic efforts to integrate modern practices while preserving traditional values can position Tigawasa's bamboo craftsmanship as a thriving cultural and economic asset. While strengths such as an experienced and educated workforce provide a solid foundation, addressing gender imbalance, aging demographics, and skill mismatches is imperative for long-term resilience. Future research should prioritize exploring systemic barriers to inclusivity and innovation, paving the way for strategic community-driven solutions.

Table 1. *Descriptive statistics of respondent profile*

| | | Frequency | Percent |
|-----------------|---------------|------------------|----------------|
| Gender | Female | 2 | 8.3 |
| | Male | 22 | 91.7 |
| | Total | 24 | 100 |
| Age | 20 - 30 years | 4 | 16.7 |
| | 31 – 40 years | 5 | 20.8 |
| | 41 and above | 15 | 62.5 |
| | Total | 24 | 100 |
| Education | Undergraduate | 19 | 79.2 |
| | Postgraduate | 5 | 20.8 |
| | Total | 24 | 100 |
| Work Experience | 1 – 5 years | 4 | 16.7 |
| | 5 and above | 20 | 83.3 |
| | Total | 24 | 100 |

Source: The Authors, 2024

Table 1 presents the descriptive statistics for the respondent profiles involved in the study of bamboo craftsmen in Tigawasa Village. The data provides insights into gender distribution, age ranges, education levels, and work experience of the respondents, forming a crucial foundation for analyzing the socio-economic and operational challenges faced by the craftsmen. The detailed analysis reveals critical areas for intervention to ensure the sustainability of Tigawasa's bamboo crafts.

The gender distribution indicates that 91.7% of respondents are male, with females comprising only 8.3%. This disparity underscores a male-dominated participation in bamboo crafting, reflecting societal norms and cultural expectations in Tigawasa. Such a skewed gender balance could limit innovation, as diverse perspectives are often essential for creative problem-solving and sustainable development. Similar studies emphasize that gender inclusivity in small and medium enterprises (SMEs) fosters resilience and innovation (Ortuño et al., 2022; Gumulya et al., 2022). However, the underrepresentation of women may also indicate untapped potential for diversifying labor and enhancing productivity, as evidenced by findings that highlight the benefits of inclusive practices in craftsmen sectors (Aguilar, 2024).

The age data reveals that 62.5% of respondents are aged 41 and above, while only 16.7% are between 20-30 years. This age distribution suggests that bamboo crafting is heavily reliant on older generations, highlighting an urgent need to attract younger participants. The declining interest among youth poses a significant risk to the craft's sustainability, aligning with findings in similar traditional industries where generational shifts threaten continuity (Tidd et al., 2023; Tiwari & Korneliussen, 2022). To mitigate this, targeted initiatives such as apprenticeships and financial incentives could play a pivotal role in rejuvenating youth engagement, as demonstrated in other craftsmen sectors where youth involvement is critical for sustainability (Ebekozen, 2024).

The educational attainment of respondents shows that 79.2% hold undergraduate degrees, while 20.8% possess postgraduate qualifications. This relatively high level of education reflects the community's potential for adopting innovative practices. However, the gap between academic knowledge and practical entrepreneurial skills remains a concern, as evidenced by limited market penetration and business scalability. Research highlights that targeted capacity-building programs can bridge this gap, enabling educated craftsmen to leverage their skills for broader market reach (Juckett et al., 2022; Bana et al., 2021). Such initiatives are crucial for fostering an environment where educated individuals can translate their knowledge into effective business practices, thereby enhancing the overall productivity of the bamboo crafting sector (Hidayat, 2023).

A majority (83.3%) of respondents have over five years of experience in bamboo crafting, suggesting a deep reservoir of expertise. However, the limited infusion of new talent underscores the challenges of sustaining this expertise in the long term. Literature suggests that experience alone cannot guarantee adaptability in dynamic markets; instead, continuous learning and exposure to emerging trends are critical for longevity (Nazer et al., 2021; Omeje

et al., 2021). This highlights the importance of integrating mentorship and ongoing training programs that not only preserve traditional skills but also encourage innovation and adaptability among craftsmen (Ebekozi, 2024).

Strengths and Weaknesses of Respondent Profiles:

Strengths:

- a. **Experienced Workforce:** The high proportion of seasoned craftsmen provides a strong base for quality production and adherence to traditional practices.
- b. **Educational Attainment:** The respondents' educational backgrounds offer opportunities for integrating modern techniques and entrepreneurial strategies.

Weaknesses:

- a. **Gender Imbalance:** The male dominance within the workforce limits diversity, potentially stifling creative problem-solving and inclusive decision-making.
- b. **Aging Workforce:** The reliance on older craftsmen poses risks for long-term sustainability without active engagement of younger generations.

Opportunities for Sustainability.

The data highlights several pathways for ensuring the sustainability of bamboo crafts in Tigawasa:

- a. **Empowering Women:** Initiatives that encourage female participation could enhance labor diversity and introduce new dynamics into the craft.
- b. **Youth Engagement Programs:** Apprenticeship and training programs tailored to younger participants could revitalize interest and ensure generational continuity.
- c. **Skill Upgradation:** Leveraging the high educational attainment of craftsmen for adopting modern marketing and production techniques can significantly improve market reach.

The study's reliance on a relatively small sample size (24 respondents) may limit the generalizability of findings. Expanding the study to include broader demographics and exploring regional variations could provide more comprehensive insights. Furthermore, understanding the motivations and barriers for youth engagement would help design targeted interventions. Compared to similar rural SME studies, the Tigawasa findings mirror challenges such as market inaccessibility, reliance on traditional practices, and gender disparity (Tiwasang & Sawang, 2021). However, the relatively high educational levels of Tigawasa craftsmen stand

out, presenting unique opportunities for leveraging formal knowledge in practical applications, which can enhance their business performance and innovation capabilities (Sabel, 2024).

The descriptive statistics in Table 2 underscore a significant transformation in the entrepreneurial behavior of bamboo craftsmen in Tigawasa Village. The improvements across all dimensions—EA, OF, and PB—highlight the effectiveness of targeted interventions in fostering entrepreneurial growth. These gains reflect a shift in mindset, from traditional craftsmanship to modern entrepreneurial practices. However, the variability in post-test scores suggests that not all participants benefited equally, emphasizing the need for ongoing, customized support. Sustaining these gains requires a systemic approach, integrating continuous training, peer-learning opportunities, and institutional support to embed entrepreneurial behaviors into the daily practices of the community.

Table 2. *Descriptive Statistics*

| Variable | | Pre-test Score | | | | Post-test Score | | | |
|--------------------------|-------|----------------|-------|-------|--------------------|-----------------|-------|-------|--------------------|
| | | Min | Max | Mean | Standard Deviation | Min | Max | Mean | Standard Deviation |
| Entrepreneurial Behavior | Ea1 | 1.000 | 2.000 | 1.542 | 0.509 | 3.000 | 5.000 | 3.958 | 0.690 |
| | Ea2 | 1.000 | 2.000 | 1.500 | 0.511 | 3.000 | 5.000 | 4.000 | 0.780 |
| | Ea3 | 1.000 | 3.000 | 1.667 | 0.565 | 3.000 | 5.000 | 4.333 | 0.702 |
| | EA | 1.000 | 2.000 | 1.569 | 0.333 | 3.333 | 4.667 | 4.097 | 0.434 |
| | Of1 | 1.000 | 3.000 | 1.500 | 0.590 | 3.000 | 5.000 | 4.000 | 0.780 |
| | Of2 | 1.000 | 3.000 | 1.542 | 0.588 | 3.000 | 5.000 | 3.917 | 0.717 |
| | Of3 | 1.000 | 2.000 | 1.333 | 0.482 | 3.000 | 5.000 | 4.000 | 0.780 |
| | OF | 1.000 | 2.000 | 1.458 | 0.426 | 3.333 | 4.667 | 3.972 | 0.404 |
| | Pb1 | 1.000 | 3.000 | 1.625 | 0.576 | 3.000 | 4.000 | 3.667 | 0.897 |
| | Pb2 | 1.000 | 2.000 | 1.667 | 0.482 | 3.000 | 5.000 | 3.917 | 0.830 |
| | Pb3 | 1.000 | 2.000 | 1.500 | 0.511 | 3.000 | 5.000 | 3.917 | 0.654 |
| | PB | 1.000 | 2.000 | 1.597 | 0.380 | 3.000 | 1.667 | 4.500 | 2.771 |
| EB | 1.000 | 2.000 | 1.542 | 0.380 | 3.222 | 3.667 | 4.190 | 1.203 | |

Author, 2024

Table 2 showcases the comparative descriptive statistics of entrepreneurial behavior dimensions among bamboo craftsmen in Tigawasa Village, with data segmented into pre-test and post-test phases. These dimensions include entrepreneurial activities (EA), overcoming failure (OF), and proactive behavior (PB), forming the composite measure of entrepreneurial

behavior (EB). Each dimension captures a critical aspect of entrepreneurial capability, highlighting the craftsmen's growth following targeted interventions.

Entrepreneurial Activities (EA)

Pre-Test Analysis:

The mean scores for EA indicators (Ea1, Ea2, Ea3) during the pre-test phase ranged from 1.500 to 1.667, with an aggregate mean of 1.569. The data reflects limited engagement in activities such as discussing product ideas, market research, and product/service development. Standard deviations indicate modest variability, suggesting that the lack of entrepreneurial activity was a shared challenge across participants. These results align with previous studies on SMEs, where traditional practices often limit active participation in entrepreneurial endeavors (Kusumawijaya & Astuti, 2024).

Post-Test Analysis:

Post-test scores reveal a substantial increase, with individual means ranging from 3.958 to 4.333 and an aggregated mean of 4.097. This improvement highlights the success of training programs in enhancing critical entrepreneurial activities, such as ideation and market engagement. The increased standard deviations, particularly in Ea2 and Ea3, suggest variability in learning uptake, possibly influenced by differences in education or motivation levels among participants (Martín et al., 2020).

Strengths and Weaknesses:

Strengths: Enhanced ability to identify market opportunities and engage in product development.

Weaknesses: Residual variability in scores suggests uneven absorption of knowledge and skills.

Sustainability Potential: The increase in EA scores signals a promising trajectory for sustained entrepreneurial engagement. However, ongoing mentorship and resource access are vital to ensure these activities become deeply embedded in daily operations.

Overcoming Failure (OF)

Pre-Test Analysis:

Pre-test means for OF indicators (Of1, Of2, Of3) fall between 1.333 and 1.542, with a composite mean of 1.458. These low scores underscore significant challenges in resilience, such as adjusting plans, exploring alternative opportunities, and innovating in response to failure. Limited standard deviation values reflect a uniform lack of adaptive strategies among craftsmen.

Post-Test Analysis:

Post-test scores show marked improvement, with individual means ranging from 3.917 to 4.000 and an aggregate mean of 3.972. These results suggest that the workshops effectively fostered resilience, enabling craftsmen to embrace failure as a learning opportunity. Moderate variability across indicators highlights differing levels of adaptability among participants (Ridloah, 2024).

Strengths and Weaknesses:

Strengths: Increased capability to innovate and pivot strategies during setbacks.

Weaknesses: While improvements are evident, a deeper cultural shift may be required to normalize iterative processes as part of business practices.

Sustainability Potential: With sustained reinforcement, these adaptive behaviors can transform resilience into a competitive advantage. Institutional frameworks, such as peer-learning platforms, can bolster these gains.

Proactive Behavior (PB)

Pre-Test Analysis:

Proactive behavior (Pb1, Pb2, Pb3) demonstrates the lowest pre-test performance, with individual means ranging from 1.500 to 1.667 and a composite mean of 1.597. These results suggest a pervasive hesitancy among craftsmen to take initiative or seize opportunities, potentially due to limited exposure to entrepreneurial success models or risk aversion (Tsoli, 2023).

Post-Test Analysis:

Post-test results exhibit remarkable improvements, with individual means reaching up to 3.917 and an aggregated mean of 4.500. This shift reflects a newfound willingness among participants to lead initiatives, solve problems actively, and seize opportunities promptly. Standard deviations indicate variability in Pb1 scores, possibly stemming from differences in confidence or external factors like financial stability (C. Wang & Li, 2022).

Strengths and Weaknesses:

Strengths: The craftsmen's improved willingness to take initiative marks a critical step toward self-reliance and community leadership.

Weaknesses: Variability in proactive behavior scores suggests that confidence-building measures need to be personalized to sustain improvements.

Sustainability Potential: Proactive behavior is a cornerstone of entrepreneurial success. Embedding proactive practices through community-led projects or leadership training could ensure these gains are long-lasting.

Overall Entrepreneurial Behavior (EB)

Pre-Test Analysis:

The pre-test composite EB score of 1.542 reflects widespread gaps in entrepreneurial competencies among the craftsmen. Uniformly low means across dimensions point to a systemic issue, where cultural and operational barriers constrain entrepreneurial growth (Emon, 2023).

Post-Test Analysis:

The post-test composite EB score of 4.190 signifies a substantial transformation, with consistent improvements across all dimensions. This demonstrates the holistic impact of the intervention programs, effectively addressing core entrepreneurial challenges (Xie et al., 2024).

Strengths and Weaknesses:

Strengths: The broad-based improvement underscores the efficacy of targeted training.

Weaknesses: Residual gaps in variability call for continued, tailored support to address individual needs.

Sustainability Potential: The improvement in overall EB is a positive indicator of long-term potential. Establishing institutional support mechanisms, such as innovation hubs or cooperatives, could further entrench entrepreneurial behavior within the community's cultural fabric.

The community service initiative targeting bamboo craftsmen in Tigawasa Village effectively addressed key challenges in entrepreneurial behavior (EB) through targeted interventions, fostering measurable improvements across all dimensions: entrepreneurial activities (EA), overcoming failure (OF), and proactive behavior (PB). The pre-test to post-test analysis underscores a transformative shift in the participants' capacity to engage in entrepreneurial activities, adapt to setbacks, and proactively seize opportunities, as evidenced by the aggregate EB mean increase from 1.542 to 4.190. These gains validate the efficacy of a participatory approach, which empowered the craftsmen by focusing on skill-building workshops tailored to their specific needs. The EA dimension saw the most notable improvement, with post-test scores (mean: 4.097) reflecting enhanced capabilities in market analysis, ideation, and product development. These skills are fundamental for sustaining Tigawasa's bamboo craft industry amidst evolving market dynamics. Similarly, the OF

dimension demonstrated a significant shift (mean: 3.972), highlighting the craftsmen's increased resilience and adaptability in response to challenges. The PB dimension, while starting with the lowest baseline, exhibited remarkable growth (mean: 4.500), signifying a newfound confidence in initiating and leading projects. These improvements collectively position Tigawasa's bamboo craftsmen as more dynamic and market-responsive.

Despite these successes, the variability in post-test results underscores the need for continued support to address individual gaps. Tailored follow-up interventions are crucial for ensuring that all participants fully internalize and sustain the entrepreneurial competencies gained. Furthermore, the demographic profile analysis highlights systemic issues such as gender imbalance (91.7% male) and reliance on an aging workforce (62.5% aged 41 and above), which must be strategically addressed for long-term sustainability. This initiative provides robust evidence that participatory, context-specific training can drive significant behavioral change. However, the path to sustainability requires embedding these gains within a supportive ecosystem, emphasizing mentorship, peer collaboration, and access to resources.

The community service program's contribution extends beyond individual skill enhancement, fostering a broader impact on the Tigawasa community and theoretical understandings of entrepreneurial behavior in SMEs. For the community, the program has laid a foundation for cultural preservation and economic resilience. The enhanced entrepreneurial capacities empower craftsmen to better market their unique bamboo products, potentially attracting regional and international markets. This not only improves individual livelihoods but also ensures the continuity of Tigawasa's cultural heritage. From a theoretical perspective, the initiative underscores the importance of contextual adaptation in entrepreneurial behavior frameworks. The findings validated that EA, OF, and PB as critical dimensions of entrepreneurial behavior. The pre-test results revealed the craftsmen's reliance on traditional practices, while post-test outcomes highlighted their ability to integrate modern business strategies, enriching theoretical discourse on SME resilience in rural contexts. The program's participatory action research (PAR) approach reinforces the theory that co-creation and localized interventions yield more sustainable outcomes. By involving craftsmen in designing solutions, the initiative fostered a sense of ownership and commitment, aligning with community development principles. Furthermore, the integration of academic expertise into the training modules demonstrated the synergy between research and practice, providing a model for future community service programs.

Implications for policy and practice include the need for structured support mechanisms, such as local cooperatives or innovation hubs, to sustain the momentum. These structures can facilitate knowledge-sharing, resource pooling, and collective bargaining, addressing systemic barriers like limited market access and gender imbalance.

While the program achieved substantial success, several limitations warrant attention. First, the small sample size (24 participants) limits the generalizability of findings. Expanding the program to include a larger and more diverse demographic would provide a comprehensive understanding of community dynamics and challenges. Second, the program's short-term duration posed constraints on evaluating the long-term sustainability of behavioral changes. While the post-test results are encouraging, ongoing monitoring is essential to determine whether the gains in EB are maintained and translated into tangible economic benefits. Third, the initiative faced logistical limitations, particularly in reaching younger and female participants. The underrepresentation of women (8.3%) and youth (16.7% aged 20–30) underscores the need for more inclusive recruitment strategies. Addressing cultural barriers that limit women's participation and designing youth-focused incentives are critical for ensuring broader engagement. Lastly, the variability in learning outcomes among participants suggests differing levels of access to resources and prior exposure to entrepreneurial concepts. Future programs should incorporate more personalized approaches, such as mentorship or tiered training sessions, to cater to varying skill levels. Despite these limitations, the initiative provides valuable insights into the design and implementation of community service programs. Addressing these challenges in future iterations could amplify the program's impact, ensuring both inclusivity and sustainability.

The results of this initiative highlight substantial potential for scaling and replicating community service programs in Tigawasa Village and beyond. The craftsmen's improved entrepreneurial behavior positions them as role models for neighboring communities, creating opportunities for peer-learning exchanges and regional collaboration. Establishing an innovation hub in Tigawasa could serve as a central platform for training, resource sharing, and market outreach, driving long-term development. From an academic perspective, the program offers fertile ground for research on rural entrepreneurship, gender dynamics, and cultural preservation. Future studies could explore the interplay between traditional craftsmanship and modern business practices, contributing to a richer understanding of SME resilience in rural settings. Additionally, longitudinal studies could evaluate the sustained impact of entrepreneurial behavior on economic and social outcomes. However, scaling the program

presents challenges, particularly in securing funding and institutional support. The reliance on external facilitators and resources may limit scalability unless local capacity-building is prioritized. Moreover, cultural resistance to change, particularly in embracing gender inclusivity and youth participation, requires sustained advocacy and community engagement. Integrating technology presents both opportunities and challenges. Digital platforms could enhance market access and training delivery but may face resistance due to limited digital literacy among older craftsmen. Bridging this gap through targeted digital literacy programs could unlock significant potential for innovation and growth.

The initiative has laid a strong foundation for community-driven development in Tigawasa Village. Addressing its limitations and leveraging its potentials through strategic, inclusive, and sustainable approaches will ensure the long-term success of similar community service programs, contributing to both theoretical advancements and tangible community benefits

4. SIMPULAN

Program pengabdian masyarakat di Desa Tigawasa berhasil meningkatkan perilaku kewirausahaan perajin bambu melalui pendekatan partisipatif dan pelatihan yang disesuaikan dengan kebutuhan lokal, sebagaimana dibuktikan oleh peningkatan signifikan skor pre-test ke post-test pada seluruh dimensi Entrepreneurial Behavior (EA, OF, PB). Meskipun para perajin memiliki pengalaman dan pendidikan yang memadai sebagai kekuatan utama, tantangan tetap muncul dalam bentuk ketimpangan gender, dominasi usia tua, dan minimnya partisipasi generasi muda. Oleh karena itu, keberlanjutan dampak program ini memerlukan dukungan sistemik berupa pendirian pusat inovasi, pelatihan lanjutan, serta strategi inklusif yang mampu menjangkau perempuan dan pemuda agar kerajinan bambu Tigawasa dapat berkembang secara berkelanjutan sebagai aset budaya dan ekonomi lokal. Temuan ini juga memperkuat pentingnya pendekatan berbasis komunitas dan kolaboratif dalam merancang solusi kewirausahaan yang kontekstual. Ke depan, perlu dilakukan studi longitudinal untuk menilai efektivitas jangka panjang program dan memperluas dampaknya ke wilayah lain dengan karakteristik serupa

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