

BUILDING ENTREPRENEURIAL MINDSETS AMONG INDONESIAN MIGRANT WORKERS THROUGH CULINARY BUSINESS TRAINING IN SINGAPORE

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Abstract

Indonesian migrant workers often return with valuable work experience and savings, yet many have limited opportunities to turn these assets into sustainable businesses. This community service program addressed gaps in entrepreneurial readiness, culinary business planning, and food safety awareness among 26 Indonesian migrant workers in Singapore. The program was delivered with D'Gayatri International Pte. Ltd. through short lectures, guided discussion, case examples, hands-on culinary demonstration, cost and pricing exercises, digital marketing practice, and mentoring. Participant learning was assessed using a 10-item pre-test and post-test, while satisfaction was measured through a five-item questionnaire. The mean proportion of correct responses increased from 38.08% to 76.54%. Before training, no participant was in the high-score category; afterward, 20 participants (77%) reached that category. Overall satisfaction averaged 4.42 out of 5 (88.46%). The clearest gains concerned entrepreneurial competencies, corporate mindset, business systems, marketing, and branding. One item on competitor and consumer analysis declined, indicating a need for clearer question wording and stronger market-research practice. The program shows that practical, context-sensitive culinary entrepreneurship training can strengthen migrant workers' confidence and post-migration business preparedness.

Keywords: Culinary Entrepreneurship, Entrepreneurial Mindset, Indonesian Migrant Workers, Participatory Training, Post-Migration Preparedness

INTRODUCTION

International labour migration can improve household income and widen workers' exposure to new service standards, work routines, and social networks. However, the benefits of migration are not automatically converted into stable livelihoods after workers return home. Reintegration involves more than physical return; it requires access to employment, enterprise opportunities, skills recognition, supportive institutions, and social participation (International Labour Organization [ILO], 2024; Wickramasekara, 2019). For Indonesian migrant workers, entrepreneurship is therefore often discussed as a practical pathway for using savings, experience, and social remittances to build a more independent economic future.

Studies of return migrants in Indonesia show that overseas experience can become a

source of knowledge, discipline, confidence, and business ideas, but only when workers can adapt those resources to local markets. Yuniarto (2018) describes return migrant entrepreneurship as a process of translating accumulated experience into livelihood strategies in the home village. Anwar and Chan (2016) similarly show that entrepreneurial outcomes vary because returnees face different household resources, market conditions, and institutional support. More recent scholarship emphasizes that return migrant entrepreneurship is shaped by the interaction of individual readiness, social networks, financial resources, and the wider business ecosystem rather than by personal motivation alone (Mardhotillah & Sofhani, 2024; Silva et al., 2026).

This perspective is important because migrant workers should not be approached simply as people who lack knowledge. Many already possess considerable practical intelligence: they manage demanding work schedules, adapt to another country, communicate across cultures, and make financial decisions for their families. The challenge is to help them recognise these experiences as entrepreneurial assets and connect them with feasible business opportunities. Previous Indonesian programs have shown that financial literacy and entrepreneurship workshops can stimulate business interest and improve participants' confidence, especially when the learning activities are closely linked to daily decisions (Mahfirah et al., 2024). Entrepreneurship training has also been associated with stronger entrepreneurial intention among Indonesian migrant workers (Irawan et al., 2019).

The culinary sector offers an accessible entry point because food businesses can begin at different scales, draw on familiar Indonesian products, and serve both local and diaspora markets. Yet culinary entrepreneurship requires more than the ability to cook. A viable product must respond to consumer needs, have a clear cost structure and selling price, maintain consistent quality, communicate a recognisable brand, and follow safe food-handling practices. Good Hygiene Practices are the foundation of food safety management because they help food businesses prevent biological, chemical, and physical hazards throughout production (Food and Agriculture Organization of the United Nations [FAO], 2023). Simple hygiene principles, including keeping clean, separating raw and cooked foods, controlling temperature, and using safe water and ingredients, are particularly relevant to small or home-based food enterprises (World Health Organization [WHO], 2006).

How training is delivered is also important. Entrepreneurship is learned more effectively when participants can connect concepts with action, test ideas, receive feedback, and reflect on realistic business situations. A systematic review by Motta and Galina (2023) found that experiential learning is widely used to develop entrepreneurial skills and intention because it moves learners beyond passive exposure to theory. In culinary education, digital multimedia and flipbook resources can extend this process by allowing learners to revisit demonstrations and procedural guidance at their own pace (Kandriasari et al., 2024; Prisila et al., 2021). Such resources are useful for migrant workers whose working hours may limit participation in conventional long-duration courses.

Against this background, Universitas Negeri Jakarta and D'Gayatri International Pte. Ltd./Gayatri Academy implemented a community service program for Indonesian migrant workers in Singapore. The partner identified two connected needs: limited readiness to design and manage a small business, and insufficient integration of culinary innovation with food safety. The program combined entrepreneurial mindset development, opportunity

identification, simple business planning, cost and pricing analysis, branding, digital marketing, food safety, and an aquafaba-based mayonnaise demonstration. Its originality lies in treating entrepreneurship, culinary production, food safety, and digital learning support as one integrated preparation pathway rather than as separate topics.

The program aimed to strengthen participants' understanding of entrepreneurship and increase their confidence in developing feasible culinary business ideas for the post-migration period. This article describes the implementation process, compares participants' knowledge before and after training, examines participant satisfaction, and identifies areas that need improvement in future mentoring. The activity contributes to Sustainable Development Goal 4 on inclusive quality education and Sustainable Development Goal 8 on decent work and economic growth (United Nations, 2015).

IMPLEMENTATION METHOD

The community service activity was conducted in Singapore in collaboration with D'Gayatri International Pte. Ltd./Gayatri Academy. Twenty-six Indonesian migrant workers completed the learning activities and both knowledge assessments. The program used a participatory, practice-oriented design. Rather than presenting entrepreneurship as an abstract body of knowledge, the facilitators invited participants to begin with their own work experience, interests, family resources, and possible markets. This approach was intended to respect participants' existing capabilities while helping them organise those capabilities into a more systematic business plan.

Preparation began with coordination between the university team and the partner institution. The discussion covered participant needs, schedule, venue, available facilities, and topics that were most relevant to migrant workers planning their economic future. Training materials were then organised around five connected learning areas: entrepreneurial mindset and business stages; opportunity identification and product differentiation; cost calculation, pricing, and simple planning; branding and digital promotion; and culinary product quality, hygiene, and food safety. A digital flipbook was prepared as a learning aid so that participants could review key points after the face-to-face session.

Table 1. Program stages, learning activities, and expected outputs

Stage	Main activities	Expected output
Needs assessment	Partner coordination, participant profiling, and identification of business-learning needs	Training focus aligned with participants' circumstances
Mindset and opportunity	Interactive explanation, reflection on work experience, discussion of business stages, and opportunity mapping	Initial culinary business idea and greater entrepreneurial awareness
Business planning	Costing, pricing, customer identification, competitor review, branding, and simple planning exercises	Draft business model and basic financial calculation
Culinary and food safety practice	Aquafaba mayonnaise demonstration, process standardisation, hygiene, sanitation, and safe handling discussion	Product prototype knowledge and safer production awareness
Mentoring and evaluation	Group consultation, presentations, pre-test/post-test comparison, and satisfaction questionnaire	Feedback, revised ideas, and program-evaluation data

Source: Program design documented in the community service report, 2026.

The face-to-face session combined short explanations, guided discussion, examples, demonstration, hands-on exercises, and mentoring. Participants were asked to consider who would buy their product, why the product would be chosen over alternatives, how much it would cost to make, and how the product could be communicated through social media. The aquafaba mayonnaise demonstration served as a concrete example of product innovation and resource-conscious culinary practice. Food safety messages were embedded in the demonstration, including personal hygiene, clean equipment, separation of materials, safe storage, and process consistency.

Knowledge was assessed using the same 10 true-or-false items before and after the training. The items covered the meaning of entrepreneurship, principles for business continuity, creativity and innovation, entrepreneurial competencies, corporate mindset, early-stage business priorities, business systems, marketing trends, branding, and competitor and consumer analysis. Because the available report contained aggregated item scores rather than individual raw scores, the analysis in this article is descriptive. Correct-response frequencies were converted to percentages. The mean knowledge score was calculated from the total correct responses across all items divided by 26 participants and 10 questions.

The report also grouped participants into low, medium, and high knowledge categories and classified individual normalised gains into four effectiveness categories. The normalised-gain approach is commonly used to describe improvement relative to the maximum possible gain (Hake, 1998), but the present article does not recalculate individual gains because participant-level scores were not available. Satisfaction was measured using five statements on material relevance, instructor communication, facilities and learning media, usefulness of practice and discussion, and the extent to which training helped participants address doubts about starting a business. Responses used a five-point scale. The activity evaluation was intended for program improvement rather than causal inference, and participation data were reported in aggregate.

RESULTS AND DISCUSSION

Program implementation and participant engagement

The training was completed as planned with 26 participants. The interaction during business-idea discussions showed that participants were able to connect entrepreneurial concepts with everyday observations, such as demand for Indonesian food, convenient products for busy consumers, and the importance of attractive yet realistic product presentation. The practical format helped shift the conversation from a general wish to ‘have a business someday’ toward more specific questions about product choice, customers, production, cost, and promotion. This shift matters because entrepreneurial intention is strengthened when training helps learners see a credible path from interest to action (Irawan et al., 2019).

The partner’s involvement was central to the program. D’Gayatri helped coordinate participants, provide the venue, and create a learning environment that was familiar to the migrant-worker community. Reintegration literature consistently notes that entrepreneurship support is more effective when it is connected to institutions and networks that can continue assisting participants after a short training event (ILO, 2024; IOM, 2023; Wickramasekara, 2019). In this program, the digital flipbook and partner-based follow-up were designed as modest first steps toward continuity. However, longer mentoring will still be needed if participants move from an initial idea to product testing and actual market entry.



Figure 1. Implementation of entrepreneurship training for Indonesian migrant workers

Changes in entrepreneurial knowledge

Across the 10 knowledge items, the number of correct answers increased from 99 at pre-test to 199 at post-test. This corresponds to a mean increase from 3.81 to 7.65 correct answers out of 10, or from 38.08% to 76.54%. The improvement of 3.85 points indicates that participants understood substantially more of the material after the session. The result should be interpreted as evidence of immediate learning, not as proof that the training alone will lead to business

creation. Nevertheless, the direction and size of the change support the use of participatory and applied activities in entrepreneurship education (Motta & Galina, 2023).

Table 2. Correct responses before and after training

No.	Knowledge topic	Pre-test (%)	Post-test (%)	Change (pp)
1	Meaning of entrepreneurship	38.46	69.23	+30.77
2	Principles supporting business continuity	100.00	100.00	0.00
3	Difference between creativity and innovation	0.00	30.77	+30.77
4	Entrepreneurial competencies and personal development	19.23	100.00	+80.77
5	Corporate mindset from the beginning of a business	0.00	84.62	+84.62
6	Priorities during the first two years of business	92.31	96.15	+3.84
7	Characteristics of a well-developed business system	42.31	92.31	+50.00
8	Adapting marketing to trends while retaining identity	0.00	65.38	+65.38
9	Purpose of branding	38.46	100.00	+61.54
10	Importance of competitor and consumer analysis	50.00	26.92	-23.08

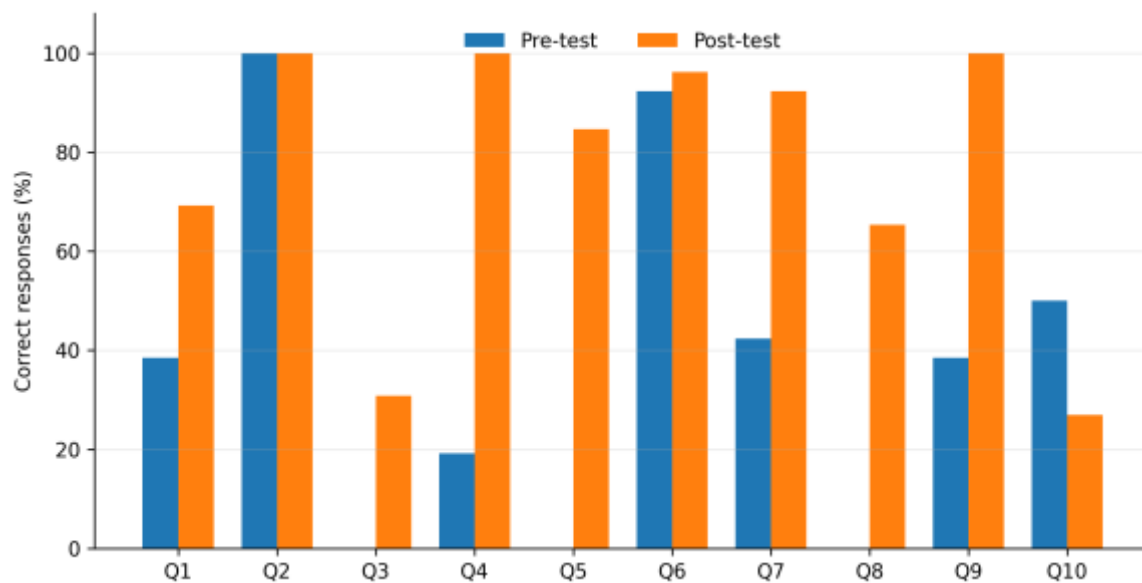


Figure 2. Percentage of correct responses by knowledge item

The largest gains occurred in understanding that entrepreneurial competencies include mental readiness, motivation, skills, and creativity (item 4), and that a corporate mindset should be developed from the beginning rather than postponed until a business is mature (item 5). Strong gains were also seen in the concepts of business systems, marketing, and branding. These topics appeared to benefit from concrete examples because participants could relate them to products and businesses they encounter in daily life. Entrepreneurship literature describes mindset as a way of noticing opportunities, acting under uncertainty, learning from feedback, and organising resources rather than merely seeking profit (Hisrich et al., 2017). The post-test

pattern suggests that the training helped participants broaden their earlier image of entrepreneurship.

The creativity-and-innovation item improved from 0% to 30.77%, but most participants still answered incorrectly. This is an important finding. Participants may understand an innovative example when they see it, yet still find it difficult to distinguish generating a new idea from applying that idea to create value. Future sessions should therefore use a simple sequence: identify a problem, generate several ideas, select one idea, test it, collect customer feedback, and revise the product. The culinary demonstration can then be explicitly mapped to this sequence so that the difference between creativity and innovation becomes visible rather than purely definitional.

Item 10, a negatively worded statement about competitor and consumer analysis, declined from 50.00% to 26.92%. This result should not be concealed because it identifies a weakness in both instruction and measurement. The wording may have caused confusion, especially because several items were phrased as statements that participants had to judge as true or false. At the same time, the decline may indicate that market analysis did not receive enough guided practice. Future evaluations should use positively worded, scenario-based questions. For example, participants could compare two product ideas and choose which information they would collect before setting a price or selecting a target customer. A short customer-profile and competitor-mapping exercise should also be added to the mentoring stage.

Movement across score categories and training effectiveness

The category distribution reinforces the item-level findings. Before training, 12 participants (46%) were in the low category and 14 (54%) were in the medium category; no participant reached the high category. After training, no participant remained in the low category, six (23%) were in the medium category, and 20 (77%) were in the high category. The movement is meaningful because it shows that the improvement was not limited to a small number of high-performing participants.

Table 3. Distribution of participant knowledge categories

Category	Pre-test n (%)	Post-test n (%)
Low	12 (46%)	0 (0%)
Medium	14 (54%)	6 (23%)
High	0 (0%)	20 (77%)
Total	26 (100%)	26 (100%)

Source: Community service evaluation data, 2026.

The project report's individual gain classification placed five participants (19%) in the ineffective category, five (19%) in the less-effective category, 10 (38%) in the moderately effective category, and six (23%) in the effective category. Percentages total 99% because of rounding. This variation cautions against treating the average improvement as a uniform experience. Differences in prior knowledge, tiredness after work, language used in test items, and opportunities to participate in practice may all have influenced learning. Future delivery

should include more small-group work, brief recap questions between topics, and follow-up tasks that allow participants to apply one concept at a time.

Participant satisfaction and learning experience

Participant satisfaction was consistently high across the five indicators. Mean scores ranged from 4.35 to 4.50 on a five-point scale, and the overall average was 4.42 (88.46%). The highest-rated aspect was the instructor's ability to explain entrepreneurial mindset in an understandable and inspiring way. Participants also rated the facilities and learning media positively. These findings suggest that the training atmosphere was supportive and that the material felt relevant to participants' aspirations.

Table 4. Participant satisfaction with the training

No.	Indicator	Mean (1–5)	Percentage	Category
1	Material matched participants' needs for starting a culinary business	4.38	87.69%	Very satisfied
2	Instructor explained entrepreneurial mindset clearly and inspiring	4.50	90.00%	Very satisfied
3	Facilities and learning media supported the learning process	4.46	89.23%	Very satisfied
4	Practice and discussion supported concrete business-idea development	4.35	86.92%	Very satisfied
5	Training helped address doubts and barriers to starting a business	4.42	88.64%	Very satisfied
	Overall	4.42	88.46%	Very satisfied

Source: Community service evaluation data, 2026.

High satisfaction is valuable, but it should not be confused with long-term impact. Participants may enjoy a session and understand its messages without yet having the time, capital, legal information, family support, or market access needed to start a business. Return migrant entrepreneurship research warns that individual motivation must be supported by networks, institutions, and local opportunity structures (Anwar & Chan, 2016; Mardhotillah & Sofhani, 2024; Silva et al., 2026). For that reason, the next phase should move from a one-day learning event toward staged mentoring: validating a customer need, testing a small batch, calculating the real unit cost, reviewing food safety, preparing simple promotional content, and reflecting on sales feedback.

The digital flipbook can support this process by providing a portable reference. Multimedia resources are particularly useful when they combine concise explanations, visual steps, video or image demonstrations, and self-check questions (Kandriasari et al., 2024). However, the flipbook should complement rather than replace human mentoring. A small peer group coordinated by the partner institution could help participants share progress and practical difficulties. Such a community-based approach is consistent with evidence that collective support and external facilitation can strengthen enterprise development among Indonesian return migrant workers (Mardhotillah & Sofhani, 2024).

Food safety and sustainable culinary business preparation

Integrating food safety into entrepreneurship training was a practical strength of the program. New food entrepreneurs often focus first on taste, packaging, and sales, although an unsafe product can quickly damage consumer trust and business continuity. The aquafaba mayonnaise demonstration created an opportunity to discuss clean equipment, ingredient handling, cross-contamination prevention, standardised procedures, storage, and product quality. These topics align with FAO's guidance that Good Hygiene Practices should form the basic control system for food businesses of all sizes (FAO, 2023). The WHO Five Keys also provides an accessible structure that can be adapted for participants who are beginning a home-based enterprise (WHO, 2006).

The report did not provide a separate pre-test and post-test for food safety knowledge, so no claim can be made about measurable improvement in this area. Future programs should include a short food safety assessment and an observation checklist during practice. Participants could also be asked to prepare a simple process flow and identify where contamination, temperature abuse, or unsafe storage might occur. This would make food safety part of business feasibility, not an additional topic delivered at the end.

Limitations and directions for follow-up

This evaluation has several limitations. First, it used a one-group pre-test and post-test design without a comparison group, so the observed improvement cannot be attributed solely to the program. Second, only aggregated item scores were available for this article; individual-level statistical testing and reliability analysis could not be conducted. Third, satisfaction was self-reported immediately after training and may reflect positive feelings toward the facilitators or event. Fourth, the evaluation measured immediate knowledge rather than later behaviour, product sales, business survival, income, or economic reintegration. Finally, the mixed use of positively and negatively worded true-or-false items may have affected responses, as suggested by item 10.

A stronger follow-up design would assess participants again after three to six months and document whether they refined a business idea, tested a product, prepared a budget, opened a digital sales channel, or began trading. Qualitative interviews could explore what helped or prevented action. This would align the evaluation more closely with reintegration research, which treats entrepreneurship as a process shaped by personal readiness, household decisions, networks, and market conditions over time (ILO, 2024; Silva et al., 2026).

CONCLUSION

The integrated culinary entrepreneurship program provided a relevant and encouraging learning experience for 26 Indonesian migrant workers in Singapore. Correct responses increased from an average of 38.08% before training to 76.54% afterward, and 77% of participants reached the high knowledge category at post-test. Participants were very satisfied with the material, facilitation, learning media, and practical discussions, with an overall satisfaction score of 4.42 out of 5. The strongest gains concerned entrepreneurial competencies, corporate mindset, business systems, marketing, and branding.

The findings also point to clear areas for improvement. Creativity and innovation need more applied explanation, while competitor and consumer analysis should be taught through scenario-based market-research exercises and assessed with clearer wording. Food safety requires its own outcome measure. Most importantly, short training should be followed by staged mentoring so that participants can validate a product, calculate real costs, apply safe production practices, test the market, and learn from feedback. The program offers a useful starting point for post-migration economic preparation, but sustainable entrepreneurship will depend on continued support from partners, peer networks, and institutions.

Acknowledgment

The authors gratefully acknowledge the Institute for Research and Community Service, Universitas Negeri Jakarta (LPPM UNJ), for the funding and institutional support provided through the International Collaborative Community Service (PPM-KKI) scheme under Decree No. 26/PPM-KI/LPPM/III/2026. The authors also thank D'Gayatri International Pte. Ltd./Gayatri Academy for coordinating the participants and supporting the implementation of the program in Singapore.

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