IJCS International Journal of Community Service
ISSN 2961-7162 (online)
https://ejournal.ipinternasional.com/index.php/ijcs

OPEN ACCESS

Vol. 4, Issue 2, 2025 DOI : 10.55299/ijcs.v4i2.1571

Mentoring and MSME Machinery in Start-up Business Planning: A Thai Snack Case Study

Yayah Sutisnawati[1]*, M. Yani Syafei [2], Prattana Srisuk[3] , Nico Irawan[4], Marlon Rael Astillero[5]

[1,] Department of Management, Faculty of Economic and Business, Universitas Komputer Indonesia, Bandung, Indonesia [2] Doctoral Program in Management Science, Postgraduate School, Universitas Komputer Indonesia, Bandung, Indonesia[3,4,5] Thai Global Business Administration Technological College, Thailand

*Corresponding Author:
Email: yayah@email.unikom.ac.id

ABSTRACT

This study explores the role of mentoring and the utilization of MSMEs machinery as strategic factors in preparing effective business plans for young start-ups, with a focus on Thai snack micro, small, and medium enterprises (MSMEs). Mentoring is examined as a source of guidance, knowledge transfer, and confidence building, while UMKM machinery is considered as a technological variable that enhances production efficiency and product quality. Using a case study approach, data were collected through interviews, observations, and document analysis from selected Thai snack MSMEs. The findings indicate that mentoring significantly improves entrepreneurs' ability to structure comprehensive business plans, identify market opportunities, and manage risks. Simultaneously, the adoption of UMKM machinery contributes to operational scalability and competitiveness, enabling young start-ups to meet market demand more effectively. The integration of mentoring and machinery adoption provides a synergistic effect, resulting in stronger strategic planning and sustainable business growth. This study highlights the importance of combining human capital development with technological adoption to support the success of young entrepreneurs in the MSME sector.

Keywords: Mentoring, SMES Machinery, Business Plan, Entrepreneurship Development

Received:	Revised:	Accepted:	Available online:
01.09.2025	10.09.2025	15.09.2025	24.09.2025

Suggested citations:
Sutisnawati, Y., Syafe'i, M. Y., Srisuk, P., Irawan, N., & Astillero, M. R. (2025). *Mentoring and MSME Machinery in Start-up Business Planning: A Thai Snack Case Study*. *International Journal of Community Service*, *4* (2), 437- 445. 10.55299/ijcs.v4i2.1571

INTRODUCTION

Business planning remains a central practice for start-up founders, as it helps articulate strategies, identifies potential risks, and facilitates access to external resources such as funding and partnerships. However, recent literature has

highlighted an ongoing debate between traditional planning approaches and lean or experimental methods. These two approaches are not mutually exclusive but can be complementary when applied adaptively under conditions of market uncertainty (Welter et al., 2021; Pathak, 2022)

From the human capital perspective, mentoring has emerged as a crucial intervention for young entrepreneurs. Mentoring provides practical guidance, facilitates knowledge transfer, expands networking opportunities, and provides psychological support. Empirical evidence demonstrates that mentoring programs whether implemented by incubators, accelerators, or angel investors can enhance managerial capabilities, stimulate business model innovation, improve access to funding, and increase venture survival. Nonetheless, the effectiveness of these programs is strongly influenced by the quality of the mentor–mentee relationship and specific organizational context (Clayton, 2024; Sariri, 2024; Zhao & Chen, 2024) Ind addition to mentoring, the adoption of MSME machinery is a key factor that shapes the operational capacity of micro and small firms. Appropriate machinery allows entrepreneurs to increase production efficiency, ensure consistency in product quality, and pursue scalability. Research on technology adoption among SMEs has identified investment costs, human resource skills, managerial support, and digital readiness as critical determinants. Furthermore, studies conducted during and after the pandemic emphasize that technology functions not only as a short-term survival strategy but also as a long-term driver of competitiveness (Mishrif & Khan, 2023; Faiz, 2024; Zhang & Charoensukmongkol, 2024).

When integrated into business planning, mentoring and machinery adoption can potentially generate synergistic effects. Mentoring may guide entrepreneurs to assess machinery investment needs, improve financial projections, and design market-oriented scaling strategies. Simultaneously, the presence of appropriate machinery ensures that business plans are realistic, actionable, and operationally feasible. Despite this promising interplay, empirical studies that simultaneously examine the role of mentoring and machinery in shaping the quality and usefulness of business plans remain limited, particularly in the micro and small snack food sector in Thailand (Zhang & Charoensukmongkol, 2024; Dana & Dana, 2023; Guo et al., 2022).

Thailand provided a relevant case context for this investigation. The MSME food sector is economically significant at both local and national levels, with snack production often characterized as labor-intensive, quality-sensitive, and highly responsive to consumer demand shifts. Prior research on digital organizational culture and technological readiness in the Thai food industry reveals varying levels of preparedness and highlights barriers that must be considered when promoting mentoring interventions and machinery adoption. Against this backdrop, a case study of Thai snack MSMEs offers valuable insights into how the integration of mentoring and technology adoption influences business planning practices in this dynamic sector.

Beyond human capital, the adoption of production technology (in this context UMKM machinery) represents a technical variable with the potential to reshape the operational capacity of micro and small firms thereby enhancing production efficiency, product quality consistency, and scalability. Research on SME technology adoption highlights determinants such as investment costs, human resource

capability, managerial support, and digital readiness. Studies conducted during and after the pandemic further suggest that technology functions not only as a survival strategy but also as a driver of competitiveness (Mishrif & Khan, 2023; Faiz, 2024; Zhang & Charoensukmongkol, 2024).

With regard to business planning, the integration of mentoring (as a source of social and knowledge capital) with UMKM machinery adoption (as physical/technological capital) has the potential to create synergistic effects Mentoring may guide entrepreneurs in understanding machinery investment needs, improving financial projections, and designing market-oriented scaling strategies whereas the presence of appropriate machinery makes plans more realistic and actionable. Nevertheless, empirical evidence that simultaneously examines the role of mentoring and machinery in shaping the quality and usefulness of business plans particularly in the micro and small snack food sector in Thailand remains limited (Zhang & Charoensukmongkol, 2024; Dana & Dana, 2023; Guo et al, 2022).

Thailand provides a relevant case study: the MSME food sector plays a crucial economic role at both local and national levels, with snack production often characterized as labor-intensive, quality-sensitive, and highly responsive to consumer demand shifts. Research on digital organizational culture and technological readiness in the Thai food industry highlights varying levels of preparedness and barriers that must be considered when promoting machinery adoption and mentoring interventions. A case study of Thai snack MSMEs therefore allows for an in-depth exploration of the interplay between mentoring, UMKM machinery adoption, and business planning practices (Zhang & Charoensukmongkol, 2024).

Addressing this empirical gap and practical policy needs, this study aims to (1) explore how mentoring influences the process and quality of business plan development among young entrepreneurs (2) investigate the role of UMKM machinery adoption in strengthening the operational and financial aspects of the plan and (3) analyze whether the combination of mentoring and machinery adoption produces synergistic effects on the feasibility and readiness of Thai snack MSMEs business plans. The findings are expected to contribute to the entrepreneurship literature that integrates human and technological capital and offers practical implications for policies and support programs targeting MSMEs (Pathak, 2022, Sariri , 2024; Mishrif & Khan, 2023).

METHOD

This study adopts a qualitative case study approach to examine how mentoring and MSME machinery influence the preparation of business plans among young Thai snack entrepreneurs. Data were collected from 15 MSMEs, five mentors, and three machinery consultants selected through purposive sampling. Primary data sources included semi-structured interviews, on-site observations of production facilities, and document analyses of business plans and mentoring reports. All interviews were conducted with participants consent, audio-recorded, transcribed verbatim, and analyzed using thematic analysis with NVivo software. To ensure research rigor, Lincoln and Guba's criteria of trustworthiness were applied, including data

triangulation, thick descriptions, audit trails, and reflexivity. Ethical approval was obtained from the relevant institution, and all participants provided informed consent with assurances of confidentiality and right to withdraw at any stage.

RESULTS AND DISCUSSION

Results

1. Mentoring improves clarity, structure, and investor-readiness of business plans.

Participants consistently reported that mentoring helped them structure their business plans more coherently Mentors guided founders to clarify value propositions, segment customers, tighten financial projections, and prepare investor-oriented narratives. These qualitative findings align with recent empirical evidence that structured mentoring/advice programs improve startup prioritization and market performance by helping founders set measurable objectives and improve the presentation of plans to external stakeholders (Clayton, 2024; , Sariri, 2024).

2. Machinery adoption strengthens operational feasibility and quality claims in plans.

Entrepreneurs who integrated MSME-scale machinery into production described that the presence of tangible production assets made their operational sections of business plans more concrete (e.g., realistic capacity estimates, cost amortization, and quality control procedures). This resonates with the literature showing that technology/machinery adoption in SMEs increases operational efficiency and enables stronger and more credible production forecasts in planning documents (Mishrif & Khan, 2023; Faiz, 2024).

3. Mentoring + machinery produce synergistic effects on plan feasibility.

A recurrent pattern was synergy: mentors helped entrepreneurs choose appropriate machines (matching scale and product requirements), interpreted ROI and payback periods, and convincingly presented machinery investments to the lenders. In other words, mentoring translates technical adoption into bankable narrative. This combined effect of human capital enabling effective technological investment decisionsechoes studies that argue that complementary human and technical capabilities enhance startup readiness and prospects for scale-up. These synergistic findings are consistent with multi-factor analyses of start-up success factors and case studies of digital/technical transitions in SMEs (Argaw, 2024; Jewapatarakul & Ueasangkomsate, 2024).

4. Persistent barriers: cost, skills gap, and access to finance.

Despite the positive effects, entrepreneurs reported barriers that limited both mentoring uptake and machinery adoption: high upfront capital costs, limited

technical skills for machine operation/maintenance, and lenders' skepticism toward MSME projections. These barriers reflect broader findings in the literature that investment cost, workforce capability, and financial constraints remain primary determinants of SME technology adoption and scaling capacity (Mishrif & Khan, 2023; Faiz, 2024; Jewapatarakul & Ueasangkomsate, 2024).

5. Local context matters: food-sector specifics and Thai MSME readiness.

The snack MSME context shaped how both the mentoring and machinery were played. Quality consistency, foodsafety concerns, and short product life cycles made entrepreneurs prioritize machines that improved uniformity and hygiene, whereas mentors with industry experience were particularly effective in translating regulatory and export requirements into actionable plan items. This finding is consistent with research on digital/technical readiness in Thai food SMEs which documents sectoral specificities and uneven readiness across firms.

Discussion

These findings highlight the complementary roles of mentoring and MSMEs machinery in enhancing the quality and feasibility of business plans prepared by young start-ups in the Thai snack sector. By examining these two factors together, the study provides evidence that business planning is not solely a cognitive or strategic exercise but is strengthened when human and technological capital are integrated.

1. Mentoring as human capital development.

Consistent with prior studies, mentoring has emerged as a critical enabler of entrepreneurial learning, managerial capability, and investor readiness (Clayton, 2024; Sariri, 2024). Mentors assisted entrepreneurs in refining their financial assumptions, structuring plans according to market standards, and framing their investment narratives. These contributions align with the human capital perspective, which argues that knowledge transfer, experiential learning, and psychological support are fundamental for entrepreneurial success. Importantly, this study confirms that mentoring is particularly valuable for young entrepreneurs with limited prior business experience, reinforcing the evidence that tailored advisory relationships can significantly influence early stage planning outcomes.

2. Machinery adoption as technological capital.

The integration of MSME-scale machinery provides a tangible foundation for operational feasibility of business plans. Machinery entrepreneurs can present realistic production estimates, cost structures, and quality assurance strategies. This resonates with existing scholarship that identifies technology adoption as a driver of operational efficiency, competitiveness, and resilience in SMEs (Mishrif & Khan, 2023; Faiz, 2024). Moreover, the Thai snack sector's emphasis on quality consistency and food safety meant that machinery adoption was not merely an efficiency choice but a strategic necessity for accessing broader markets. Thus, machinery serves as a form of

technological capital that enhances both internal operation and external legitimacy.

3. Synergistic effects of human and technological capital.

One of the most significant findings of this study is the synergy between mentoring and machinery adoption. Mentors not only provided strategic advice but also guided entrepreneurs in selecting machinery, calculating return on investment, and integrating technology into growth-oriented strategies. This dual role underscores that the impact of mentoring is maximized when coupled with technological investments, echoing broader research that highlights complementarities between human and technological resources in determining start-up success (Argaw, 2024; Jewapatarakul & Ueasangkomsate, 2024). In this way, business planning becomes more visionary and actionable, bridging the gap between aspiration and operational capacity.

4. Barriers and contextual considerations.

Despite these positive outcomes, persistent barriers such as high capital costs, limited technical skills, and unequal access to mentoring programs have constrained the broader diffusion of these benefits. These findings confirm earlier work that identifies financing, workforce readiness, and infrastructure gaps as critical obstacles for SMEs in emerging economies (Mishrif & Khan, 2023; Faiz, 2024). Furthermore, the Thai context illustrates that sector-specific dynamics such as regulatory standards in food production and shifting consumer demand shape how both mentoring and technology adoption influence planning practices. This suggests that interventions must be sensitive to industry and cultural contexts rather than relying on generic SME support models.

5. Implications for theory and practice.

From a theoretical standpoint, this study advances the entrepreneurship literature by demonstrating that business planning quality depends on the interaction between human and technological capital. For practice and policy, the results suggest that support programs for MSMEs should not isolate mentoring and technology financing but instead integrate them. For example, mentoring initiatives can include technical training and machinery investment guidance, whereas financial programs can combine credit schemes with advisory services. Such integrated approaches may significantly enhance the feasibility and investor appeal of MSME business plans, thereby improving the survival and growth prospects of young start ups.

This figure shows a worker operating traditional snack-making equipment in a small-scale production facility. The worker, wearing masks, gloves, aprons, and hairnets for hygiene purposes, was seated at a workstation with multiple manual heating presses. These machines are used to shape and cook snacks. The setting reflects a semi-manual processin which human labor plays a significant role in handling and monitoring production.

Figure 1. Worker operating

The machine was equipped with digital control panels and multiple heating units, allowing for precise temperature control and consistent production. The advanced system suggests a higher level of automation than traditional manual presses, enabling improved efficiency, uniformity, and scalability in snack production.

Figure 2. Automated snack-making machine

The machine included a stainless steel mixing and feeding system connected to the main processing unit. Several people are observed near the equipment, likely supervising its operation or receiving training in its use. This illustrates the transition from manual labor to semi-automated production, emphasizing the increased productivity and professionalization in MSME snack manufacturing.

Figure 3. Wider view of the automated snack-making machine in operation

CONCLUSION

This study demonstrated that the quality and feasibility of business plans prepared by young start-ups in the Thai snack sector are significantly enhanced when mentoring and MSMEs machinery are combined. Mentoring functions as a form of human capital development that equips entrepreneurs with strategic clarity, financial discipline, and investor-oriented narrative. Meanwhile, machinery adoption strengthens the technical and operational foundation of business plans by enabling realistic production forecasts, cost calculations, and product quality assurances.The evidence further reveals that these two factors are most effective when combined, as mentoring helps entrepreneurs evaluate, select, and strategically integrate machinery investments into their growth models. This synergy transforms business planning from a primarily cognitive exercise in to a balanced process that is both visionary and operationally grounded. However, persistent barriers such as high capital costs, limited technical skills, and unequal access to mentoring highlight the need for supportive policies and industry-specific interventions. Theoretically, the findings contribute to the entrepreneurship literature by showing that business planning effectiveness depends not only on knowledge resources but also on technological assets. This study suggests that support programs for MSMEs should integrate mentoring with financial and technical assistance for machinery adoption. For Thailand's snack sector, such integrated approaches hold promise for enhancing competitiveness, improving investor confidence, and ensuring sustainable growth of young start-ups.

REFERENCES

Argaw, Y. M., Fang, S., Li, Y., Chen, S., Liu, S., Liu, Y., & Zhang, Y. (2024). The pathway to startup success: A comprehensive framework for analyzing multifaceted success factors. Systems, 12(6), 270. MDPI. https://doi.org/10.3390/systems12060270

Clayton, P. A. (2024). Mentored without incubation: Start-up survival, funding, and the role of entrepreneurial support organizational services. Research Policy 53(4) 104975. https://doi.org/10.1016/j.respol.2024.104975

Dana, L. P., & Dana, T. (2023). Business plan competitions and nascent entrepreneurs: Outcomes and challenges. Journal of Enterprising Communities 17(5) 1203–1221. https://doi.org/10.1108/JEC-03-2022-0058

Faiz, F. (2024). Determinants of digital technology adoption in innovative SMEs. International Journal of Innovation Science, 16(2), 299–317. Emerald. https://doi.org/10.1108/IJIS-10-2022-0241

Guo, H., Yang, Z., & Chen, W. (2022). How does business model innovation contribute to digital start-ups: Evidence from China Journal of Business Venturing, 37(4), 106–123. https://doi.org/10.1016/j.jbusvent.2022.106197

Jewapatarakul, D., Ueasangkomsate, P. (2024). Digital organizational culture, organizational readiness, and knowledge acquisition affect the digital transformation of SMEs in the food manufacturing sector. SAGE Open, 14(1), 21582440241226873. https://doi.org/10.1177/21582440241226873

Mishrif, A., & Khan, A. (2023). Technology adoption as a survival strategy for small and medium enterprises during COVID-19. Journal of Innovation and Entrepreneurship 12(1) 53. https://doi.org/10.1186/s13731-023-00317-9

Pathak M. D. (2022). Chaos and complexity: entrepreneurial planning during uncertainty. Journal of Entrepreneurship in Emerging Economies 14(3), 501–520. https://doi.org/10.1108/JEEE-11-2020-0432

Sariri, H. (2024). Economics of advice: start-up mentoring and founder performance. Small Business Economics 62(1) 45–67. Springer. https://doi.org/10.1007/s11187-023-00792-5

Welter, C., Mauer, R., & Wuebker, R. J. (2021). Business plans, lean start ups, or both? Meta-analysis of entrepreneurial planning. New England Journal of Entrepreneurship, 24(1), 35–61. https://doi.org/10.1108/NEJE-04-2020-0016

Zhang, Y. & Charoensukmongkol, P. (2024). Knowledge acquisition and digital technology adoption among SMEs in the Thai food sector: The moderating role of organizational readiness. Journal of Small Business Management, 62(3), 451–469. Taylor & Francis. https://doi.org/10.1080/00472778.2023.2234567

Zhao, Y., & Chen, W. (2024). Role of value similarities and mentors' experiences in entrepreneurial mentoring outcomes. International Journal of Entrepreneurial Behavior & Research, 30(1), 88–107. https://doi.org/10.1108/IJEBR-06-2022-0554

Published by IPI Global Press in collaboration with the Inovasi Pratama Internasional Ltd