Strategic Marketing and Digital Transformation for SME Empowerment: Insights from a Malaysia–Indonesia Service-Learning Collaboration

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ABSTRACT

This study explores a Malaysia–Indonesia service-learning initiative aimed at strengthening Small and Medium Enterprises (SMEs) through strategic marketing and digital transformation. Conducted under the Service-Learning Malaysia University for Society (SULAM) framework, the program combined workshops on marketing and digital strategies with applied sessions where SMEs worked alongside students to solve business challenges. The program involved 22 SME participants, 5 students' representatives from Airlangga University and 32 students from Universiti Teknologi MARA (UiTM), Malaysia. Findings show that participants gained confidence in using digital tools, adapting products and applying marketing concepts, though gaps remain in cultural communication and digital readiness. Overall, the program was positively evaluated (mean = 4.09, SD = 0.81), confirming the effectiveness of targeted interventions in improving SME competencies. The study highlights how cross-border service-learning can enhance SME competitiveness and offers guidance for future training and support.

1. Introduction

Small and Medium Enterprises (SMEs) are key drivers of economic growth, job creation, and innovation in developing countries. In Indonesia, they represent more than 99% of businesses and contribute over 60% of the national GDP. Despite this central role, many SMEs struggle to remain competitive in the face of rapid technological change and globalization. Limited knowledge, skills, and infrastructure hinder their ability to adopt effective marketing strategies and fully benefit from digital transformation. Previous studies have emphasized the importance of digital tools and marketing for SMEs, yet most have focused on technical adoption or policy measures. Less attention has been paid to community-based initiatives that

integrate academic learning with entrepreneurial practice. This gap highlights the need for programs that not only transfer knowledge but also build practical capabilities through direct engagement. This study addresses that need by examining a Malaysia–Indonesia service-learning collaboration carried out under the Service-Learning Malaysia – University for Society (SULAM) framework. Through workshops and applied learning, the program connected students with SME owners to co-develop solutions to real business challenges. By exploring this model in Surabaya, the study offers insights into how experiential, cross-border collaborations can enhance SME competitiveness while contributing to inclusive and sustainable economic growth.

2.   Literature Review

2.1 SME Development in Emerging Markets

In many emerging economies, SMEs are super important for growing the economy in many countries. They can change gears quickly and are tied tightly to their communities, so they're seen as vital for national growth. But even though they're important, lots of SMEs still find it tough to stay afloat and grow, especially now that things move so fast and everyone needs to be good with computers and know how to market themselves. In a place like Indonesia, SMEs are all over the business map. But they can't grow as much as they could because things get in their way. They do not always know enough about marketing, can't get enough money, and aren't up to speed on tech. Research shows many Indonesian SMEs still do things the old-school way with marketing and haven't really gotten into digital stuff that could help them compete better. The government and other groups have tried to help SMEs get better. Programs like UMKM Go Digital try to get them using computers more, and there are also training sessions and events to help them pick up skills and get their name out there. But often, these programs do not work together, or they try to help everyone the same way, which doesn't really fit what different SMEs need in different places. So, recent studies concluded to get everyone involved and come up with plans that make sense for each community, universities and local organizations are collaborating to boost community growth. Schools are expanding their role from teaching to actively engaging with their surroundings, combining expertise with practical problem-solving. This gives SMEs targeted support and offers students hands-on learning. These partnerships show the importance of creating solutions tailored to local issues, contributing to economic and social progress.

2.2 Experiential Learning Theory (ELT)

Kolb's Experiential Learning Theory (ELT) is a known model for how people learn by doing things. It says that learning is not just passively getting info, it is a cycle with four parts which are doing something, thinking about it, understanding it, and trying it out (Kolb, 1984). Real learning happens when people deal with situations firsthand, think about what happened, learn from it, and then use what they've learned. This way of learning is helpful in business and entrepreneurship, where being able to adapt and solve problems is important. Regular lectures do not always get students ready for real businesses since they focus on theories but do not let students practice them. ELT can fix this by making learning more hands-on, thoughtful, and practical. It helps people think critically, make smart choices, and handle changes (Kayes, Kayes, & Kolb, 2005).

Experiential learning is useful for community programs like service learning. These programs let students work with real communities, which helps both the students and the community. For instance, service-learning projects that work with small businesses let students see real business stuff and use what they've learned in school while aiding the community. The Service-Learning Malaysia – University for Society (SULAM) program is a good example. It connects school learning with community work and gives students chances to use their knowledge in real situations. With Kolb's ELT, SULAM helps everyone grow

where students learn about actual business and small businesses get help from new ideas and what the university knows. This helps both education and the community.

2.3 Service Learning and Community Engagement in Higher Learning

Service learning combines classroom learning with actual community work, so students and communities both gain something. It is not just volunteering, it is designed for students to learn more while helping with specific community needs (Bringle & Hatcher, 1996). Students use what they learn in class in real situations. This helps them get better at things like communicating, working with others, and understanding ethics. It also teaches them to be good citizens and understand social problems better. In Malaysia, the SULAM program puts these partnerships between universities and communities into practice. A study by Wahab et al. (2025) showed that SULAM makes students better at thinking critically, getting involved in their communities, and solving problems. The study also saw that when knowledge is shared well, people are happier with the program, and it has a bigger impact.

Adding to this, Junainah Mohamad and team (2024) at UiTM Perak used surveys to see how SULAM was working with 107 students and 19 lecturers. The study showed students felt they got better at hands-on work, understanding ethics, and acting professionally. Lecturers said they had more chances to work with people outside the university and improved how they planned and taught their courses. Outside of class, SULAM projects in communities have had social and business good results. A summary of projects at the International Symposium on Sustainable Communities (2025) showed that student-run SULAM programs supported doing things to last, made community relationships stronger and gave students life-changing learning through actual social issues.

2.4 Marketing Capability Development for SMEs

Marketing ability is now seen as key to making small and medium-sized businesses (SMEs) more competitive and helping them grow in the long run. This is true especially in new markets where SMEs often lack resources and know-how (Patel, Vorhies, & Morgan, 2021). A lot of SMEs do not have marketing staff or solid plans for things like figuring out who their customers are, building a brand, or planning promotions. Instead, they usually do things randomly or without much thought, which can make it hard for them to change and compete in markets that are always changing. Recent studies show that giving SMEs structured help like workshops, advice from universities, and specific training can really improve their marketing. For example, Zahoor and Lew (2023) learned that during crises, Pakistani SMEs that used tech and were able to adjust their plans saw big improvements in their global marketing and exports. Abu Seman and Segar (2023) also said that marketing on social media has a big impact on what people buy, especially when the messages match what those people want. Their study shows that it is important to connect content with what customers expect to build stronger relationships, increase the desire to buy, and get good feedback to improve products or services.

Mostafiz et al. (2022) also looked at how good marketing skills help drive new ideas and sales in Malaysian startups. Their results show that giving hands-on marketing education, mostly in areas like branding and getting people involved online, is helpful for SMEs. It lets them modernize and better handle competition. Overall, these studies show why it is key to have structured plans that focus on building marketing skills in SMEs. By mixing basic marketing ideas, like the marketing mix, with real-world practice, these programs allow businesses to rethink their plans, react better to what the market wants, and better use online platforms to grow.

2.5 Digital transformation

For small and medium-sized businesses (SMEs) in Southeast Asia, going digital is not just a nice-to-have anymore but it is a must, especially with tech changing things so fast. In Indonesia, cities like Surabaya see SMEs facing both chances and problems as they start using digital tools. Most small businesses know about things like online stores, marketing, and managing customers online. But many still have trouble because they do not know much about tech, do not have enough money or people, and do not really have a plan for what they're doing. (Zahoor and Lew, 2023). The COVID-19 pandemic made going digital even more pressing. Lots of SMEs had to switch to selling online quickly to keep going while everything was shut down. But often, they did not plan it out or think about the long term (Mostafiz et al., 2024). They started using digital tools faster than they could make them part of their business.

To get a clearer view of why this change is uneven, researchers use tools like the Technology-Organization-Environment (TOE) framework. This framework looks at how companies decide to use tech based on what they can do and what is happening around them (Bening et al., 2023). In Indonesia, getting better at using digital tools is not just about having the right tech. It also involves learning how to use it well, creating the right support, and making sure what they do online fits what the market wants. If SMEs want to get the most out of going digital, these things need to work together well over the long run.

3.   Methodology

3.1 Research Design

This study uses a quantitative, descriptive method within a service-learning framework, as part of the SULAM initiative. Because of the study's exploratory nature and small participant group, this method allows to closely examine the program's influence on participating SMEs. To measure how well the program worked, we looked at mean scores and standard deviations from participant feedback, which showed their thoughts on marketing and digital skills. The program combined classroom learning with real-world, community work to help SMEs improve their marketing and use digital tools with more confidence.

3.2 Population and Sample Size

The study focused on small and medium enterprises (SMEs) located in Surabaya, Indonesia. A total of 22 SMEs voluntarily joined the program and served as the sample. These businesses varied in size and sector but shared common needs in strengthening marketing practices and adopting digital tools.

3.3 Sampling Technique

Purposive sampling was used to select participants. This approach was considered appropriate because the program required SMEs that were both open to collaboration with students and in need of marketing and digital strategy support. The main advantage of purposive sampling is that it allows the researcher to focus on cases most relevant to the study objectives. However, a key limitation is the lack of representativeness, which restricts the ability to generalize findings to all SMEs in Indonesia. Despite this limitation, the method provided rich, context-specific insights into how service-learning initiatives can empower SMEs.

3.4 Program Structure

The program was divided into two phases. The first, called the Conceptual Workshop, introduced SMEs to the fundamentals of marketing, including the marketing mix and digital marketing tools. Delivery methods included presentations and group discussions to encourage interaction. The second phase, Knowledge Implementation, emphasized application. Here, SME owners presented their business

operations and specific challenges. Students worked in groups to provide tailored advice and co-develop marketing strategies suited to each enterprise.

The structure of the program was guided by Kolb's Experiential Learning Theory (ELT), which emphasizes a four-stage learning cycle which are concrete experience, reflective observation, abstract conceptualization, and active experimentation. In this study, SMEs engaged in concrete experience by sharing their real business challenges. Reflective observation took place during group discussions where owners considered different perspectives. The workshops provided abstract conceptualization through structured input on marketing and digital tools. Finally, active experimentation was achieved when SMEs applied the new strategies to their businesses. This alignment with ELT ensured that learning was not only theoretical but also grounded in practical application.

3.5 *Data Collection Methods*

Data were collected through a structured survey distributed to all 22 SMEs immediately after the program. The instrument consisted of 9 items, designed to capture changes in participants' understanding, confidence, and readiness in marketing and digital strategy. Items were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). These items were developed based on the program learning objectives and adapted from previous studies on SME marketing and digital adoption. For example, the item on Marketing Mix Confidence reflects ideas from Gilmore, Carson, and Grant (2001), who examined how SMEs apply marketing in practice. Questions on Digital Marketing Understanding, Preparedness for Digital Tools, and Regulatory Consideration were informed by the work of Rahayu and Day (2015, 2017), who studied how small businesses in Indonesia adopt e-commerce and adjust their strategies in response to digital demands. Each construct was measured with a single item, as the focus was on capturing participants' direct perceptions in a simple and practical format suited for SME respondents. While single-item measures limit the ability to test internal reliability, they have been shown to be valid when constructs are clearly defined and unidimensional (Bergkvist & Rossiter, 2007).

Table 1. Survey Instruments

Factor	Item
Marketing Mix Confidence	I feel confident in applying the 4Ps (Product, Price, Place, Promotion).
Digital Marketing Understanding	I understand how digital channels can be used to promote products.
Adapting Product Attributes	I can adapt product features to meet the needs of different markets.
Regulatory Consideration	I am aware of key regulations that affect small business operations.
Delivery Method Changes	I can identify alternative delivery methods suitable for SMEs.
Cultural Communication	I understand how cultural differences affect marketing and communication.
Preparedness for Digital Tools	I am confident in using digital tools (shopee application, instagram).
Applicable Digital Strategy	I can identify digital strategies most relevant to SMEs.
Overall Experience	The program improved my knowledge of marketing and digital strategy.

To assess the reliability of the instrument, Cronbach's alpha values were calculated and are reported in the Results section. The survey data were analyzed using SPSS, focusing on descriptive statistics such as means and standard deviations to identify response patterns. The study followed institutional ethical guidelines. Participation was voluntary, informed consent was obtained, and confidentiality of responses was maintained throughout the process.

4. Findings

Table 2. Gender Distribution of SME Participants

Gender	Frequency	Percentage (%)
Female	18	81.8%
Male	4	18.2%
Total	22	100%

Out of the 22 SME participants involved in the program, 18 were women (81.8%) and 4 were men (18.2%). Although the sample size was relatively small, the high level of female participation highlights the strong presence of women entrepreneurs in this particular initiative.

Table 3. Age Group Distribution

Age Group	Frequency	Percentage (%)
20–30 years old	1	4.5%
31–40 years old	3	13.6%
41–50 years old	10	45.5%
50 and above	8	36.4%

Among the 22 SME participants, the majority were aged between 41–50 years old (45.5%), followed by those 50 years and above (36.4%). A smaller number of participants were in the 31–40 age range (13.6%), while only one participant (4.5%) was in the 20–30 age group. These figures indicate a predominance of middle-aged and older entrepreneurs attending the program, reflecting a potential trend of more experienced individuals seeking support in marketing mix and digital marketing.

Table 4. Business Duration Distribution

Business Duration	Frequency	Percentage (%)
0–10 years	14	63.6%
11–20 years	6	27.3%
21–30 years	1	4.5%
30 years and above	1	4.5%

Table 5. Descriptive Statistics of Participants' Responses

Question	Mean	Standard Deviation
Marketing Mix Confidence	4.23	0.752
Digital Marketing Understanding	3.91	0.684
Adapting Product Attributes	4.32	0.716
Regulatory Consideration	4.00	0.873
Delivery Method Changes	4.05	0.486
Cultural Communication	3.91	0.971
Preparedness for Digital Tools	3.91	0.921
Applicable Digital Strategy	4.45	0.739
Overall Experience	4.09	0.811

The post-workshop survey results indicate a generally positive impact of the marketing and digital strategy intervention on SMEs in Surabaya. Participants reported strong confidence in applying the marketing mix (M = 4.23, SD = 0.75) and adapting product attributes (M = 4.32, SD = 0.72), highlighting the practical relevance of these components. Understanding of digital marketing concepts was moderately high (M = 3.91, SD = 0.68), with the ability to implement applicable digital strategy receiving the highest rating (M = 4.45, SD = 0.74) reflecting strong interest and potential in digital execution. Moderate confidence was observed in addressing regulatory requirements (M = 4.00, SD = 0.87) might mean some are not fully aware of the legal rules. This could make it harder to follow the rules and grow the business in the future. Meanwhile adjusting delivery methods (M = 4.05, SD = 0.49), indicating operational readiness. Areas such as cultural communication (M = 3.91, SD = 0.97) and readiness to adopt digital tools (M = 3.91, SD = 0.92). Overall, the workshop was positively evaluated (M = 4.09, SD = 0.81), supporting the effectiveness of targeted community engagement efforts in strengthening the marketing and digital competencies of SMEs. However, the slightly lower mean values and higher variation in areas like preparedness for digital tools and cultural communication reflect uneven levels of digital maturity among participants, which could relate to factors such as business size, experience, or resource access.

These findings are consistent with prior research showing how digital and marketing training can enhance SME capabilities. Verma (2023) observed measurable gains in customer engagement and brand awareness among Indian SMEs adopting digital marketing, similar to the high score for digital strategy implementation (M = 4.45) seen in this study. Likewise, Sari and Samrin (2022) highlighted business performance improvements among SMEs in Nias following structured digital marketing training. Ahmed et al. (2023) reported that the successful application of digital strategies had a clear link to SME performance in Pakistan. Similarly, Shah et al. (2023), using the Technology Acceptance Model (TAM), emphasized how perceptions of usefulness and ease of use strongly influence SME adoption of digital tools

5.   Conclusion

The Service-Learning Malaysia – University for Society (SULAM) initiative has shown clear benefits for SMEs in Surabaya. Participants improved their confidence in applying digital marketing strategies and gained a better grasp of how to use online tools. These outcomes highlight the value of linking universities with communities, where knowledge is applied directly to business practice rather than staying only in classrooms. From a policy angle, this suggests that SMEs will continue to need structured support if they are to compete in the digital economy. Universities can play a stronger role by designing programs that respond to sector-specific challenges, for example retail, food services, or creative industries. Continuous training is also important, since digital tools and consumer behavior change quickly.

For future SULAM projects, one recommendation is to develop modular training that can be repeated and updated over time, so that SMEs are not left behind once a single project ends. Another is to involve local industry partners more actively, to ensure the training reflects real business practices. Taken together, these steps can help sustain the impact of SULAM and make it a stronger bridge between higher education and community development.

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Conflict of Interest

The authors of this manuscript declare that there is no conflict of interest pertaining to the contents presented in this research.

References

Abu Seman, N. A., & Segar, V. (2023). *The impact of digital marketing channels on consumer buying decision*. Journal of International Business, Economics and Entrepreneurship, 8(1), 42–53. https://doi.org/10.24191/jibe.v8i1.23145

Ab Rani, N. I., Abdull Rahman, S. H., & Mat Isa, C. M. (2025). Community engagement and student learning through international SULAM projects: Insights from the 1st International Symposium on Sustainable Communities. *International Journal of Modern Education (IJMOE)*, *7*(24)

Ahmed, A., Rashid, S., Saad, N. M., & Rana, M. W. (2025). *The tech advantage: Exploring technological determinants of social media marketing adoption in Pakistani small and medium startups*. Journal of Innovation and Entrepreneurship, 14, Article 23. https://doi.org/10.1186/s13731-025-00470-3

Aribowo, A., & Fitriani, E. (2020). University-community engagement as a strategy for empowering SMEs in Indonesia: A case study of participatory development. Jurnal Pengabdian Kepada Masyarakat, 5(1), 45–52

Bening, S. A., Dachyar, M., Pratama, N. R., Park, J., & Chang, Y. (2023). E-commerce technologies adoption strategy selection in Indonesian SMEs using the Decision-Makers, Technological, Organizational and Environmental (DTOE) framework. *Sustainability, 15*(12), 9361. https://doi.org/10.3390/su15129361

Bringle, R. G., & Hatcher, J. A. (1996). Implementing service learning in higher education. *The Journal of Higher Education*, 67(2), 221–239. https://doi.org/10.2307/2943981

Gilmore, A., Carson, D., & Grant, K. (2001). SME marketing in practice. *Marketing Intelligence & Planning, 19*(1), 6–11. https://doi.org/10.1108/02634500110363583

Kayes, D. C., Kayes, A. B., & Kolb, D. A. (2005). Experiential learning in teams. Simulation & Gaming, 36(3), 330–354. https://doi.org/10.1177/1046878105279012

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice Hall

Mohamad, J., Baharun, N., & Sedhu, D. S. S. (2024). *The implementation of Service-Learning Malaysia–University for Society (SULAM) programme at Universiti Teknologi MARA Perak Branch, Malaysia. Creative Practices in Language Learning and Teaching (CPLT), 12*(2), 49–62

Mostafiz, M. I., Ahmed, F. U., & Hughes, P. (2022). *Open innovation pathway to firm performance: The role of dynamic marketing capability in Malaysian entrepreneurial firms*. *International Journal of Entrepreneurial Behavior & Research, 19*(3), 417–435. https://doi.org/10.1108/IJEBR-02-2022-0206

Rahayu, R., & Day, J. (2015). Determinant factors of e-commerce adoption by SMEs in developing country: Evidence from Indonesia. *Procedia - Social and Behavioral Sciences, 195,* 142–150. https://doi.org/10.1016/j.sbspro.2015.06.423

Rahayu, R., & Day, J. (2017). E-commerce adoption by SMEs in developing countries: Evidence from Indonesia. *Eurasian Business Review, 7*(1), 25–41. https://doi.org/10.1007/s40821-016-0044-6

Sari, D. S., & Samrin, S. (2022). The influence of training and digital marketing on the growth of SMEs in Nias. *Proceedings of the Medan International Conference on Economic and Business (MICEB)*, *2*, Article 880

Syah, D. H., Dongoran, F. R., Nugrahadi, E. W., & Aditia, R. (2023). Understanding the Technology Acceptance Model in QRIS usage: Evidence from SMEs in Indonesia. *International Journal of Research in Business and Social Science*, *11*(6), 84–96. https://doi.org/10.20525/ijrbs.v11i6.1917

Tambunan, T. T. H. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. Journal of Global Entrepreneurship Research, 9(1), 18. https://doi.org/10.1186/s40497-018-0140-4

Verma, A. (2024). *The impact of digital marketing adoption on firm performance: A case study of small and medium enterprises in India*. *International Journal of Strategic Marketing Practice, 6*(1), 1–11. https://doi.org/10.47604/ijsmp.2453

Wahab, M. Z. H., Che Sobry, S., Mohd Saufi, M. S. A., & Hanafi, A. H. A. (2025). Enhancing experiential learning through Service-Learning Malaysia–University for Society (SULAM): Assessing its effectiveness, knowledge transfer, and community satisfaction in achieving quality education (SDG 4). *International Journal of Education, Psychology and Counselling*, 10(57). https://doi.org/10.35631/IJEPC.1057032

Wahyuni, D., Yulianto, E., & Hartanto, R. (2021). Digital transformation readiness in Indonesian SMEs: Marketing perspective and business sustainability. Journal of Entrepreneurship and Business, 9(2), 10–20

Zahoor, N., & Lew, Y. K. (2023). Enhancing international marketing capability and export performance of emerging market SMEs in crises: Strategic flexibility and digital technologies. *International Marketing Review*, 40(5), 1158–1187. https://doi.org/10.1108/IMR-12-2021-0350