

Bridging the Digital Marketing Literacy Gap: Capacity Building for Rural MSMEs in Moncongloe, Indonesia

Asril¹, Iklil Hidayah^{2,*}

¹ Universitas Muslim Indonesia, Makassar, Indonesia

² Universitas Hasanuddin, Makassar, Indonesia

* Corresponding author: Iklil Hidayah, hidayahi23a@student.unhas.ac.id

ABSTRACT

Micro, small and medium enterprises (MSMEs) in peri-urban villages often hold competitive products yet remain invisible to the urban markets next door, because their marketing still travels by word of mouth. This community engagement programme addressed that gap among twenty MSMEs in Moncongloe District, Maros Regency, South Sulawesi, Indonesia. The purpose was to raise digital marketing literacy and managerial capability to a level the partners could sustain without further assistance. The programme followed a participatory action approach in four stages: a door-to-door field assessment of all twenty enterprises, an internal focus group discussion that converted the assessment into a syllabus, a one-day workshop delivered by two university lecturers around a seven-step digital marketing campaign framework, and post-workshop sustainability support consisting of a printed self-study module and two on-site mentoring visits. Capacity was measured with an identical pre-test and post-test instrument built on the Technology Acceptance Model and covering five competencies. Aggregate digital marketing literacy rose from 19 per cent to 92 per cent, and the share of partners reaching comprehensive mastery rose from 5 per cent to 85 per cent, with the sharpest gain in WhatsApp Business and hashtag optimisation, from 0 to 95 per cent. The value of the programme lies in pairing measured diagnosis with hands-on demonstration, which dismantled the perceived difficulty of the tools before any technical instruction began.

Keywords: digital marketing literacy; MSME empowerment; community engagement; technology acceptance; rural entrepreneurship

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1. Introduction

Micro, small and medium enterprises (MSMEs) remain the structural backbone of the Indonesian economy and have repeatedly absorbed macroeconomic shocks that larger firms could not. Moncongloe District occupies a particularly favourable position. It borders the city of Makassar directly, which in principle makes it a buffer zone able to connect rural production with metropolitan demand. That geographic advantage, however, has not been matched by the level of literacy, penetration and adoption of modern marketing technology among the enterprises operating there.

Field observation conducted before this programme found that most MSMEs in Moncongloe still relied on conventional marketing: word of mouth and offline transactions. The consequences are systemic rather than incidental. Market reach is confined to a narrow geographic radius, promotional spending is inefficient because it cannot be targeted, and owners have no means of observing or analysing consumer behaviour. Growth stalls, and the middle-income urban segment with higher purchasing power stays out of reach. The international evidence points the same way. Taiminen and Karjaluo (2015) found that small firms use only a fraction of the digital channels

available to them and rarely exploit the relational potential of those channels, while Chatterjee and Kumar Kar (2020) showed that social media marketing raises small-firm performance primarily when owners perceive it as useful and easy to operate rather than when the technology is simply present.

The deeper obstacle is not access to devices. Van Deursen and van Dijk (2019) demonstrated that the first-level digital divide has shifted from physical access to the quality of access and the skills that make access productive, which is precisely the pattern observed in Moncongloe. Owners possess smartphones and social media accounts, yet they are present in digital space without performing in it. This study refers to that condition as the optimisation paradox: a business that is digitally visible but commercially inert because no literacy strategy underpins the presence. Human-resource constraints, low digital literacy and the simple scarcity of time during daily production combine to produce a belief that marketing technology is complicated and expensive, and that belief hardens into quiet resistance to innovation. Eller et al. (2020) identified employee skills and managerial attention as the dominant antecedents of small-enterprise digitalisation, and Anatan and Nur (2023) reported that limited marketing capability and weak business management are among the principal barriers to digital readiness among Indonesian MSMEs, concluding that university-based knowledge transfer is a viable route to addressing them.

Read through the Technology Acceptance Model (Davis, 1989), this resistance is legible rather than mysterious. Adoption is governed by perceived ease of use and perceived usefulness, and both were depressed in the target community: the tools looked like specialist equipment, and no participant had yet experienced a revenue increase attributable to a digital campaign. The model's later extensions, which add social influence and facilitating conditions to the account (Venkatesh & Davis, 2000; Venkatesh et al., 2003), suggest that an intervention which changes perception through direct demonstration should move adoption faster than one that transmits concepts alone. Digital capability also carries a competitive payoff that justifies the effort (Cenamor et al., 2019), and it has been shown to widen market access for small firms that had previously been confined to local trade (Pergelova et al., 2019).

A structured, measured and problem-based community engagement programme is therefore a reasonable instrument for this situation. Academic facilitators are needed to deconstruct the complexity of digital marketing into practical modules that can be applied immediately, and at the same time to dismantle the psychological barrier that surrounds the technology. The literature on community development is explicit that such work succeeds when it is organised around solidarity and agency rather than delivery (Bhattacharyya, 2004), and that the knowledge of the community itself must come first (Chambers, 2013; Freire, 2000). The transformation path open to any one firm also depends on the digital maturity it already has and on the capability of its owner, so an intervention has to meet partners where they stand rather than where a model places them (Priyono et al., 2020). Comparable Indonesian programmes have reported encouraging short-term gains from branding and digital marketing training (Silfiani et al., 2026), but few report a measured baseline, and fewer still follow participants after the training day.

This programme was designed to close that reporting gap as well as the literacy gap. Its objective was to accelerate digital marketing literacy and catalyse the managerial capability of MSME owners in Moncongloe District, so that business operation shifts from conventional production routine towards a commercial entity able to compete in digital markets. Three specific aims followed: to establish a comprehensive understanding of basic digital marketing concepts; to build the technical skill to produce visual and textual promotional assets; and to optimise the digital

infrastructure participants already owned, through the features of WhatsApp Business and through hashtag management on social media.

2. Method of Implementation

The programme was carried out in Moncongloe District, Maros Regency, South Sulawesi, Indonesia, by an academic community engagement team over a single programme cycle. It adopted a participatory action research approach (Baum et al., 2006; Israel et al., 1998), in which the partners were treated as the source of the problem definition rather than as recipients of a predetermined curriculum. Four stages followed in sequence: field assessment, syllabus formulation, workshop delivery, and post-workshop sustainability support.

2.1. Participants and selection

Twenty MSMEs operating in Moncongloe District took part. They were selected because they shared the characteristic the programme was designed to address: an established product with demonstrable local demand, combined with a marketing practice that was still entirely conventional. The group covered processed culinary products and local handicrafts. All twenty enterprises were visited individually before the programme began, and all twenty attended the workshop, so the participant set was identical at assessment, intervention and evaluation.

2.2. Stage one: door-to-door field assessment

The first stage was a field assessment. The team visited the home and production site of each of the twenty enterprises in turn. Door-to-door observation was chosen deliberately in order to remove the bureaucratic and psychological distance between an academic team and the community, and to let the team record production infrastructure, storage capacity and the ergonomics of the working space as they actually were. The same visit was used to coordinate with local stakeholders. Qualitative data gathered during the assessment confirmed the team's initial reading: most micro-enterprises in the district were locked into a highly conventional trade chain, with no modern inventory record, no representative product catalogue and no digital promotion strategy whatsoever. The assessment established that the binding constraint on business scale was not intrinsic product quality but the distribution of marketing information, and it ensured that the curriculum designed afterwards would be bottom-up rather than top-down.

Table 1. Needs analysis derived from the field assessment of twenty MSMEs in Moncongloe District

Gap area	Assessment finding	Education target
Product visuals	Low-resolution photographs, poor lighting, improvised packaging and no consistent product presentation.	Aesthetic photography using natural light, emphasis on texture and detail, and a coherent visual identity for the product.
Copywriting skill	Rigid promotional language, minimal descriptive information and no persuasive structure.	Narrative that carries emotion, states a unique selling proposition and closes with a clear call to action.
Business feature optimisation	Personal social media accounts mixed with business use, and business features left unused.	Integrated use of platform business features, automated replies, digital catalogue and structured hashtag management.

Source: Field assessment of twenty MSMEs, Moncongloe District, 2026.

2.3. Stage two: focus group discussion and instrument design

The team then held an internal focus group discussion to consolidate and interpret the assessment data. The discussion synthesised the observations into an adaptive and targeted digital marketing syllabus capable of bridging theory and the reality of a conventional market, and it mapped the level of psychological resistance the team expected to meet, so that the communication approach used during the workshop could be made more inclusive and empathetic.

The same session produced the evaluation instrument. A baseline measurement design using an identical pre-test and post-test was adopted, and each item was constructed on the principles of the Technology Acceptance Model (Davis, 1989). The instrument was not written to test theoretical recall. It was designed to evaluate perceived ease of use, perceived usefulness and behavioural intention towards the adoption of digital marketing technology. Five competency dimensions were measured: basic digital marketing concepts; social media use for promotion; product photography and copywriting; WhatsApp Business and hashtag optimisation; and target-market understanding and data evaluation. The response scale was modified for inclusivity so that adult participants without an academic background could answer it without assistance.

2.4. Stage three: workshop delivery

The intervention took the form of a one-day Digital Marketing workshop attended by all twenty partner enterprises. The agenda was constructed in three continuous phases so that knowledge transfer could be evaluated objectively: baseline cognitive measurement through the pre-test, an interactive education session, and a closing measurement through the post-test.

The pre-test was administered simultaneously to all participants immediately before the material was presented, which locked the starting point of competence without information bias. The education session was facilitated directly by two university lecturers with relevant subject expertise, so that the transfer of knowledge carried both academic justification and operational relevance. The session was organised around a module entitled “Seven Steps to an Effective Digital Marketing Campaign”, which breaks a campaign down in sequence from content planning through creative asset production to social media tactics and digital visibility. Table 2 sets out how each step was translated into workshop practice. The post-test, identical to the pre-test, was distributed once the presentation and the interactive discussion had finished.

Table 2. The seven-step campaign framework and its application during the workshop

Step	Application in the workshop
1. Setting the objective	Determining the orientation of a promotion: introducing a new brand, increasing interaction, or driving direct sales.
2. Mapping the target market	Profiling prospective buyers by age, purchasing power and consumption habit.
3. Selecting relevant platforms	Concentrating effort on the platforms the target buyers actually use, rather than on all platforms at once.
4. Improving visual quality	Hands-on product styling with simple properties, use of natural light and basic editing on a mobile phone.
5. Constructing copywriting	Practice in writing three-layer text: hook, product value, and call to action.
6. Optimising hashtags	Use of specific local tags, for example #UMKMMaros and #KulinerMoncongloe, in place of generic tags.

Step	Application in the workshop
7. Evaluating data	Reading simple platform statistics to judge which content performed and why.

Source: Workshop curriculum, adapted by the facilitators from the “Seven Steps to an Effective Digital Marketing Campaign” module, 2026.

2.5. Stage four: sustainability support

Two actions followed the workshop. First, the team designed and printed a guidance module entitled “Optimising Digital Marketing” as an independent reference for the partners; twenty-five copies were produced and distributed. Second, the team returned to the field for two scheduled mentoring visits, providing on-site technical assistance while participants applied the material at their own business premises.



Figure 1. Programme implementation: (a) door-to-door field assessment with a participating MSME; and (b) MSME owners during the digital marketing workshop

Source: Programme documentation, 2026.

2.6. Indicators, analysis and ethical considerations

Programme success was judged against four indicators agreed before implementation: full participation of the twenty target enterprises; a measurable increase in aggregate digital marketing literacy between pre-test and post-test; an increase in the share of partners reaching comprehensive mastery, defined as the ability to operate the fundamentals of digital marketing independently; and the distribution of the guidance module together with completion of the two follow-up visits. Pre-test and post-test results were analysed descriptively as the percentage of participants demonstrating each competency, and the two measurements were compared directly by indicator and in aggregate. Qualitative field notes from the assessment, the workshop and the follow-up visits were used to interpret the quantitative movement.

The programme was conducted under institutional authorisation and was coordinated in advance with local stakeholders in Moncongloe District during the field assessment. Participation was voluntary and participants were informed of the purpose of the activity and of the evaluation instrument before the pre-test was administered. Test results are reported only in aggregate, and no individual participant, household or enterprise is identified by name.

3. Results

3.1. Field assessment and syllabus formulation

The exploratory stage produced a clear qualitative finding. The narrative of stagnant turnover offered by the partners bore no relation to any decline in intrinsic product quality. The processed culinary products and local handicrafts observed during the visits were competitive on their merits, but that advantage disappeared inside an obsolete marketing chain. In conversation the

owners described themselves as isolated from a shift in urban consumer behaviour towards transacting through digital platforms. The three gap areas in Table 1 were adopted unanimously by the team as the framework for the syllabus, and the focus group discussion additionally produced a communication strategy calibrated to the resistance the field notes had recorded.

3.2. Baseline condition

The pre-test, administered immediately before the presentation, returned a baseline that was low across every dimension. Aggregate digital marketing literacy among the twenty participants stood at 19 per cent, and the proportion of enterprises that could be classified as having comprehensive mastery was 5 per cent. Two of the five competencies registered at zero: no participant was using the business features of WhatsApp or managing hashtags, and none was able to describe a target market or read platform data. Figure 2 shows the position on each competency before and after the intervention.

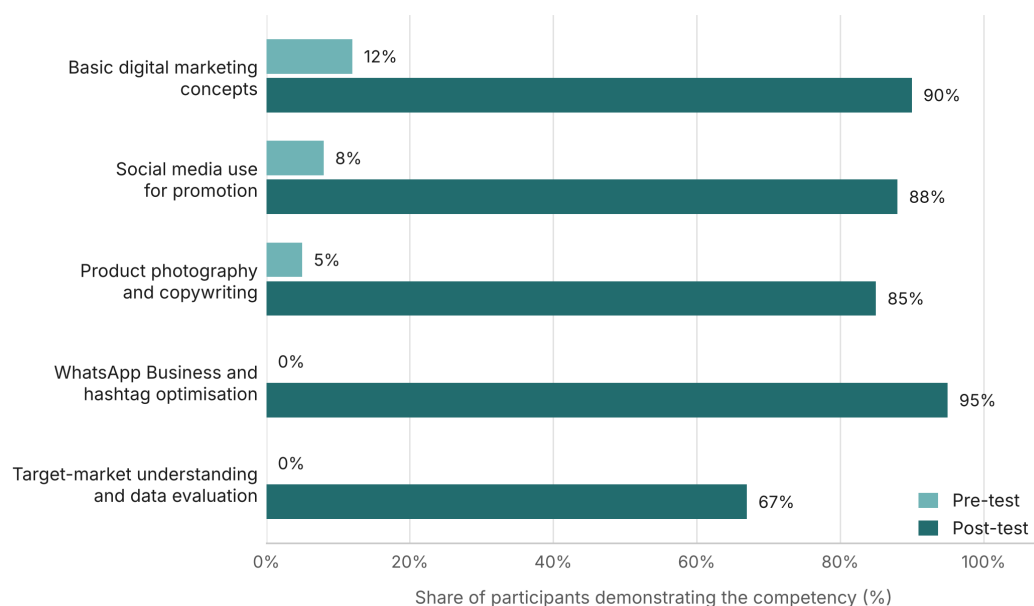


Figure 2. Share of participants demonstrating each competency before and after the intervention (n = 20)

Source: Pre-test and post-test records. *Notes:* Values are the percentage of the twenty participating enterprises demonstrating each competency, 2026.

3.3. Workshop delivery

The workshop ran as planned, with all twenty enterprises present for the full day. Facilitation by the two lecturers proved decisive in dissolving the initial resistance. The interactive simulations in steps four and five of the framework, in which participants restyled and rephotographed their own products during the session, broke the perception that the work required specialist equipment. Participants revised the digital presentation of their products under direct supervision, and the session shifted from a lecture into a working clinic.

3.4. Capacity gain

The post-test recorded a substantial and even increase across all five dimensions. Aggregate digital marketing literacy moved from 19 per cent to 92 per cent, and the share of participants reaching comprehensive mastery moved from 5 per cent to 85 per cent. The largest single movement was in WhatsApp Business and hashtag optimisation, which rose from 0 to 95 per cent.

Basic concepts reached 90 per cent, social media use for promotion 88 per cent, and product photography and copywriting 85 per cent. Target-market understanding and data evaluation improved from 0 to 67 per cent, the lowest endpoint of the five and the only competency that did not reach the 80 per cent threshold the team had set.

3.5. Outputs, sustainability and constraints

Twenty-five copies of the guidance module “Optimising Digital Marketing” were printed and distributed at the close of the workshop. The module restates the seven-step campaign guide, supplies copywriting templates, explains how to identify a target market and sets out the technical steps for configuring a business account, so that the material stays available to owners whose production routine leaves little time for revision. Two follow-up visits were then completed, which let the team observe how far the material had been applied and resolve technical difficulties encountered in practice. Table 3 summarises attainment against the indicators.

Table 3. Attainment against the programme indicators agreed before implementation

Indicator	Baseline	Result	Target	Attained
Participation of target enterprises	–	20 of 20	20	Yes
Aggregate digital marketing literacy	19%	92%	≥ 70%	Yes
Partners reaching comprehensive mastery	5%	85%	≥ 70%	Yes
Guidance modules printed and distributed	0	25 copies	≥ 20	Yes
Post-workshop on-site mentoring visits	0	2 visits	2	Yes
Target-market understanding and data evaluation	0%	67%	≥ 80%	Partly

Source: Programme records and pre-test and post-test results. *Notes:* “Attained” indicates whether the target set before implementation was reached, 2026.

Two constraints were recorded during implementation. The first was the time available to participants: production obligations meant that the intervention had to be compressed into a single day, which limited the depth possible on the analytical competencies. The second was the uneven baseline within the group, since participants ranged widely in age and in prior familiarity with smartphone applications, and the facilitators had to spend part of the session equalising that starting point before technical instruction could proceed.

4. Discussion

The results indicate that the binding constraint in Moncongloe was perceptual rather than material, and that it responded quickly once addressed directly. The partners already owned the devices and the accounts; what they lacked was the belief that the tools were usable by someone like them, and the skill to convert presence into commercial activity. This is the pattern van Deursen and van Dijk (2019) describe when they argue that the first-level divide has migrated from access to the quality of access, and it explains why an intervention built on demonstration rather than exposition produced movement within a single day.

Read through the Technology Acceptance Model, the distribution of the gains is informative. The movement from 0 to 95 per cent on WhatsApp Business and hashtag optimisation is the clearest evidence of a shift in perceived ease of use. Hands-on demonstration showed participants that configuring an automated reply or building a digital catalogue required no programming

knowledge, only a sequence of taps on a phone they already carried. Once that technical and psychological barrier fell, adoption followed immediately. The gains on basic concepts, at 90 per cent, and on product photography and copywriting, at 85 per cent, point instead to a shift in perceived usefulness: the facilitators presented empirical arguments and cases connecting visual and narrative quality to conversion, and once participants saw that the effort terminated in a rational financial return, their attitude towards adoption changed accordingly. This sequencing is consistent with Davis (1989) and with the extended accounts of Venkatesh and Davis (2000) and Venkatesh et al. (2003), in which ease of use and demonstrable result operate as the proximate determinants of intention.

The finding also qualifies the optimisation paradox set out in the introduction. The partners did not need to be brought into digital space; they were already there. What the intervention supplied was the tactical repertoire to occupy that space productively, which is a different and considerably cheaper problem than first adoption. Chatterjee and Kumar Kar (2020) reach a comparable conclusion for Indian small enterprises, where the performance effect of social media marketing is mediated by owner perception rather than by platform availability, and Eller et al. (2020) identify skill and managerial attention, not infrastructure, as the antecedents that matter most. Programmes aimed at peri-urban MSMEs in Indonesia may therefore be better directed at literacy and confidence than at access or equipment.

The single competency that fell short is equally instructive. Target-market understanding and data evaluation reached 67 per cent against a target of 80 per cent, and it was the only analytical competency among the five. The other four are procedural: they can be learned by watching a demonstration and repeating it. Reading platform statistics and inferring a market segment from them is an interpretive skill that develops through repeated cycles of posting, observing and adjusting, and a single day provides no such cycle. This suggests that analytical capability requires a mentoring design measured in months rather than a workshop measured in hours, a point that comparable Indonesian engagement programmes rarely test because they seldom return to the field (Silfiani et al., 2026).

From the standpoint of community development practice, the value of the design lay in the order of its stages. The door-to-door assessment preceded the syllabus, so the curriculum answered documented needs rather than assumed ones, which is the bottom-up principle that Chambers (2013) and Freire (2000) place at the centre of development practice and that participatory action research operationalises (Baum et al., 2006; Israel et al., 1998). The partners moved from being objects of assistance to being operators of their own promotional channels, which is the shift in agency that Bhattacharyya (2004) identifies as the substance of community development rather than its by-product. The involvement of experienced academic facilitators gave the content both academic grounding and credibility with an adult audience, supporting the proposition of Anatan and Nur (2023) that university knowledge transfer is a workable instrument for MSME digital readiness in Indonesia.

The approach appears transferable, with conditions. Districts bordering a metropolitan market, where the commercial payoff of digital visibility is immediate and visible, are the most favourable setting, because the argument for usefulness can be made concretely. The implication for policy is that digital-adoption support for rural MSMEs is likely to yield more from short, demonstration-led literacy interventions with follow-up than from device provision or platform registration drives, a reading consistent with the capability evidence of Cenamor et al. (2019) and Pergelova et al. (2019).

Three limitations bound these conclusions. First, the evaluation measured competency immediately after the intervention, so the figures capture learning rather than retention; the two follow-up visits were qualitative and were not designed to re-administer the instrument. Second, the programme recorded no business outcome data, such as turnover, order volume or market reach, so the commercial effect of the literacy gain remains unmeasured. Third, with twenty participants in a single district and no comparison group, the design cannot separate the effect of the intervention from concurrent influences, and the results should be read as a documented programme outcome rather than as a causal estimate. The principal lesson for the implementing team was that dismantling the perception of difficulty, rather than transmitting content, is the step on which this kind of programme turns.

5. Conclusion

This community engagement programme set out to raise digital marketing literacy among twenty MSMEs in Moncongloe District, Maros Regency, and the measured outcome indicates that it did so. Aggregate literacy rose from 19 per cent to 92 per cent and comprehensive mastery from 5 per cent to 85 per cent, with every one of the five competencies improving and four of them exceeding the threshold set before implementation. The partners ended the programme operating business features, producing their own promotional visuals and text, and managing hashtags on channels they had previously used only socially.

The contribution of the programme is methodological as much as practical. By assessing all twenty enterprises door to door before writing the syllabus, measuring capacity with an identical instrument before and after the intervention, and returning to the field twice afterwards, it produced an account of a digital literacy intervention that can be examined and replicated rather than only reported. The partner problem identified at the outset, a marketing chain confined to word of mouth, was addressed in substance, although not completely: analytical competency reached 67 per cent against a target of 80 per cent, and the commercial consequences of the literacy gain were not measured.

Sustainability rests on two instruments already in the partners' hands. Twenty-five copies of the guidance module remain with the group as a self-study reference, and the two on-site mentoring visits established a working relationship that the partners can draw on. For subsequent programmes, three steps follow from this experience: extend mentoring across several months so that analytical skills have time to develop through repeated practice; re-administer the instrument after six months to distinguish retention from immediate learning; and record business outcome data alongside competency data, so that the link between digital literacy and commercial result can be examined directly. Participants, for their part, are encouraged to maintain at least two to three promotional posts each week and to build a cross-promotion network among themselves, which would extend organic reach while establishing a collective identity for Moncongloe as a centre of local products.

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