

## Bridging Digital Gaps: Optimizing Marketing Strategies and Branding for Sustainable Growth in Farmers' Household Businesses

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### Abstract

Farmers' household enterprises in developing economies often operate under structural constraints such as limited digital literacy, scarce resources, and entrenched socio-cultural norms—factors that collectively hinder market access and brand development. This study investigates the interplay between entrepreneurial traits, digital marketing practices, socio-cultural context, and branding strategies in shaping business sustainability and competitiveness. Drawing on data from 98 rural enterprises in West Kalimantan, Indonesia—where internet access lags behind the national average and cultural identities of Dayak and Malay communities influence business behavior—a mixed-methods approach was employed, combining surveys with qualitative interviews to capture both patterns and lived realities. The findings reveal that while traits like age, gender, and digital platform preferences guide strategic decisions, adoption is often constrained by low digital proficiency, outdated technologies, and vague performance indicators; yet, these businesses persist with resilience, underscoring the urgent need for culturally attuned marketing, digital infrastructure investment, and targeted capacity-building initiatives.

### Keywords

Digital marketing, branding, farmers' household businesses, sustainable agriculture.

Nurliza, Saverah, S., Muthahhari, M. and Abdurrahman, T. (2025) "Bridging Digital Gaps: Optimizing Marketing Strategies and Branding for Sustainable Growth in Farmers' Household Businesses", *AGRIS on-line Papers in Economics and Informatics*, Vol. 17, No. 2, pp. 63-77. ISSN 1804-1930. DOI 10.7160/aol.2025.170205.

### Introduction

Agriculture remains a cornerstone of development across many low- and middle-income countries—not only as a contributor to national GDP but as the livelihood core of rural communities. In Indonesia, household-run farming enterprises operate at this critical intersection of economy and identity. These smallholder businesses—often informal, inherited across generations, and deeply entwined with local traditions—sustain rural livelihoods and preserve cultural continuity. Globally, such enterprises account for nearly 70% of the world's food production (WBG, 2022). Yet despite their significance, they remain systematically marginalized from digital economies. Structural barriers

like capital limitations, weak infrastructure, and entrenched socio-cultural norms continue to hinder their engagement with the tools and platforms reshaping modern markets (Touch et al., 2024).

Nowhere is this exclusion more visible than in the widening gap between smallholder enterprises and digital marketing ecosystems. While digital tools—particularly social media and e-commerce—have unlocked new pathways for product visibility, narrative building, and customer interaction, their uptake among rural agribusinesses has been uneven. Some entrepreneurs have found in these platforms a means of differentiation and expansion. But for many, digital branding remains out of reach, limited not just by access

or technical know-how, but by layers of uncertainty shaped by generational habits, gender roles, communal expectations, and varying degrees of cultural resonance (Kumar and Agrawal, 2023; Yuan and Sun, 2024).

This study asks a deceptively question: how do entrepreneurial capacity, digital marketing strategies, and socio-cultural forces interact to influence branding effectiveness and business sustainability in household agribusinesses? Rather than treating these domains as isolated variables, the research adopts a multi-framework perspective—both to guide inquiry and to structure interpretation. While prior studies have explored each domain separately, few have examined how they operate in concert, particularly in rural contexts where identity and tradition infuse every layer of economic decision-making (Zollo et al., 2021; Värzaru, 2022).

To ensure theoretical integrity throughout the research process, three frameworks were selected not for rhetorical framing but for analytical deployment: the Resource-Based View (RBV), the Technology Acceptance Model (TAM), and Social Identity Theory (SIT). Each was embedded in the study's empirical architecture—guiding instrument design, informing data collection, and anchoring the interpretation of results. These frameworks are not merely cited in the literature review; they are activated in the analysis and used to make sense of patterns, outliers, and emergent dynamics.

RBV is used to assess the internal resources and capabilities that smallholders mobilize to compete in digital spaces. Constructs such as branding knowledge, platform use proficiency, digital literacy, and social capital are translated into measurable indicators—allowing us to test how specific resource bundles influence branding outcomes (Kero and Bogale, 2023). TAM offers a lens into the cognitive and perceptual dimensions of technology adoption, using established constructs like perceived ease of use and perceived usefulness. These were operationalized into behavioral metrics—ranging from posting frequency to platform diversification—thereby tracing how users' beliefs shape their digital engagement patterns (Boustani and Chammaa, 2023).

SIT brings an essential socio-cultural depth to the study, moving the analysis beyond capacity and perception to explore how identity and belonging shape platform behavior. Constructs such as in-group affiliation, cultural conformity,

and normative expectations were integrated into the survey design and qualitative instruments. This allowed for a nuanced interpretation of how digital marketing decisions are mediated by gendered expectations, ethnic belonging, and generational worldviews—particularly in community settings where social reputation and collective coherence often outweigh individual entrepreneurial ambition (Zollo et al., 2021).

Importantly, the use of theory extends beyond the construction of the model—it shapes the reading of results. Findings are not presented as decontextualized statistics but are interpreted through these frameworks, drawing links between observed behaviors and the theoretical mechanisms presumed to underpin them. When training efforts fall short, for example, the analysis moves past performance metrics to examine where in the RBV, TAM, or SIT dimensions friction may be occurring—whether due to misalignment between resources and task complexity, low perceived relevance, or social resistance to behavioral change.

To deepen this evaluative lens, the study also employs the Kirkpatrick model to assess the impact of digital literacy interventions across four dimensions: reaction, learning, behavior, and results. This enables a layered understanding of not just whether training worked, but how participants responded to it, what they internalized, how they applied it, and what outcomes emerged. For instance, low learning scores were contextualized through open-ended responses revealing mismatched expectations, linguistic barriers, and limited post-training support (Nurliza and Fauyan, 2021).

By threading theory into every phase of the research—from design to analysis—this study moves decisively beyond descriptive mapping. It offers a theoretically informed, empirically grounded account of how digital transformation unfolds within the lived realities of smallholder entrepreneurs. In doing so, it positions household agribusiness branding not as a technical upgrade but as a socio-cultural negotiation—where internal capacity, technological perception, and identity-based norms intersect in ways that shape both constraints and possibilities. Ultimately, the study contributes a robust analytic model for understanding rural digital engagement—one that is contextually sensitive, methodologically rigorous, and globally relevant for those seeking inclusive models of innovation and development.

## **Materials and methods**

This study used a convergent mixed-methods design (Creswell and Creswell, 2018). This study applied a convergent mixed-methods design (Creswell and Creswell, 2018) to explore how entrepreneurial characteristics, digital marketing practices, and socio-cultural contexts shape branding strategies in household agribusinesses. By combining descriptive data with thematic insights from interviews, it revealed patterns such as generational differences in platform use and motivational clusters, while also unpacking the deeper narratives behind them—like learning through trial and error, peer influence, and trust-building. The region presents a unique context, with only 59% of households having internet access—below the national average of 73% (Muazir et al., 2022)—and a diverse social landscape shaped by multi-ethnic communities and smallholder farming. The integration of quantitative trends and qualitative stories allowed for a richer understanding not just of what digital engagement looks like, but why it unfolds the way it does (Fetters et al., 2013).

### **Sampling**

A purposive sampling approach was used to select 98 household agribusiness entrepreneurs from three agriculturally intensive districts. These districts were intentionally chosen to reflect variation in market connectivity, ethnic composition, and access to extension services. Participants were identified through collaboration with local cooperatives, farmer groups, and agricultural extension agents, which ensured both contextual credibility and logistical feasibility (Palinkas et al., 2015). To be included, respondents needed to meet three criteria: (1) operate an agribusiness enterprise for at least one year; (2) be engaged in household-based agricultural production; and (3) demonstrate some level of digital engagement, either current or aspirational.

### **Data collection**

Data were collected over three months through two complementary modalities. 59 participants completed online surveys via Google Forms, while 39 participated through face-to-face interviews. This dual-mode strategy was not incidental but intentional, grounded in the digital realities of the region. Internet coverage and digital fluency varied considerably by location and demographic; thus, the bifurcation enabled inclusivity without compromising methodological rigor (Roberts et al.,

2021). To ensure data equivalence, both instruments were structurally identical in content, phrasing, and scoring logic. Interviewers used a read-aloud protocol and visual Likert scales for in-person administration, mitigating literacy constraints without sacrificing methodological consistency.

### **Instrument design**

Survey and interview instruments were adapted from validated tools in digital marketing, technology adoption, and rural entrepreneurship (Yueh and Zheng, 2019; Boustani and Chammaa, 2023), then refined through a three-stage process to ensure clarity and contextual fit. First, an expert review was conducted with two digital marketing researchers, a rural sociologist, and two agribusiness practitioners, who evaluated the instruments for conceptual and cultural relevance. Next, pilot testing with ten respondents from a nearby village led to adjustments in language—replacing jargon with local terms—and response formats, such as using pictograms for Likert scales. Finally, reliability testing showed acceptable internal consistency across constructs, with Cronbach's alpha ranging from 0.74 to 0.88. To support respondent comprehension, especially in low-literacy settings, the survey included visual scales and analog examples. Key constructs measured included digital branding and performance (e.g., platform use, engagement, brand recall) (Yueh and Zheng, 2019); entrepreneurial motivation, both intrinsic (learning, creativity) and extrinsic (income, visibility), based on Self-Determination Theory (Ryan and Deci, 2000); and brand identity and personality, assessed through tone, narrative coherence, and emotional appeal (Boustani and Chammaa, 2023).

### **Research steps and analytical tools**

The instrument captured five core domains across three analytical subsections, and the discussion mirrors this structure to ensure continuity between research design and findings. First, entrepreneurial characteristics, digital marketing strategies, and the socio-cultural environment. This study first examined participants' demographic and socio-cultural backgrounds using descriptive statistics and percentage distributions. It covers age, gender, education, internet familiarity, and community ties (Ryan and Deci, 2000). While the numbers provided an overview, interviews added depth by showing how identity and social context shape digital engagement (Zollo et al., 2021). In terms of digital marketing, survey data detailed platform use, posting habits, and performance metrics like

click-through rates and brand recall. Qualitative reflections highlighted how training influenced actual marketing behavior (Boustani and Chammaa, 2023). Motivations for adopting digital tools were also explored, combining statistical insights with personal stories framed by self-determination theory (Ryan and Deci, 2000).

Second, assessing the effectiveness of digital tools and branding training for farmers' household businesses. It focused on the impact of training, framed by Kirkpatrick's four-level evaluation model using descriptive statistics and percentage distributions. This involved assessing participants' reactions to training in terms of satisfaction with facilitation and relevance, measuring learning gains in digital literacy and branding knowledge, evaluating behavioral changes reflected in the adoption of new marketing strategies, and finally, examining results in terms of customer base growth, revenue changes, and increased peer engagement (Kirkpatrick, 1998). The qualitative part uses semi-structured interviews and storytelling to understand how the training truly affected participants' behavior—like how they started using new marketing strategies, boosted their digital skills, and put branding knowledge into practice in their everyday business.

Third, business overview, branding strategies, and digital marketing approaches. It offers a snapshot of each business—what they aim to do, how they operate, and where they're headed. It helps us see how entrepreneurs navigate competitive, often limited-resource environments and how they shape their strategies to stay relevant. By looking at these patterns, we can better understand how different business types emerge and adapt within their local contexts. The quantitative side helps show what's happening—like which platforms are used, how often, or what strategies are common across businesses with descriptive statistics. Meanwhile, the qualitative side helps explain why or how those things happen—through people's stories, experiences, and reflections with the guide was informed by three theoretical frameworks: Social Identity Theory (Zollo et al., 2021), Resource-Based View (Kero and Bogale, 2023), and the Technology Acceptance Model (Boustani and Chammaa, 2023). This ensured alignment between conceptual framing and empirical questioning. Interviews were audio-recorded, transcribed, and analyzed, following Braun and Clarke (2006) six-phase thematic approach. The integration of theory with empirical narrative enabled interpretation beyond surface-level

description, providing nuanced insights into how branding and digital performance are shaped by lived experience, resource availability, and cultural framing.

By combining quantitative breadth with qualitative depth, the study offers a grounded view of how rural entrepreneurs navigate the promises and pitfalls of digital branding. It underscores that while digital tools are increasingly within reach, the capacity to use them strategically remains deeply shaped by identity, experience, and context.

## Results and discussion

### Entrepreneurial characteristics, digital marketing strategies, and the socio-cultural environment

The demographic landscape of digital platform engagement among household agribusiness entrepreneurs reveals significant variation shaped by gender, generation, and behavioral preferences.

Entrepreneurs' Characteristics	%
Female	60.24
<20	21.69
Gen Z (1997-2012)	21.69
Facebook, Instagram	3.61
Facebook, Instagram, Pinterest, TikTok	4.82
Instagram, TikTok	3.61
TikTok	9.64
20-25	4.82
Gen Z (1997-2012)	4.82
Facebook, Instagram, YouTube, Pinterest, TikTok	4.82
25-30	13.25
Gen Z (1997-2012)	13.25
Facebook	9.64
YouTube	3.61
30-35	20.48
Gen X (1965-1980)	4.82
Facebook	4.82
Millennials (1981-1996)	15.66
Facebook	12.05
Facebook, Instagram, Pinterest, TikTok	3.61
Male	39.76
<20	7.23
Gen X (1965-1980)	3.61
Instagram, YouTube	3.61
Gen Z (1997-2012)	3.61
Facebook	3.61

Source: Author's

Table 1: Characteristics of entrepreneurs (to be continued).



Entrepreneurs Characteristic's	%
20-25	14.46
Gen Z (1997-2012)	14.46
Facebook	7.23
Facebook, Instagram, YouTube, TikTok	3.61
Instagram	3.61
25-30	7.23
Milenial (1981-1996)	7.23
Facebook	3.61
Facebook, Instagram, YouTube, TikTok	3.61
30-35	10.84
Gen X (1965-1980)	3.61
Facebook	3.61
Milenial (1981-1996)	7.23
Facebook, Instagram, TikTok	3.61
Facebook, YouTube, Wa	3.61
Grand Total	100.00

Source: Author's

Table 1: Characteristics of entrepreneurs (Continuation).

Table 1 illustrates distinct demographic patterns and digital engagement behaviors among household agribusiness entrepreneurs, with clear generational and gendered tendencies in social media use. Women make up the majority (60.24%) of entrepreneurs, a trend particularly pronounced in micro and small-scale operations. This aligns with wider patterns observed in rural digital entrepreneurship, where women often occupy central roles in household-based business strategies, especially in contexts where flexibility and informal capital are central to participation (Meagher, 2021).

Generational segmentation reveals that Generation Z (born 1997–2012) comprises the largest share of respondents (40.97%). Their platform choices reflect this generational positioning—favoring TikTok (9.64%) or blended usage patterns that include combinations such as Facebook, Instagram, and TikTok (4.82%). These younger entrepreneurs are clearly drawn to dynamic, short-form, visually oriented content, characteristic of platforms that reward immediacy and creative presentation (Van Dijk, 2020). Millennials (1981–1996) make up 33.73% of the sample, showing a strong preference for Facebook, both as a standalone platform and in hybrid use cases, while Gen X (1965–1980) is less represented (4.82%) and primarily reliant on Facebook. Aggregated platform data indicate Facebook as the most dominant overall (49.40%), particularly among older users and male entrepreneurs, who tend to prefer simpler, more functionally familiar platforms.

A deeper look into gendered platform preferences reveals telling differences in how male and female

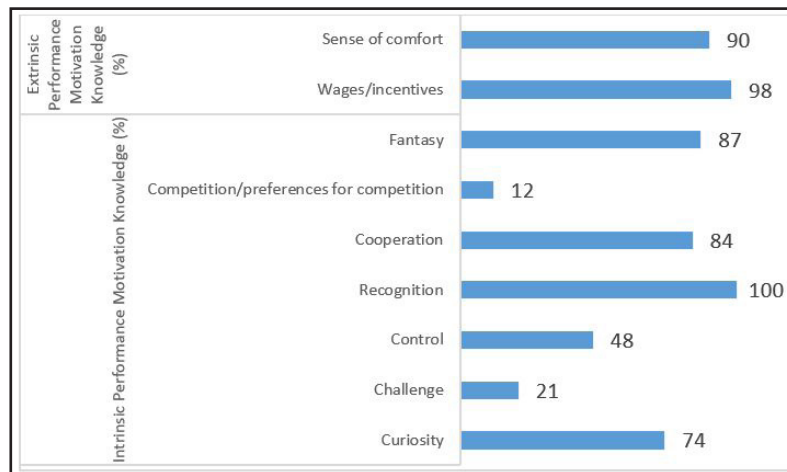
entrepreneurs navigate the digital space. Male respondents tend to stick with single-platform usage—7.23% use only Facebook—suggesting a more streamlined, possibly utilitarian approach. In contrast, women are more likely to engage across multiple platforms, with combinations like Facebook–Instagram–TikTok appearing more frequently. This suggests not just broader digital exposure, but potentially greater adaptability and experimentation in how female entrepreneurs reach and relate to their audiences. Such differences may stem from varying levels of digital literacy, audience targeting approaches, or even the nature of products marketed within household enterprises (Zhao et al., 2022; Hu et al., 2023).

Generational differences add important context to these patterns. Gen Z's strong use of TikTok and Millennials' preference for Facebook go beyond simple platform choice—they reflect deeper comfort zones shaped by the way each generation grew up with technology and communicates online. These connections aren't accidental; the data shows that digital engagement is closely linked to both generational identity and gender. This means it's not just about which platforms people use, but also how social and cultural influences shape their digital habits in consistent and meaningful ways.

Transitioning to Figure 1, which explores intrinsic and extrinsic motivations for entrepreneurship, these behavioral insights begin to cohere.

Younger entrepreneurs, especially Gen Z, tend to be driven more by intrinsic motivators like creativity, autonomy, and self-fulfillment, while older cohorts—Gen X and older Millennials—lean toward extrinsic goals such as financial security and social recognition. Though not directly linked to platform use, these motivational differences shed light on why Gen Z gravitates toward visually rich, expressive platforms like TikTok and Instagram, whereas Facebook appeals more to those with practical, outcome-focused intentions. This suggests that platform choice reflects a complex interplay of entrepreneurial identity, motivation, and strategy (Bhargava et al., 2022). Together, these insights reveal underlying generational, gendered, and motivational dynamics shaping digital engagement.

Digital marketing strategies are organized into three key areas—channels, engagement, and performance metrics—offering a clear framework to understand how entrepreneurs select, use, and assess their digital tools. The first dimension, marketing channels, highlights communication approaches, implementation hurdles, and cost factors, as detailed in Table 2.



Source: Author's

Figure 1: Knowledge of intrinsic and extrinsic work motivation (%).

Digital Marketing Channels	%
Content marketing	7.23
Social media	7.23
Branding capital	3.61
Limited understanding of social media changes	3.61
Paid advertising	3.61
Social media	3.61
Digital platform	3.61
Social media marketing	59.04
Multimedia advertising	3.61
None	3.61
Social media	51.81
Internet, old-fashioned mobile phone	7.23
Limited understanding of social media changes	12.05
None	28.92
Old-fashioned mobile phone	3.61
Website/blog, multimedia advertising, social media	3.61
Promotion	3.61
Social media marketing, content marketing	3.61
Social media	3.61
Old-fashioned mobile phone	3.61
Social media marketing, content marketing, paid advertisement, video marketing	4.82
Social media	4.82
None	4.82
Social media marketing, content marketing, video marketing	9.64
Social media	9.64
Limited understanding of social media changes	9.64
Social media marketing, mobile marketing	8.43
Social media	8.43
Limited understanding of social media changes	8.43
Social media marketing, mobile marketing, video marketing	3.61
Social media	3.61
Limited understanding of social media changes	3.61
Total	100.00

Source: Author's

Table 2: Digital marketing channels.

Table 2 reveals that most respondents (59%) primarily use social media for marketing, while content marketing (7%) and paid advertising (4%) remain limited. Alarminglly, nearly 29% have no digital marketing strategy, and 12% struggle with understanding digital tools, highlighting ongoing knowledge gaps. To clarify patterns, responses were grouped into three typologies: High-Integration, Low-Integration, and Non-Adopters.

The preference for social media seems driven more by ease of access and peer familiarity than strategic choice, with platforms like Facebook

and WhatsApp dominating due to their simplicity. This aligns with earlier findings on how limited digital literacy constrains adoption in rural settings (Rachmawati, 2024). These insights underscore the need for tailored support—not just platform access, but training focused on strategic use, multi-channel storytelling, and basic analytics to help entrepreneurs move beyond mere presence.

The next domain, social media engagement, examines interactions, trust, outcomes, and content creation, as detailed in Table 3.

Social Media Engagement	%
Once a day	21.69
Yes	21.69
Attract clients to the physical store	3.61
Instagram and Facebook ads	3.61
Drive traffic to the website or social media platforms for ad revenue and build an online presence	18.07
Advancement in SEO, social media, YouTube and Google ads, Instagram and Facebook ads, LinkedIn marketing, brand introduction, and brand enhancement	9.64
Advancements in SEO and social media	4.82
SEO optimization and social media	3.61
Once a week	3.61
Yes	3.61
Attract clients to the physical store	3.61
Instagram and Facebook ads	3.61
Rarely/Never	3.61
Yes	3.61
Drive traffic to the website or social media platforms for ad revenue and build an online presence	3.61
YouTube and Google ads	3.61
Several times a day	56.63
Not confident	13.25
Attract clients to the physical store	13.25
Brand introduction and enhancement	8.43
Instagram and Facebook ads	4.82
Yes	43.37
Attract clients to the physical store	12.05
Brand introduction and enhancement	12.05
Drive traffic to the website or social media platforms for ad revenue and build an online presence	31.33
Advancement in SEO, social media, YouTube and Google ads, Instagram and Facebook ads, LinkedIn marketing, brand introduction, and brand enhancement	4.82
Brand introduction and enhancement	22.89
YouTube and Google ads, brand introduction, and brand enhancement	3.61
Several times a week	14.46
Yes	14.46
Drive traffic to the website or social media platforms for ad revenue and build an online presence	14.46
Advancement in SEO, social media, YouTube and Google ads, Instagram and Facebook ads, LinkedIn marketing, brand introduction, and brand enhancement	7.23
Brand introduction and enhancement	3.61
SEO optimization and social media	3.61
Total	100.00

Source: Author's

Table 3: Social media engagement.

Table 3 reveals distinct patterns in digital engagement among agribusiness entrepreneurs. While over half (57%) access social media multiple times daily, a notable minority (13%) remain less confident or infrequent users, highlighting uneven digital literacy and strategic capacity. This gap underscores the need to enhance digital presence through better website performance and targeted social strategies. As Sayudin (2023) emphasizes, optimizing user experience and search visibility can expand market reach, while integrating organic and paid channels across platforms like Instagram and Google boosts returns (Mero and Karjaluoto, 2015). Using analytics to refine campaigns and collaborating with influencers further deepen audience connections (Akintayo et al., 2022). Consistent, interactive content remains key to sustaining long-term growth.

The study identifies three digital marketing profiles: visibility-focused entrepreneurs (23%) who prioritize brand awareness through visual storytelling but often stop short of conversion;

transaction-oriented entrepreneurs (31%) driven by immediate sales and leads, sometimes at the expense of deeper engagement; and content-driven entrepreneurs (10%) who employ integrated SEO and multimedia strategies to build trust and community, reflecting greater digital maturity. Yet, frequent engagement does not always mean effective marketing—many underuse content qualities, targeting, and timing.

These strategies reflect a tension between transactional goals and relational depth, echoing the Technology Acceptance Model and Social Influence Theory. While ease of use and utility drive adoption (Boustani and Chammaa, 2023), social trust and norms strongly influence behavior in rural settings where social capital often outweighs technology (Zollo et al., 2021; Sayudin, 2023).

The next focus, digital metrics, assesses revenue growth, brand positioning, and messaging effectiveness (Table 4).

Digital Performance Metrics	%
Click-Through Rate (CTR)	12.05
>20%	4.82
Improvement in search engine rankings	4.82
Image ads	4.82
2-5%	3.61
Increased website traffic	3.61
Image ads, video ads, story ads	3.61
2-5%	3.61
Increased website traffic	3.61
Video ads, story ads	3.61
Click-through rate, average session duration, social media engagement	3.61
2-5%	3.61
Increased website traffic	3.61
Image ads, video ads, story ads	3.61
Cost per acquisition	3.61
5-10%	3.61
Increased leads/sales	3.61
Video ads	3.61
Cost per acquisition, social media engagement	3.61
2-5%	3.61
Increased leads/sales, social media engagement, and positive customer feedback/reviews	3.61
Image ads, video ads, slideshow ads	3.61
Impressions, cost per acquisition	3.61
2-5%	3.61
Increased leads/sales	3.61
Image ads, video ads	3.61

Source: Author's

Table 4: Digital performance metrics (to be continued).



Digital Performance Metrics	%
Impressions, cost per acquisition, social media engagement	
10-20%	
Increased website traffic, improved leads/sales, brand awareness, enhanced search engine rankings	
Image ads, video ads, story ads	
Social media engagement	
>20%	
Positive customer feedback/reviews	
Image ads, video ads, collection ads	
Video ads, collection ads	
10-20%	
Increased website traffic	
Image ads, video ads, carousel ads, slideshow ads, story ads	
10-20%	
Increased website traffic	
Image ads, video ads, carousel ads, slideshow ads, story ads	
2-5%	
Brand awareness	
Video ads	
Increased leads/sales	
Image ads, video ads, story ads	
2-5%	
Increased website traffic	
Image ads, video ads	
Uncertain	37.35
Increased website traffic	3.61
Image ads, video ads, story ads	3.61
Increased website traffic, brand awareness	3.61
Video ads, story ads	3.61
Positive customer feedback/reviews	30.12
Image ads	4.82
Image ads, video ads	25.30
Total	100.00

Source: Author's

Table 4: Digital performance metrics (continuation).

Table 4 presents key digital performance indicators shaping marketing strategies among agribusiness entrepreneurs. About 12% prioritize click-through rates (CTR), with nearly 5% achieving rates above 20%, mainly through image, video, and story ads that boost website traffic by 10–20%. While promising, these figures lack rigorous statistical backing, suggesting the need for more robust analysis. Only a small group (3.6%) focuses on improving cost-per-acquisition (CPA) through video and social engagement, signaling a gradual shift toward cost-efficient creativity. Lead generation and sales tend to rely on visually rich ad formats, while brand awareness benefits from sustained video campaigns.

Interestingly, 13% use visual content to gather

customer feedback, reflecting a growing emphasis on listening as much as persuading. Social media engagement remains central, with nearly 69% prioritizing it and 13% reporting engagement rates over 20%. Yet, over a third of businesses struggle to measure campaign impact clearly, highlighting persistent challenges in aligning KPIs and evaluating success. Figure 3 further illustrates sectoral differences in digital strategy maturity, revealing not just what entrepreneurs prioritize, but how uneven and selective their measurement approaches remain. This underscores the ongoing need for clearer metrics and integrated analytics frameworks.

## Assessing the effectiveness of digital tools and branding training for farmers' household businesses

An assessment of the effectiveness of digital tools and branding training for farmers' household businesses showed diverse outcomes across the four evaluation categories—reaction, learning, behavior, and outcomes, as detailed in Figure 2.

Figure 2 illustrates training outcomes through Kirkpatrick's four-level model, revealing a distinct gap between participant satisfaction and deeper learning. While 88% expressed satisfaction with the training delivery, only 44% reported improved understanding of work processes. This suggests that engagement alone does not ensure cognitive gains, pointing to the need for more immersive, application-oriented learning. A similar pattern appears in behavioral outcomes: 72% felt more confident in pursuing business goals, yet only 44% demonstrated increased responsibility in practice. Behavioral outcomes reflected a similar duality. While 72% felt more confident pursuing business goals, only 44% reported greater responsibility

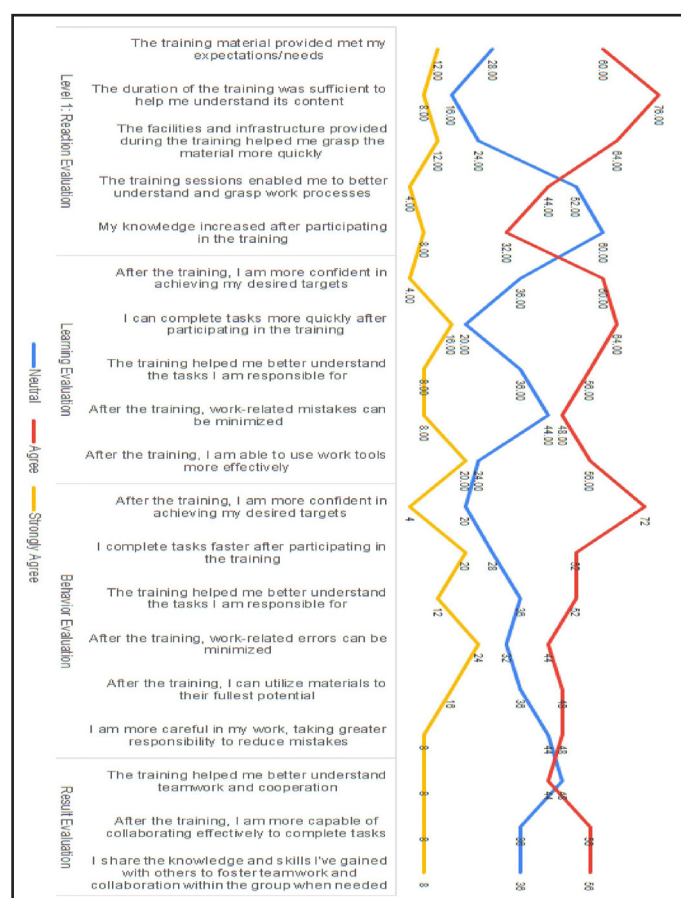
in task execution.

Digital readiness emerged as a key moderating factor. Those with prior exposure to digital tools showed more consistent gains across all evaluation levels. Although formal statistical tests were not applied, the pattern suggests a potential interaction worth exploring in future work through stratified or regression-based analyses.

Figure 2 reinforces a key insight: training is well-received, but its impact varies significantly by participant readiness. As Bujang et al. (2020) emphasize, real-world tasks, modular delivery, and collaborative formats are likely to support more meaningful transformation—especially for those navigating early stages of digital adoption. A more tailored, experiential learning approach may better meet the varied needs of farmers' household businesses in adapting to digital environments.

## Business overview, branding strategies, and digital marketing approaches

Table 5 offers a snapshot of business purpose, operations, and strategic direction, revealing



Source: Author's

Figure 2: Assessing the effectiveness of digital tools and branding training (%).

Business Overview	
Unique Story	Trial and error, hobby, availability of abundant natural resources
Business Target Niche/Segment	No specific niche/target, accessible to all social classes
Main Competitors:	Existing similar products
Differentiation from Main Competitors:	Uniqueness, price, taste
Market Positioning	Following market trends
Products/Services:	Vegetables, chicken, goats, VOC oil, agricultural products, knitted bags and wallets, craft bracelets, and cakes.
Commitment to Customers:	Fast delivery, high-quality products, satisfying service, good taste, neat presentation
Business Slogans:	<ul style="list-style-type: none"> <li>- "If you haven't tried it, you don't know."</li> <li>- "Delicious crab, you know."</li> <li>- "Greenhouse, thriving business."</li> <li>- "You buy, we sell."</li> <li>- "Unlimited shopping, endless profit."</li> <li>- "Fresh vegetables, healthy living."</li> <li>- "Coconut in my business, prosperity in my village."</li> </ul>
Business Challenge:	Capital, knowledge and skills, profit, and digital marketing
Social Media Formula:	X, Facebook, WhatsApp, Instagram, TikTok, Shopee
Focused Social Media Platforms:	Facebook, WhatsApp, Instagram, TikTok, Shopee
Marketing Strategy:	Order-based
Business Strengths:	Taste, price, quality, service

Source: Author's

Table 5: Business overview.

how entrepreneurs position their ventures within competitive landscapes. Most businesses emphasize flexibility and accessibility, drawing on personal experience and available resources rather than formal planning. While this organic approach fosters adaptability, the absence of clearly defined objectives or targeted market segments may limit long-term strategic growth. Still, the overview reflects a foundational awareness of value creation—particularly through taste, quality, and service—that can be refined with more structured business development support.

As shown in Table 5, entrepreneurs differentiate their businesses primarily through taste, price, and product quality. While this emphasis supports broad appeal, the absence of clear market positioning may hinder long-term brand consolidation. The diversity of offerings—from agriculture to handmade crafts—adds resilience but also calls for a more coherent brand narrative to foster customer loyalty and identity (Zia, 2013; Tan & Ludwig, 2016).

Brand development, as shown in Tables 6 and 7, presents a varied picture of maturity among entrepreneurs. While some clearly express a strong visual identity and convey emotional depth, many others find it challenging to craft consistent and compelling brand stories. This contrast underscores both the budding strengths within these

businesses and the ongoing struggles they face in shaping meaningful brand narratives. It points to a clear need for more tailored support—rooted in strategic thinking, authentic storytelling, and deeper customer engagement—to help entrepreneurs build brands that resonate and endure.

Entrepreneurs in this study display growing competence in crafting visual and emotional brand identities; however, many lack coherent brand narratives. Key elements such as conflict, character, and resolution are often missing, revealing a disconnect between surface-level branding and deeper value-driven storytelling. From this gap, three archetypes emerge—Functionally Focused, Emotionally Driven, and Narratively Undeveloped—providing a practical framework to assess current practices and guide branding support. Prior studies affirm that authentic, emotive branding—particularly when co-created with customers—strengthens trust and long-term engagement (Kirumirah et al., 2021; Tian et al., 2022).

Although entrepreneurs actively utilize platforms like WhatsApp, Shopee, and TikTok, many struggle to align brand personality with digital content. The inconsistency across touchpoints suggests an enthusiasm for digital tools that is not yet matched by strategic branding literacy. These findings echo earlier calls for branding interventions

Target audience	
Ideal customers	General public
General public	All ages
Customer online location	Cafés, anywhere with social media
Customer contact methods	Direct message, chat, live
Customer priorities	Taste/quality, affordable prices, easy access
Brand personality	
Emotions related to the brand	Happy
Brand location	Shopee
Brand image	Innovative and inspiring
Preferred brand colors	Black-white, pink-white, brown-white, green, rainbow, red
Brand	
Words describing the brand's appearance	Luxurious, elegant, simple, relaxed, modern, warm, friendly, fun
Brand personality	Serious, colorful, fun, classic, modern, professional, approachable, relaxed-elegant
Word group describing the brand	Honest, humble, healthy, trustworthy, cheerful
Chosen brand fonts	Modern, serif, classic
Selected brand colors	Dark, blue, green, pink, gray

Source: Author's

Table 6: Brand discovery.

Brand personality creation	
Brand Representative	Business identity, product name
Strongest Brand Motivation	Uniqueness of process and product
Brand Recall	Name, logo
Brand Story Development	
The story theme	Health
The story plot	None
The backstory	None
The primary conflict	None
The brand's role	None
How the story resolves	None
The moral/lesson	None
The brand character	None
Other characters	None

Source: Author's

Table 7: Brand personality.

that go beyond aesthetics to address story structure, audience alignment, and platform-specific adaptation (Kirby and Kent, 2010; Suprayitno, 2017).

Despite some limitations—such as a modest sample size and reliance on self-reported data—these findings provide valuable insight into the branding challenges faced by rural entrepreneurs. Future studies would benefit from exploring regional differences and the socio-cultural factors that shape digital marketing adoption, as well as the long-term impact of branding and digital initiatives on smallholder business growth. It remains critical to assess the effectiveness of digital literacy

programs and to better understand how local infrastructure, training methods, and cooperative support contribute to success. Creating inclusive, narrative-driven, and digitally empowered entrepreneurial ecosystems will require thoughtful strategy alongside ongoing collaboration between entrepreneurs, educators, and policymakers.

## Conclusion

This study examines how entrepreneurial traits, digital marketing strategies, socio-cultural factors, and branding interact within farmers' household businesses in Indonesia. The findings

emphasize the significant influence of traits such as age, gender, and platform preferences on digital marketing strategies, highlighting the need for tailored, multi-platform approaches. While social media remains the primary channel, challenges like limited digital literacy, outdated tools, and unclear performance metrics hinder its full potential. Training evaluations show improvements in confidence, collaboration, and task efficiency, but also reveal gaps in understanding work processes and practical application. Despite adaptability in product offerings and multi-platform engagement, businesses face barriers such as limited capital, digital skills,

and marketing knowledge. Overcoming these challenges requires targeted digital literacy programs, accessible funding, and strategic collaborations with local partners, e-commerce platforms, and influencers. Strengthening brand storytelling around health, quality, and emotional connections can build loyalty and expand market reach. Effective training, performance evaluations, and the adoption of advanced digital tools, combined with employee motivation and strong partnerships, are essential for driving sustainable growth, competitiveness, and long-term success in an evolving market.

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## References

- [1] Akintayo, O. I., Oyedokun, M. O. and Akindele, M. O. (2022) "Agricultural productivity and access to market among farmers in Ekiti State, Nigeria", *Agro-Science*, Vol. 21, No. 2, pp. 79-84. ISSN 1119 -7455. DOI 10.4314/as.v21i2.9.
- [2] Bhargava, H. K., Wang, K. and Zhang, X. (2022) "Fending off critics of platform power with differential revenue sharing: Doing well by doing good?", *Management Science*, Vol. 68, No. 11, pp. 8249-8260. E-ISSN 1526-5501, ISSN 0025-1909. DOI 10.1287/mnsc.2022.4545.
- [3] Boustani, N. M. and Chammaa, C. (2023) "Youth adoption of innovative digital marketing and cross-cultural disparities", *Administrative Sciences*, Vol. 13, No. 6, p. 151. ISSN 2076-3387. DOI 10.3390/admsci13060151.
- [4] Braun, V. and Clarke, V. (2006) "Using thematic analysis in psychology", *Qualitative Research in Psychology*, Vol. 3, No. 2, pp. 77-101. ISSN 1478-0887. DOI 10.1191/1478088706qp063oa.
- [5] Bujang, S. D. A., Selamat, A., Krejcar, O., Marešová, P. and Nguyễn, N. T. (2020) "Digital learning demand for future education 4.0—Case studies at Malaysian education institutions", *Informatics*, Vol. 7, No. 2, p. 13. ISSN 2227-9709. DOI 10.3390/informatics7020013.
- [6] Creswell, J. W. and Creswell, J. D. (2018) "Mixed methods procedures", In Creswell, J. W. (Eds.) *Research design: Qualitative, quantitative, and mixed methods approaches*, 5<sup>th</sup> ed., SAGE, p. 418. ISBN-13 978-1506386706.
- [7] Fetters, M., Curry, L. and Creswell, J. (2013) "Achieving integration in mixed methods designs—Principles and practices", *Health Services Research*, Vol. 48, No. 6, pp. 2134-2156. E-ISSN 1475-6773, ISSN 0017-9124. DOI 10.1111/1475-6773.12117.
- [8] Hu, D., Zhai, C. and Zhao, S. (2023) "Does digital finance promote household consumption upgrading? An analysis based on data from the China Family Panel Studies", *Economic Modelling*, Vol. 125, p. 106377. ISSN 0264-9993. DOI 10.1016/j.econmod.2023.106377.
- [9] Kero, C. and Bogale, A. (2023) "A systematic review of resource-based view and dynamic capabilities of firms and future research avenues", *International Journal of Sustainable Development and Planning*, Vol. 18, No. 10, pp. 3137-3154. E-ISSN 1743-761X, ISSN 1743-7601. DOI 10.18280/ijstdp.181016.



- [10] Kirby, A. and Kent, A. (2010) "Architecture as brand: Store design and brand identity", *Journal of Product & Brand Management*, Vol. 19, No. 6, pp. 432-439. E-ISSN 2054-1643, ISSN 1061-0421. DOI 10.1108/10610421011085749.
- [11] Kirkpatrick, D. L. (1998) "The four levels of evaluation", In Brown, S. M. and Seidner, C. J. (Eds.), *Evaluation in education and human services*, pp. 95-112, Springer Netherlands. ISBN 978-94-010-6031-8. DOI 10.1007/978-94-011-4850-4\_5.
- [12] Kirumirah, M., Munishi, E. J. and Kajubili, A. E. (2021) "The conundrum in accessing business development services among urban informal manufacturers in Dar Es Salaam, Tanzania", *International Journal of Business and Management*, Vol. 16, No. 12, p. 119. E-ISSN 1833-8119, ISSN 1833-3850. DOI 10.5539/ijbm.v16n12p119.
- [13] Kumar, A. and Agrawal, S. (2023) "Challenges and opportunities for agri-fresh food supply chain management in India", *Computers and Electronics in Agriculture*, Vol. 212, p. 108161. ISSN 0168-1699. DOI 10.1016/j.compag.2023.108161.
- [14] Meagher, K. (2021) "Informality and the infrastructures of inclusion: An introduction", *Development and Change*, Vol. 52, No. 4, pp. 729-755. ISSN 2632-055X. DOI 10.1111/dech.12672.
- [15] Mero, J. and Karjaluto, H. (2015) "The use of web analytics for digital marketing performance measurement", *Industrial Marketing Management*, Vol. 50, pp. 117-127. E-ISSN 1873-2062. DOI 10.1016/j.indmarman.2015.04.009.
- [16] Muazir, S., Lestari, L., Alhamdani, M. R. and Nurhamsyah, M. (2022) "Regional network (centrality) and COVID-19 spread in West Kalimantan", *Applied Engineering and Technology*, Vol. 1, No. 1, pp. 47-55. ISSN 2829-4998. DOI 10.31763/aet.v1i1.665.
- [17] Nurliza, N. and Fauyan (2021) "Behavioral changes of independent palm smallholder farmers through farmer institution", *Jurnal Penyuluhan*, Vol. 17, No. 1, pp. 1-11. ISSN 1858-2664. DOI 10.25015/17202131699.
- [18] Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N. and Hoagwood, K. (2015) "Purposeful sampling for qualitative data collection and analysis in mixed method implementation research", *Administration and Policy in Mental Health*, Vol. 42, No. 5, pp. 533-544. ISSN 0894-587X. DOI 10.1007/s10488-013-0528-y.
- [19] Rachmawati, M. (2024) "The use of digitalization of information in developing digital marketing for MSMEs", *Edusight International Journal of Multidisciplinary Studies*, Vol. 1, No. 1, pp. 1-7. E-ISSN 3046-8477. DOI 10.69726/eijoms.v1i1.8.
- [20] Roberts, J. K., Pavlakis, A. E. and Richards, M. P. (2021) "It's more complicated than it seems: Virtual qualitative research in the COVID-19 era", *International Journal of Qualitative Methods*, Vol. 20, p. 16094069211002960. E-ISSN 1609-4069, ISSN 1609-4069. DOI 10.1177/16094069211002959.
- [21] Ryan, R. M. and Deci, E. L. (2000) "Intrinsic and extrinsic motivations: Classic definitions and new directions", *Contemporary Educational Psychology*, Vol. 25, No. 1, pp. 54-67. ISSN 0361-476X. DOI 10.1006/ceps.1999.1020.
- [22] Sayudin, S. (2023) "Increasing business effectiveness through the implementation of an integrated digital marketing strategy", *Journal of World Science*, Vol. 2, No. 11, pp. 1908-1913. E-ISSN 2828-9307, ISSN 2828-8726. DOI 10.58344/jws.v2i11.478.
- [23] Suprayitno, S. (2017) "Gestalt principles applied on visual identity in Bogor city", *Humaniora*, Vol. 8, No. 2, p. 143. ISSN 2476-9061. DOI 10.21512/humaniora.v8i2.3892.
- [24] Tan, J. and Ludwig, S. (2016) "Regional adoption of business-to-business electronic commerce in China", *International Journal of Electronic Commerce*, Vol. 20, No. 3, pp. 408-439. ISSN 1086-4415. DOI 10.1080/10864415.2016.1122438.
- [25] Tian, Y., Fan, Y. and He, G. (2022) "Farmers' personality traits and credit exclusion: Evidence from rural China", *Frontiers in Psychology*, Vol. 13, p. 979588. ISSN 1664-1078. DOI 10.3389/fpsyg.2022.979588.

- [26] Touch, V., Tan, D. K. Y., Cook, B. R., Liu, D. L., Cross, R., Tran, T. A., Utomo, A., Yous, S., Grunbuhel, C. and Cowie, A. (2024) "Smallholder farmers' challenges and opportunities: Implications for agricultural production, environment and food security", *Journal of Environmental Management*, Vol. 370, pp. 122536. ISSN 0301-4797. DOI 10.1016/j.jenvman.2024.122536.
- [27] Van Dijk, J. A. G. M. (2020) "The digital divide", *Journal of the Association for Information Science and Technology*, Vol. 72, No. 1, pp. 136-138. E-ISSN 2330-1643, ISSN 2330-1635. DOI 10.1002/asi.24355.
- [28] Vărzaru, A. A. (2022) "Assessing digital transformation acceptance in public organizations' marketing", *Sustainability*, Vol. 15, No. 1, p. 265. ISSN 2071-1050. DOI 10.3390/su15010265.
- [29] WBG. (2022) "*The World Bank supports Indonesia's agriculture sector to become more resilient and inclusive*". [Online]. Available: <https://www.worldbank.org/en/news/press-release/2022/09/09/the-world-bank-supports-indonesia-agriculture-sector-to-become-more-resilient-and-inclusive> [Accessed: April 20, 2025].