

## **SNAPSEED AS A DIGITAL BRIDGE: TAM-BASED PRODUCT PHOTO EDITING TRAINING ON TRADITIONAL CULINARY MSMESI TAM APPROACH**

**Guntoro Barovich<sup>1</sup>, Fahmi Ajizmanto<sup>2</sup>**

<sup>1,2</sup>Jakarta International University, Central Cikarang, Bekasi, West Java, Indonesia

<sup>1</sup>guntoro@jiu.ac, <sup>2</sup>fahmi@jiu.ac

### **ABSTRACT**

*Inadequate product photography represents a persistent barrier to effective digital marketing among micro-scale culinary enterprises in Indonesia. This community service study aimed to enhance the digital marketing capacity of MSME Dapoer KuKia through structured product photo editing training using the Snapseed mobile application, while evaluating technology acceptance using the Technology Acceptance Model (TAM). The program was implemented over eight weeks through a Participatory Action Research (PAR) approach, comprising four structured training sessions and guided independent practice. A 14-item TAM questionnaire with established content validity was administered at pre- and post-intervention time points, and changes were assessed using the Wilcoxon Signed-Rank Test. Results confirmed significant improvements across all four TAM constructs ( $W = 0$ ,  $N = 14$ ,  $p < 0.05$ ). Perceived Ease of Use recorded the highest improvement, increasing from a mean of 2.00 to 4.50 (+125.0%), followed by Perceived Usefulness from 2.25 to 4.25 (+88.9%), and both Attitude toward Using and Behavioral Intention to Use from 3.00 to 4.67 (+55.6%). These findings demonstrate that contextual, hands-on mobile technology training effectively dismantles perceived complexity barriers and enhances technology acceptance among micro-scale culinary MSME practitioners.*

*Keywords: snapseed; digitization of msmes; technology acceptance model*

### **INTRODUCTION**

The rapid expansion of digital commerce has fundamentally reshaped the competitive dynamics of the culinary sector, placing Micro, Small, and Medium Enterprises (MSMEs) under increasing pressure to establish credible digital identities. According to a 2024 survey by the Ministry of Communication and Digital Affairs in Indonesia, only 26% of MSMEs

have adopted the digital ecosystem, and of those operating in the culinary sector, merely 15 – 20% actively utilize product visual content that meets the minimum standards for digital viability. This structural gap between digital readiness and market demand poses a significant challenge to the sustainability and growth of micro-scale culinary enterprises, particularly those operating through informal distribution channels such as

consignment-based selling and word-of-mouth referrals (Komdigi, 2024).

Within the digital marketing ecosystem, product photography has emerged as the primary determinant of consumer engagement. Research employing eye-tracking technology confirmed that visual food content on digital platforms significantly influences the attention and purchase intentions of consumers, with visual quality serving as the critical factor determining whether a potential buyer pauses to engage or continues scrolling (Riswanto, et al., 2025). This finding is further reinforced by multisensory food perception research, which established that the visual properties of food photographs including color accuracy, lighting quality, and textural detail directly stimulate taste expectations and purchasing arousal, a phenomenon widely described as ocular consumption (Motoki, et al., 2023; Sun, et al., 2024). For culinary MSMEs, these findings underscore that suboptimal product photographs do not merely affect aesthetic appeal they actively suppress consumer purchase intent

before any product description is read.

Dapoer KuKia is a micro-scale culinary enterprise producing traditional market snacks, brownies, and pastry products. The enterprise's name derived from Kuliner Kreasi Ibu dan Anak (Culinary Creations of Mother and Child) reflects its artisanal, family-based production model. Despite possessing products of demonstrably high quality, as evidenced by strong word-of-mouth endorsement, Dapoer KuKia's marketing reach remains severely constrained. All existing product photographs were captured without structured lighting or post-production editing, resulting in visual content that inadequately represents the product quality and fails to meet the standards required for effective digital marketing. This condition is representative of a broader pattern observed across micro-scale culinary MSMEs in Indonesia, where production competency consistently outpaces digital marketing capacity (Giantari, et al., 2022).

The growing accessibility of mobile-based editing applications offers a cost-effective and technically accessible solution to this challenge. Snapseed, a free Android-based photo

editing application developed by Google, delivers professional-grade editing capabilities including exposure correction, white balance adjustment, texture sharpening, and selective area enhancement within an interface designed for non-technical users. In their study of mobile application adoption among Indonesian culinary MSMEs, established that Perceived Usefulness and Perceived Ease of Use are the two most critical determinants of adoption behavior, both of which Snapseed fulfils through its zero-cost model, offline operability, and intuitive gesture-based interface (Hardiyanto, et al., 2022). Similarly affirmed that the absence of financial barriers and contextual relevance are the strongest predictors of sustained technology adoption among micro-enterprise practitioners (Agustina et al., 2023).

To evaluate the effectiveness of the technology intervention, this study employs the Technology Acceptance Model (TAM) as its theoretical framework. TAM measures technology acceptance through four interrelated constructs:

Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude toward Using (ATU), and Behavioral Intention to Use (BITU). according to (Marikyan & Papagiannidis, 2024) in their comprehensive review affirmed TAM's enduring validity across diverse technology adoption contexts. In a systematic analysis of over 1,000 TAM-based marketing studies, it further confirmed that PEOU exerts a particularly strong influence during the initial stages of adoption among users with limited prior technology exposure a finding directly applicable to the micro-scale MSME context of this study (Musa, et al., 2024).

Notwithstanding the substantial body of research on digital technology adoption among Indonesian MSMEs, a critical research gap persists. The majority of existing TAM-based studies in this domain focus on platform-level adoption such as e-commerce marketplaces, mobile payment systems, and social media applications with limited attention to tool-level adoption, specifically the use of mobile visual content production applications by individual micro-scale practitioners (Syah et al., 2022). Furthermore, most prior studies

employ single-point post-intervention measurement designs, which are unable to quantify the actual change in technology acceptance attributable to a structured training program. The combined application of TAM within a community service intervention framework targeting photo editing technology adoption among micro-scale culinary MSMEs has not been previously documented in the Indonesian empirical literature. This study directly addresses this gap.

The novelty of this study resides in three dimensions. First, it applies TAM within a structured community service intervention a combination that remains underexplored in Indonesian MSME digitalization research. Second, it employs a pre-post comparative measurement design that quantifies the shift in technology acceptance attributable specifically to the training intervention, rather than simply reporting post-program attitudes. Third, it focuses on photo editing application adoption at the individual micro-enterprise level, filling a gap left by studies that

examine adoption at the organizational or platform level. Accordingly, this study aims to: (1) Document the implementation and outcomes of a Snapseed-based product photo editing training program at MSME Dapoer KuKia; (2) Measure changes across all four TAM constructs PU, PEOU, ATU, and BITU using a validated pre-post instrument, and; (3) Develop a replicable mobile technology adoption model for micro-scale culinary MSMEs applicable to future community service and digitalization initiatives.

#### **IMPLEMENTATION METHOD**

Dapoer KuKia is located in the city of Palembang, Talang Jambe Village, Sukarame District and was pioneered by a housewife who later became a culinary entrepreneur. This business is engaged in the production of market snacks (vegetable martabak, rolled omelette, onde-onde, risol), brownies, and various breads such as mini pizza. The entire production and marketing process is still managed independently by the founder. The average monthly turnover is in the range of IDR 1.7 - 2.5 million, with the main distribution channels in the form of sales points to

traders and sales to colleagues through personal recommendations.

The primary participant in this study is the founder and sole operator of Dapoer KuKia, a female entrepreneur aged 38 years with a bachelor's degree in pharmacy and serving as the pharmacist in charge. Prior to the program, she had received no formal training in digital marketing or photography and had never used a dedicated photo editing application. Her smartphone usage experience was approximately five years, limited primarily to communication and basic social media browsing. This participant profile is representative of the broader demographic of micro-scale culinary MSME operators in Indonesia, characterized by moderate smartphone familiarity combined with low digital content production literacy (Syah et al., 2022). Given the single-subject nature of this study, the findings are treated as an in-depth case study rather than a statistically generalizable sample, with analytical emphasis placed on the magnitude and significance of pre-post changes within the individual

rather than between-group comparisons.

The initial assessment conducted by the service team found that all available product photos were taken without special lighting preparation, using a smartphone camera with automatic mode, and did not go through any editing process. In the self-assessment conducted by MSME actors on the visual quality of their own product photos before the training, the average visual satisfaction score given was at 2 out of 5 indicating the awareness of MSME actors that the photos were not adequate to be used as effective digital marketing content



**Figure 1. Sample KuKia Kitchen product photos**

This service activity uses a *Participatory Action Research* (PAR) approach, where MSME actors are not just passive beneficiaries, but active

partners involved in each stage of activities. The service team acts as a facilitator who accompanies the learning process, not as an instructor who only delivers material in one direction.

The design of the activity consists of three main phases that are carried out over eight weeks, as shown in Table 1:

**Table 1. Activity Timeline**

No	Types of Activities	Schedule
1	Assessment and Baseline Phases	Weeks 1–2
2	Training and Mentoring Phase	Weeks 3–6
3	Evaluation and Dissemination Phase	Weeks 7–8

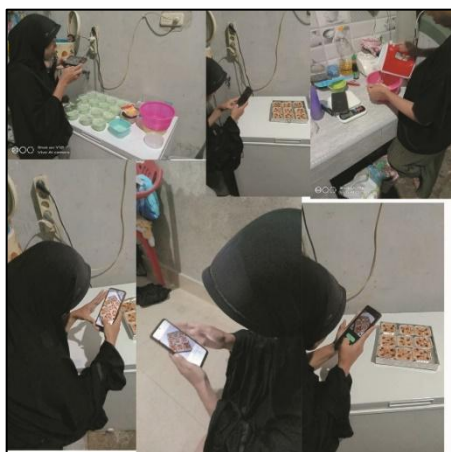
The first phase, assessment and baseline, was carried out through a field visit to the Dapoer KuKia production site. The service team documents the existing conditions: The existing marketing infrastructure, examples of product photos that have been owned, and the level of digital literacy of the founder. At this stage, MSME actors fill out a pre-intervention TAM questionnaire and undergo an in-depth interview about their initial experience and perception of the use of photo editing applications.



**Figure 2. Frying Process of Dapoer Kukia Donut Products**

The second phase, Training and Mentoring, was carried out in four structured sessions of 2 – 2.5 hours each. The first session focused on a basic understanding of why good product photos are important for a culinary business, followed by a thorough introduction to the Snapseed interface. The second session focused on lighting and color correction techniques using the tune image and white balance menus, two of the most critical features to overcome the problem of dark and unnatural color photos due to room lighting. The third session covered the use of the details feature to sharpen product texture, selective to highlight the main object, and healing to remove distracting elements. The fourth session was a guided self-practice session in which

the MSME actor independently edited real Dapoer KuKia product photos with facilitator guidance, followed by a joint review of results.



**Figure 3. Shooting and editing training using Snapseed**

The third phase included using the details feature to sharpen the texture of the product, Selective to highlight the main object, and healing to clean up the annoying elements. The fourth session was a guided self-practice session, where MSME actors edited photos of Dapoer KuKia's real products with the guidance of the facilitator, then the results were discussed together.



**Figure 4. Dapoer KuKia Products Edited**

The third phase, Evaluation and Dissemination, focused on measuring the outcomes of the training intervention. This phase included the completion of the post-intervention TAM questionnaire, in-depth evaluative interviews with the MSME actor, and self-assessment of product photo quality using the five-dimensional rubric introduced during training. Quantitative data from both questionnaires were then analyzed using descriptive statistics and the Wilcoxon Signed-Rank Test to capture the magnitude and significance of changes in technology acceptance. The best photographs produced during the program were compiled into Dapoer KuKia's first digital portfolio, deployed on WhatsApp Business and Google Business Profile.

The TAM framework is integrated into this service activity as a measurement tool that is applied at the beginning and end of the program to capture changes in the perception of MSME actors towards the technology trained. The questionnaire consists of 14 statements that measure four main constructs: Perceived Usefulness (4 items), Perceived Ease of Use (4 items), Attitude toward Using (3 items), and Behavioral Intention to Use (3 items). Each item is measured using a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The results of the assessment from the TAM instrument were then verified and analyzed using descriptive statistics and differential tests (Wilcoxon signed-rank test) to detect significant changes between pre- and post-intervention (Marikyan & Papagiannidis, 2024; Zakariya, 2022), scores. Content validity was established through expert judgment by two academic reviewers with expertise in information systems and digital marketing. Each item was evaluated for relevance, clarity, and construct representativeness. Items

with a Content Validity Index (CVI) below 0.80 were revised prior to administration. Construct validity was verified through theoretical alignment of each item with its designated TAM construct (Marikyan & Papagiannidis, 2024; Musa et al., 2024).

Given that this study employs a single-subject design, internal consistency measures such as Cronbach's Alpha are not applicable, as the formula requires variance across multiple respondents (Zakariya, 2022). Instrument reliability is therefore supported through two complementary means: (1) The theoretical grounding of the adapted TAM scale, which has been extensively validated across diverse technology adoption contexts (Marikyan & Papagiannidis, 2024; Musa et al., 2024), and; (2) The content validity process described above, in which all 14 items achieved CVI scores above the 0.80 threshold following expert review and revision.

Quantitative data from the TAM instrument was analyzed in two stages. First, descriptive statistics including mean scores and standard deviations were calculated for each construct at both pre- and post-intervention time points to characterize the direction and

magnitude of change. Second, The Wilcoxon Signed-Rank Test was employed to assess the statistical significance of observed pre-post differences at the item level (N = 14 items). This non-parametric test was selected because: (1) The data derives from ordinal Likert-scale measurements; (2) The single-subject design precludes parametric assumptions of normality, and (3) The within-subject repeated measurement structure aligns with Wilcoxon procedural assumptions (Zakariya, 2022). The significance threshold was set at  $p < 0.05$ . All computations were performed manually using the standard Wilcoxon Signed-Rank procedure with average rank correction for tied values.

## **RESULT AND DISCUSSION**

Before the training program started, the service team conducted comprehensive documentation of the initial condition of the photos of Dapoer KuKia products. All of them have similar characteristics: They were taken under the lighting of a kitchen fluorescent lamp resulting in a predominantly yellowish-greenish color, without deliberate

compositional arrangement, and without post-shooting editing as seen in Figure 1.

When asked to independently assess the visual quality of the product photos themselves using a simple assessment instrument prepared by the service team, MSME actors gave an average visual satisfaction score of 2.1 on a scale of 5, with the main notes mentioned spontaneously: product colors that do not look natural, textures that are not clearly visible, and crowded photo backgrounds distract from the main product. This self-assessment is consistent with the condition described by the founder of Dapoer KuKia himself in an initial interview: "I know the photos are not good, but I don't know where to start to fix them. I think we need a good camera first, a special photo studio and lighting."

The belief that photo quality is determined by camera quality rather than processing ability is the most common misconception found among MSME actors in this service, as well as the biggest psychological obstacle that needs to be addressed from the first meeting.

One of the most important pedagogical decisions in this program is to use real photos of Dapoer KuKia products, not sample photos, or illustration photos as practice materials from the first session. This decision is based on the principle of situated learning which is systematically studied by a learner who learns most effectively when the material learned is directly relevant to the actual work context and can be practiced in daily work. And the use of free digital tools by MSMEs confirms that the relevance of context is the strongest factor that determines the success of technology adoption in small businesses (Agustina et al., 2023; Olmos-Vega & Stalmeijer, 2025).

The response of MSME actors to this approach has been very positive. When the facilitator demonstrated how a fantasy tofu photo, a pale and dull sausage bun in the original photo can become golden brown and shiny after white balance correction and detail sharpening and made a little realistic in Snapseed, the MSME actor spontaneously reacted: "Oh, so this is wrong anyway! It's not the

camera; it's the color that needs to be improved." This "a-ha" moment is a marker of a shift in perception from resistance to openness.

During the four training sessions, the service team noted that the most significant progress occurred in understanding the use of White Balance and Selective features. These two features initially feel the most intimidating because they look technical, but after hands-on practice, they have become the favorite of MSME actors because of their most dramatic impact and are immediately visible on the quality of product photos

A comparison of pre- and post-intervention TAM scores showed substantial and consistent changes in the entire construct measured. Table 2 presents a summary of the measurement results.

**Table 2. Comparison of Pre- and Post-Intervention TAM Scores**

No	TAM Construct	Items	Pre (Mean)	Post (Mean)	Δ Mean	Δ (%)
1	Perceived Usefulness (PU)	Q1-Q4	2.25	4.25	2	88.89%
2	Perceived Ease of Use (PEOU)	Q5-Q8	2	4.5	2.5	125.00%
3	Attitude Toward Using (ATU)	Q9-Q11	3	4.67	1.67	55.67%
4	Behavioral Intention to Use (BITU)	Q12-Q14	3	4.67	1.67	55.67%

The most notable finding was the 125.0% increase in Perceived Ease of Use (PEOU), rising from a mean of 2.00 to 4.50, the highest proportional improvement among all four constructs. This result is particularly meaningful given that the pre-intervention PEOU score of 2.00 represented the lowest baseline recorded, reflecting a strong initial perception of technological difficulty among the participants. The magnitude of this improvement empirically confirms that the psychological barrier of perceived complexity consistently identified in the literature as the primary inhibitor of technology adoption among non-technical users can be effectively dismantled through structured, contextually grounded training (Agustina et al., 2023; Hardiyanto et al., 2022).

Perceived Usefulness (PU) showed the second highest

improvement at 88.9%, increasing from a mean of 2.25 to 4.25. This substantial gain reflects the immediate and tangible impact participants observed when applying Snapseed to their actual product photographs a direct consequence of the contextual learning approach adopted in this program. When users can see, in real time, that a technology resolves genuine problems they have experienced in their work, perceived usefulness rises sharply and rapidly (Musa et al., 2024). The alignment between Snapseed's core features and the specific visual deficiencies documented at baseline color cast, poor texture visibility, and compositional clutter created an optimal condition for PU improvement.

Attitude toward Using (ATU) and Behavioral Intention to Use (BITU) each improved by 55.6%, from a baseline mean of 3.00 to 4.67. The

identical pre-intervention scores for ATU and BITU are notable: a baseline mean of 3.00 (Neutral) for both constructs indicates that the participant entered the program in a state of genuine uncertainty neither resistant nor enthusiastic regarding Snapseed adoption. The post-intervention score of 4.67 for both constructs, approaching the maximum of 5.00,

reflects a decisive shift from ambivalence to committed positive disposition and strong intention to continue. This pattern is consistent with (Musa et al., 2024), who established that ATU and BITU are most strongly influenced by direct experiential exposure to technology precisely what the four structured training sessions provided.

**Table 3. Wilcoxon Signed-Rank Test**

No	Item	Construct	PRE	POST	D	D	Rank	R+	R-
1	Q1	PU	2	4	+2	2	7.5	7.5	0
2	Q2	PU	3	4	+1	1	2.0	2.0	0
3	Q3	PU	2	4	+2	2	7.5	7.5	0
4	Q4	PU	2	5	+3	3	13.0	13.0	0
5	Q1	PEOU	2	5	+3	3	13.0	13.0	0
6	Q2	PEOU	2	5	+3	3	13.0	13.0	0
7	Q3	PEOU	2	4	+2	2	7.5	7.5	0
8	Q4	PEOU	2	4	+2	2	7.5	7.5	0
9	Q1	ATU	3	4	+1	1	2.0	2.0	0
10	Q2	ATU	3	5	+2	2	7.5	7.5	0
11	Q3	ATU	3	5	+2	2	7.5	7.5	0
12	Q4	BITU	3	4	+1	1	2.0	2.0	0
13	Q1	BITU	3	5	+2	2	7.5	7.5	0
14	Q2	BITU	3	5	+2	2	7.5	7.5	0
							<b>R+</b>	<b>105.0</b>	<b>0</b>

The Wilcoxon Signed-Rank Test confirmed the statistical significance of all observed pre-post differences ( $W = 0$ ,  $N = 14$ ,  $W_{\text{Critical}} = 21$ ,  $p < 0.05$ ). The  $W$  statistic of 0 — its minimum possible value — indicates that every single item across all 14 questionnaire statements recorded a positive improvement from pre- to post-

intervention, with no negative or zero differences observed. This unanimous directionality of change represents the strongest possible outcome for a Wilcoxon Signed-Rank Test and provides unambiguous statistical evidence that the training program produced a significant and consistent

shift in technology acceptance across all measured dimensions.

A comparison of the self-assessment of MSME actors on the quality of their product photos before and after the training program provides a concrete picture of the changes in perception that occurred. The assessment was conducted using the same five-dimensional rubric at two points in time: before the training began and after the entire session and independent practice were completed, Table 4 presents the results.

**Table 4. Comparison of Product Photo Quality Self-Assessment**

No	Assessment Dimensions	Before	After	Remarks
1	Brightness and exposure	1,9	4,3	Products look bright and fresh
2	Accuracy and naturalness of color	1,7	4,5	Product color as original
3	Sharpness and texture detail	2,0	4,2	The texture of the cake is clear and evocative
4	Cleanliness and visual composition	2,3	4,1	Neat background, focus on the product
5	Appeal as marketing content	2,1	4,4	Worthy of publication in digital media

Table 4 shows that the entire dimension of photo quality has improved significantly. The greatest improvement was observed in the

dimensions of color accuracy and naturalness, where the scores increased from 1.7 to 4.5. These findings suggest that the White Balance feature effectively mitigated the yellow-reddish color cast in the original images, resulting in a more accurate and visually balanced representation of market snack products.

Beyond all the numbers that have been presented, there is one impact that is not measurable in the questionnaire but very real in field observations: the transformation of MSME actors' confidence in their abilities in the digital era.

This story reflects a phenomenon known in the learning literature as an increase in self-efficacy, a person's belief in his ability to succeed in a particular task. These results are in line with what has been conveyed by the fact that increased self-efficacy through contextual learning experiences directly drives sustained behavioral change, including the courage to actively use technology in everyday work life (Olmos-Vega & Stalmeijer, 2025).

The products produced by MSME actors independently assess that it feels feasible and confident to be published

as marketing content and foster a sense of confidence in the publication.

## **CONCLUSION**

This program demonstrated that structured, hands-on mobile technology training can meaningfully shift technology acceptance among micro-scale culinary MSME practitioners. Using the TAM framework, all four constructs showed statistically significant improvement following the intervention (Wilcoxon Signed-Rank Test,  $W = 0$ ,  $N = 14$ ,  $p < 0.05$ ). Perceived Ease of Use recorded the most substantial gain, increasing from a mean of 2.00 to 4.50 (+125.0%), confirming that perceived complexity, not cost or motivation was the primary adoption barrier. Perceived Usefulness improved from 2.25 to 4.25 (+88.9%), while both Attitude toward Using and Behavioral Intention to Use rose from 3.00 to 4.67 (+55.6%), reflecting a decisive shift from pre-intervention ambivalence to genuine commitment.

The key driver of this outcome was the decision to use Dapoer KuKia's actual product photographs as training material from the outset. When participants could see, immediately and tangibly, that the technology solved real problems in their own work, both

skepticism and resistance dissolved. Snapseed's zero-cost model and offline operability further removed the financial and technical barriers that commonly delay adoption among micro-enterprise practitioners. Together, these conditions created a learning environment in which technology acceptance developed naturally rather than under obligation.

For practitioners and institutions engaged in MSME digital empowerment, this study offers a replicable, low-resource model: contextual training, real work materials, and structured pre-post measurement. The digital foundations established at Dapoer KuKia a product photo portfolio, WhatsApp Business, and Google Business Profile provide a practical starting point that other micro-scale culinary enterprises can follow. Future studies should expand the participant sample to strengthen generalizability, and longitudinal follow-up is recommended to assess whether the strong post-intervention intentions translate into sustained independent digital marketing behavior.

## REFERENCES

- Agustina, A., Ambarwati, R., & Sari, H. M. K. (2023). Social Media as Digital Marketing Tool in MSME: A Systematic Literature Review. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, 13(1), 266. <https://doi.org/10.30588/jmp.v13i1.1534>
- Giantari, I. G. A. K., Yasa, N. N. K., Suprasto, H. B., & Rahmayanti, P. L. D. (2022). The role of digital marketing in mediating the effect of the COVID-19 pandemic and the intensity of competition on business performance. *International Journal of Data and Network Science*, 6(1), 217–232. <https://doi.org/10.5267/j.ijdns.2021.9.006>
- Hardiyanto, N., Rafdinal, W., & Gaffar, M. R. (2022). Predicting the Adoption of Mobile Business Applications by Culinary SMEs in Indonesia. *Journal of Management and Entrepreneurship Research*, 3(1), 46–60. <https://doi.org/10.34001/jmer.2022.6.03.1-27>
- Komdigi. (2024, September 17). *Satu Dekade, Transformasi Digital UMKM Dorong Pertumbuhan Ekonomi Nasional*. <https://www.komdigi.go.id/Berita/Siaran-Pers/Detail/Satu-Dekade-Transformasi-Digital-Umkm-Dorong-Pertumbuhan-Ekonomi-Nasional>.
- Marikyan, D., & Papagiannidis, S. (2024). *Technology Acceptance Model*. TheoryHub. <https://open.ncl.ac.uk>
- Motoki, K., Spence, C., & Velasco, C. (2023). When visual cues influence taste/flavour perception: A systematic review. *Food Quality and Preference*, 111, 104996. <https://doi.org/10.1016/j.foodqual.2023.104996>
- Musa, H. G., Fatmawati, I., Nuryakin, N., & Suyanto, M. (2024). Marketing research trends using technology acceptance model (TAM): a comprehensive review of researches (2002–2022). *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2329375>
- Olmos-Vega, F. M., & Stalmeijer, R. E. (2025). Using theoretical engagement to understand workplace learning across contexts—Bringing worlds apart together. *Medical Education*, 59(1), 65–74. <https://doi.org/10.1111/medu.15481>
- Riswanto, A., Kim, S., Ha, Y., & Kim, H.-S. (2025). Visual Attention to Food Content on Social Media: An Eye-Tracking Study Among Young Adults. *Journal of Eye Movement Research*, 18(6), 69. <https://doi.org/10.3390/jemr18060069>
- Sun, C., Ding, Y., & Meng, X. (2024). Unpacking the Influence of Visual Density on Pizza Packaging: Sensory Expectations and Purchase Intentions. *Foods*, 13(16), 2567. <https://doi.org/10.3390/foods13162567>
- Syah, D. H., Rahman Dongoran, F., Wahyu Nugrahadi, E., & Aditia, R. (2022). Understanding the technology acceptance model in the QRIS usage: Evidence from SMEs in Indonesia. *International Journal of Research in Business and Social Science* (2147- 4478), 11(6), 12–19.

<https://doi.org/10.20525/ijrbs.v1i1i6.1917>

Zakariya, Y. F. (2022). Cronbach's alpha in mathematics education research: Its appropriateness, overuse, and alternatives in estimating scale reliability. *Frontiers in Psychology, 13*. <https://doi.org/10.3389/fpsyg.2022.1074430>

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