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Fintech Adoption And Competitive Advantage As Dual Mediators: Integrating Financial And Marketing Capabilities On F&B Msme Performance

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Abstract-This study proposes an integrated dual-mediation model examining how financial capability and marketing capability jointly influence the performance of food and beverage (F&B) MSMEs in Tegal City and Brebes Regency, Indonesia. Financial technology (fintech) adoption and competitive advantage are proposed as parallel mediating mechanisms. Data from 100 predominantly micro-scale MSME respondents were analyzed using PLS-SEM via SmartPLS 4. Results demonstrate that fintech adoption significantly mediates the impact of financial attitude and financial literacy on financial performance. Similarly, competitive advantage mediates the relationship between perceived quality and price on sales performance. Interestingly, product innovation did not significantly affect competitive advantage due to local consumer preferences for culinary authenticity. Furthermore, the dual-mediation path linking fintech adoption to sales performance via competitive advantage was non-significant, highlighting that back-end digital financial tools do not inherently create front-end consumer value. F&B MSMEs must deliberately integrate digital agility with fundamental marketing strategies competitive pricing and product quality for sustainable growth.

Keywords- *Fintech Adoption; Competitive Advantage; MSME Performance; Financial Capability; Marketing Strategy*

I. INTRODUCTION

In Tegal City and Brebes Regency, the food and beverage (F&B) MSME sector contributes significantly to the regional gross domestic product (GRDP), recording turnovers of trillions of rupiah. Despite the rapid surge in digital financial adoption, such as the Quick Response Code Indonesian Standard (QRIS), this agility in digital transactions does not entirely translate into a sustainable competitive advantage. Many F&B MSMEs fail to integrate digital payment instruments with strategic marketing capabilities, leaving their sales performance stagnant amidst aggressive market competition.

This phenomenon is particularly evident in the local context of Tegal and Brebes, where consumer purchasing power is highly price-sensitive and heavily influenced by traditional culinary preferences. Consequently, F&B MSMEs face a strategic paradox: while they actively invest in digitalizing their payment systems to facilitate seamless transactions, they often neglect the core marketing elements necessary to attract and retain customers in a highly saturated market. The digitalization of finance, therefore, risks becoming merely an operational upgrade rather than a strategic driver for market expansion and customer acquisition.

MSMEs remain a central economic pillar but face dual constraints: weak financial management and limited marketing capability. In the digital era, financial technology (fintech) adoption is a primary catalyst for financial inclusion and business resilience (Amnas et al., 2024; Ariana et al., 2024; Kurniasari et al., 2023). Prior research shows perceived usefulness shapes fintech adoption in East Java MSMEs (Maghfiroh et al., 2025). Financial literacy strengthens access to finance through intermediating mechanisms (Hj Talip & Wasiuzzaman, 2024), while digital financial literacy bridges fintech capability and financial inclusion (Amnas et al., 2024). In the Indonesian context, fintech adoption and financial inclusion consistently mediate the link between financial literacy and MSME performance (Kurniasari et al., 2023, 2025; Lontchi et al., 2023). Furthermore, innovation serves as a crucial mediator in mitigating external shocks (Sudjatmoko et al., 2023).

Conversely, perceived quality, pricing strategy, and product innovation function as key antecedents of competitive advantage and sales performance (Porter, 1985; Zeithaml, 1988). Innovation translates firm-level capabilities into sustainable competitive advantage (Dukhaykh & Alangri, 2026), and innovative mindsets enhance performance in Southeast Asian SMEs (Jaaffar et al., 2024). The combination of product innovation and perceived quality remains a key driver of competitive positioning (Nazhifan Adilfi & Yuldinawati, 2024).

Despite these robust individual streams of literature, previous studies have frequently presented fragmented or even contradictory findings regarding the actual holistic impact of digitalization on MSME performance. For instance, while some scholars argue that fintech automatically elevates overall business competitiveness, others suggest that technology adoption without corresponding marketing agility yields marginal external benefits. This theoretical inconsistency highlights the urgent need for a more comprehensive, multi-dimensional model that evaluates both internal financial efficiency and external market competitiveness simultaneously.

To date, fintech-mediated financial performance and marketing-mediated sales performance have largely been examined in isolation. This study bridges this gap by testing a dual-mediation model using matched survey data from 100 F&B MSMEs, combining local field data with international perspectives on digital-economy competitiveness.

Financial literacy (Lusardi & Mitchell, 2014) and financial attitude (Widjayanti et al., 2025) drive fintech adoption, a pattern confirmed among Indonesian women-owned SMEs (Kurniasari & Lestari, 2024). Attitudes and social norms act as critical predictors of adoption intentions (Irimia-Diéguez et al., 2023). Financial literacy also mediates the relationship between social capital, innovation, and MSME performance (Hj Talip & Wasiuzzaman, 2024; Lontchi et al., 2023; Munasib & Fitriyah, 2025; Widjayanti et al., 2025). Thus, we hypothesize that financial literacy (H1) and financial attitude (H2) positively affect fintech

adoption.

Perceived quality is a critical source of competitive advantage (Zeithaml, 1988). Classical economic theory emphasizes innovation as the engine of development (Schumpeter, 1934), supported by findings that adaptive quality and continuous innovation improve market performance in Indonesian culinary MSMEs (Pusung et al., 2023; Rubio-Andrés et al., 2024). Innovation significantly mediates the effect of firm capabilities on sustainable advantage (Dukhaykh & Alangri, 2026), building defensible market positions (Porter, 1985). Thus, perceived quality (H3), price (H4), and product innovation (H5) positively affect competitive advantage.

Fintech adoption drives financial performance (Maghfiroh et al., 2025), and competitive advantage drives sales (Cravens et al., 1993). Therefore, fintech adoption positively affects financial performance (H6), and competitive advantage positively affects sales performance (H7). We further propose that fintech adoption reinforces competitive advantage (H8), conceptually parallel to how digital literacy reinforces broader capability outcomes (Amnas et al., 2024). Finally, we hypothesize four mediation paths: fintech adoption mediates the effect of financial literacy (H9) and financial attitude (H10) on financial performance; competitive advantage mediates marketing capabilities on sales performance (H11); and fintech adoption mediates financial capabilities on competitive advantage (H12).

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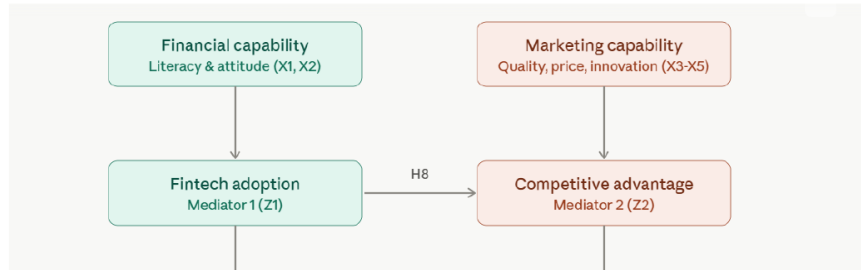


Figure 1. Dual-Mediation Conceptual Model

Source: Author.

II. METHOD

This quantitative study selected 100 F&B MSME owner-managers in Tegal and Brebes (operating ≥ 1 year) using purposive sampling. Constructs were measured using reflective Likert-scale indicators. Financial capability constructs (literacy, attitude, fintech adoption, financial performance) were adapted from Maghfiroh et al. (2025). Marketing capability constructs (perceived quality, innovation, price, competitive advantage, sales performance) were adapted from Dukhaykh and Alangri (2026) and Zeithaml (1988). Data were analyzed using PLS-SEM via SmartPLS 4 (Hair et al., 2022). The measurement model was evaluated through indicator loadings, AVE, and CR, followed by discriminant validity assessment using the HTMT ratio, a robust criterion for variance-based SEM (Henseler et al., 2015). The structural model was evaluated via bootstrapping (5,000 resamples).

III. RESULTS AND DISCUSSION

Before evaluating the measurement and structural models, it is essential to establish the demographic and operational characteristics of the sample. As presented in Table 1, the respondents are predominantly in their productive age, with the majority falling into the 40-47 years (54%) and 33-39 years (37%) categories. The business landscape is primarily driven by traditional food stalls (warung makan) at 30% and street food vendors (pedagang kaki lima) at 28%. Notably, the sample heavily represents businesses in their initial operational phases, with 95% having been established for 1 to 3 years. The micro-scale nature of these enterprises is highly evident in their structural capacity: 84% operate with 5 or fewer employees, and a significant 77% generate an estimated monthly turnover of less than IDR 5,000,000. This profile confirms that the collected data accurately reflects the grass-roots realities of the local F&B micro-economy in Tegal and Brebes, providing a highly relevant context for evaluating their digital and marketing capabilities.

TABLE I. DEMOGRAPHIC AND BUSINESS PROFILE OF RESPONDENTS

Characteristics	Category	Frequency (n)	Percentage (%)
Age	25-32 Years	8	8%
	33-39 Years	37	37%
	40-47 Years	54	54%
	48-56 Years	1	1%
	>57 Years	0	0%
Type of F&B Business	Food Stall (Warung Makan)	30	30%
	Street Food Vendor	28	28%
	Snack Business	17	17%
	Modern Food Business	10	10%
	Modern Beverage Business	7	7%
	Bakery / Pastry	5	5%
	Coffee Shop	3	3%
Length of Operation	<1 Year	3	3%
	1-3 Years	95	95%
	4-6 Years	2	2%
	>6 Years	0	0%
Number of Employees	1-2 People	39	39%
	3-5 People	45	45%
	6-10 People	16	16%
	>10 People	0	0%
Estimated Monthly Turnover	< IDR 5,000,000	77	77%
	IDR 5,000,000-IDR 15,000,000	21	21%
	IDR 15,000,000-IDR 30,000,000	2	2%
	> IDR 30,000,000	0	0%
Total		100	100%

As shown in Table 1, indicator reliability was established (outer loadings > 0.708). Internal consistency was confirmed as

Composite Reliability (CR) values (0.808-0.970) exceeded 0.70. Convergent validity was satisfied with all Average Variance Extracted (AVE) values exceeding 0.50 (0.589-0.758).

TABLE II. CONSTRUCT RELIABILITY AND VALIDITY

Construct	Items (n)	Outer Loadings	Cronbach's Alpha	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Competitive Advantage	3	0.604-0.860	0.646	0.808	0.589
Financial Adoption	9	0.798-0.871	0.949	0.957	0.710
Financial Attitude	9	0.820-0.887	0.951	0.958	0.719
Financial Literacy	15	0.765-0.867	0.967	0.970	0.687
Financial Performance	9	0.854-0.906	0.960	0.966	0.758
Innovation	3	0.789-0.883	0.793	0.877	0.705
Perceived Quality	3	0.782-0.832	0.723	0.843	0.642
Price	4	0.732-0.807	0.783	0.857	0.600
Sales Performance	4	0.776-0.874	0.844	0.895	0.682

Table 3 presents the comprehensive structural model evaluation. Direct effects confirm that Financial Literacy and Financial Attitude positively drive Fintech Adoption (supporting H1, H2). Perceived Quality and Price positively influence Competitive Advantage (supporting H3, H4). However, Product Innovation does not significantly affect Competitive Advantage; thus, H5 is rejected. Fintech Adoption strongly drives Financial Performance (supporting H6), and Competitive Advantage enhances Sales Performance (supporting H7). Critically, H8 is rejected, as Fintech Adoption exhibits no direct effect on Competitive Advantage.

Regarding indirect effects, Fintech Adoption significantly mediates the relationship between both financial antecedents and Financial Performance (supporting H9, H10). Competitive Advantage successfully acts as a mediator linking Perceived Quality and Price to Sales Performance (H11 partially supported), but fails for Product Innovation. Finally, H12 is rejected, as the extended serial mediation paths to Competitive Advantage were non-significant.

TABLE III. HYPOTHESIS TESTING (DIRECT AND INDIRECT EFFECTS)

Hypothesis	Path / Relationship	Original Sample (O)	T Statistics	P Values	Decision
Direct Effects					
H1	Financial Literacy -> Financial Adoption	0.511	5.785	0.000	Supported
H2	Financial Attitude -> Financial Adoption	0.276	3.071	0.002	Supported
H3	Perceived Quality -> Competitive Advantage	0.370	3.888	0.000	Supported
H4	Price -> Competitive Advantage	0.546	6.060	0.000	Supported
H5	Product Innovation -> Competitive Advantage	-0.131	1.331	0.183	Not Supported
H6	Financial Adoption -> Financial Performance	0.785	20.547	0.000	Supported
H7	Competitive Advantage -> Sales Performance	0.664	11.391	0.000	Supported
H8	Financial Adoption -> Competitive Advantage	0.013	0.183	0.855	Not Supported
Indirect Effects					
H9	Fin. Literacy -> Fin. Adoption -> Fin. Performance	0.401	5.411	0.000	Supported
H10	Fin. Attitude -> Fin. Adoption -> Fin. Performance	0.216	2.992	0.003	Supported
H11	Perceived Quality -> Comp. Advantage -> Sales Perf.	0.220	2.479	0.013	Supported
	Price -> Comp. Advantage -> Sales Perf.	0.310	4.055	0.000	Supported
	Prod. Innovation -> Comp. Advantage -> Sales Perf.	-0.019	0.278	0.781	Not Supported
H12	Fin. Literacy -> Fin. Adoption -> Comp. Advantage	0.025	0.605	0.545	Not Supported
	Fin. Attitude -> Fin. Adoption -> Comp. Advantage	0.013	0.572	0.568	Not Supported

Our findings confirm that technological integration requires cognitive understanding and proactive psychological readiness (Maghfiroh et al., 2025). MSMEs utilizing digital financial tools successfully streamline transactions and boost internal financial performance. In the marketing context, quality and price remain robust drivers of competitive advantage, corroborating the value-tradeoff framework (Zeithaml, 1988). F&B consumers in this region are highly sensitive to affordable pricing and reliable quality. Interestingly, while strategic competitive innovation drives performance during turbulent periods (El Chaarani et al., 2022), our findings indicate that product innovation alone does not translate into competitive advantage for this MSME segment, as local consumers prefer consistent, familiar tastes over radical menu changes. In the specific regions of Tegal and Brebes, the culinary market is deeply rooted in local heritage and comfort food. When MSMEs introduce radical or overly modern product innovations, it often alienates their core customer base who actively seek authenticity and affordability. Therefore, continuous product alteration may actually increase production and raw material costs without yielding a proportional increase in perceived customer value, fundamentally explaining the non-significant pathway between product innovation and competitive advantage.

A key contribution is testing the link between back-end fintech adoption and front-end competitiveness (H8). This lack of significance is reinforced by a negligible effect size ($f^2 = 0.004$), suggesting the absence of a meaningful relationship (Cohen, 1988). As fintech operates as a back-end utility invisible to end consumers (Maghfiroh et al., 2025), purchasing decisions remain fundamentally driven by marketing variables. Fintech is indispensable for financial sustainability but cannot generate external competitive advantage.

This pivotal finding demystifies the 'halo effect' often attributed to digitalization in developing economies. It proves empirically that while back-end financial tools are excellent for internal organizational health, they do not inherently communicate superior brand value to the target market. A customer purchasing an F&B product is primarily motivated by the taste (perceived quality) and the cost (price), largely regardless of whether the MSME uses a sophisticated digital payment system or traditional cash. Hence, the dual-mediation model confirms that financial capabilities and marketing capabilities operate on parallel, rather than intersecting, tracks when determining the ultimate business performance of MSMEs.

IV. CONCLUSIONS

This study validates a dual-pathway model delineating how financial and marketing capabilities independently drive MSME performance. Intrinsic financial capabilities are vital antecedents to fintech adoption, significantly enhancing internal financial performance. Concurrently, maintaining perceived quality and competitive pricing builds competitive advantage that boosts sales. However, the hypothesized theoretical bridge was unsupported: fintech adoption functions strictly as an administrative enhancer, not a market differentiator.

To secure financial sustainability, MSME owners must upgrade their financial literacy and integrate fintech solutions. However, to capture market share, resources must be allocated to front-end marketing fundamentals: uncompromising product quality and competitive pricing. Given that the majority of these local enterprises operate strictly on a micro-scale with highly sensitive cash flows, this dual-focus strategy is economically pragmatic. Rather than over-investing in radical product innovations that may alienate traditional consumer preferences, owner-managers should optimally channel their limited resources into utilizing accessible, low-cost digital payment gateways while perfecting their everyday operational quality. This study's geographical constraint limits generalizability. Future studies should replicate this model across different industries or integrate external-facing technological variables (e.g., social media marketing). Additionally, potential common method bias from self-reported questionnaires should be addressed in future research (Podsakoff et al., 2003).

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