

Khamdan Suriyok¹
Ach Maulidi²

¹ Program Doktor Ilmu
Akuntansi, Universitas
Surabaya, Indonesia; dan
Institut Teknologi dan
Bisnis Yadika Pasuruan,
Indonesia.

² Department of
Accounting, Universitas
Surabaya, Indonesia.

Does AI-Driven marketing improve SMEs' financial outcomes? Evidence from servitization and celebrity endorsement

Abstract

Artificial intelligence has become an important tool in marketing. However, many businesses still question how it improves financial results. There is a need to understand whether AI marketing directly increases financial performance or whether it works through other strategic paths. This study aims to examine the relationship between AI marketing and financial performance, with a focus on the roles of servitization and celebrity endorsement. This research uses a quantitative design with purposive sampling and data were collected through a survey distributed to consumers of micro-sized enterprises, particularly operated in food and beverage sectors. The results show that AI marketing does not have a direct effect on financial performance. However, AI marketing has a strong positive effect on servitization, which then improves financial performance. This means servitization plays a mediating role. Celebrity endorsement has a positive effect on financial performance, yet it does not mediate the relationship between AI marketing and financial performance. The main contribution of this study is the explanation that AI marketing improves financial outcomes through service transformation rather than through symbolic promotion. The findings offer useful insights for managers who plan to invest in AI-based marketing strategies.

Keywords: AI marketing; Servitization; Celebrity Endorsement; Financial Performance

Abstrak

Kecerdasan buatan (AI) telah menjadi salah satu alat penting dalam kegiatan pemasaran. Namun, masih banyak pelaku bisnis yang mempertanyakan bagaimana teknologi ini benar-benar dapat meningkatkan kinerja keuangan perusahaan. Oleh karena itu, perlu dipahami apakah pemasaran berbasis AI dapat langsung meningkatkan kinerja keuangan, atau justru bekerja melalui jalur strategis lainnya. Penelitian ini bertujuan untuk mengkaji hubungan antara AI marketing dan kinerja keuangan, dengan menyoroti peran *servitization* dan *celebrity endorsement*. Penelitian ini menggunakan pendekatan kuantitatif dengan teknik *purposive sampling*. Data dikumpulkan melalui survei yang disebar kepada konsumen usaha mikro, khususnya yang bergerak di sektor makanan dan minuman. Hasil penelitian menunjukkan bahwa *AI marketing* tidak memiliki pengaruh langsung terhadap kinerja keuangan. Namun, *AI marketing* memiliki pengaruh positif yang kuat terhadap *servitization*, yang pada akhirnya mampu meningkatkan kinerja keuangan. Hal ini menunjukkan bahwa *servitization* berperan sebagai variabel mediasi. Di sisi lain, *celebrity endorsement* terbukti memiliki pengaruh positif terhadap kinerja keuangan, tetapi tidak memediasi hubungan antara AI marketing dan kinerja keuangan. Kontribusi utama penelitian ini adalah memberikan penjelasan bahwa *AI marketing* dapat meningkatkan hasil keuangan melalui transformasi layanan (*servitization*), bukan melalui promosi yang bersifat simbolik semata. Temuan ini memberikan wawasan yang bermanfaat bagi para manajer yang berencana berinvestasi dalam strategi pemasaran berbasis AI.

Kata Kunci: AI marketing; Servitization; Celebrity Endorsement; Financial Performance

Implementasi **IMKA**
Manajemen & Kewirausahaan

E-ISSN 2776 – 8554

¹ Corresponding author: Ach Maulidi
Email: achmaulidi@staff.ubaya.ac.id



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Micro-sized enterprises represent the economic backbone of many emerging economies, yet they remain structurally vulnerable to rapid technological and market changes. In tourism-driven regions, such as East Java, culinary small businesses operate in highly competitive and digitally exposed environments where visibility, responsiveness, and customer engagement determine survival. Even though digital transformation is often framed as an equalising force, evidence suggests that technology adoption produces uneven performance outcomes among small firms (Teirlinck, 2017). Recent discussions on AI in marketing portray it as a transformative capability that enhances personalization, prediction, and automation (Huang and Rust, 2021). However, most empirical insights stem from large corporations with structured digital infrastructure (Vlačić et al., 2021), that leaves micro enterprises underexplored. Then, although AI marketing is frequently associated with operational efficiency (Chintalapati and Pandey, 2022), its capacity to generate measurable financial improvement in micro-sized enterprises remains theoretically and empirically unsettled.

The relationship between AI marketing and financial performance is *unlikely* to be linear. Emerging scholarship suggests that digital capabilities yield value when embedded within broader strategic transformations rather than functioning as isolated tools (Schmitt, 2023). Servitization, defined as the shift from product-based exchange toward service-oriented value creation, has been shown to stabilize revenue structures and deepen customer relationships (Kowalkowski et al., 2017; Rabetino et al., 2018). In smaller firms, service integration may compensate for limited scale advantages by enhancing relational intensity. Moreover, digital technologies increasingly enable predictive service offerings, which allows firms to anticipate needs and sustain engagement (Martinelli and Tunisini, 2024). In parallel, celebrity endorsement operates through symbolic trust transfer and social validation mechanisms (Wang and Liu, 2022) to shape consumer perception and purchase intention. As such, it enhances the financial performance of business (Jain et al., 2024). In this sense, although AI improves targeting precision, endorsement effectiveness continues to depend heavily on authenticity and emotional resonance (Rocha et al., 2020). So, drawing on dialogic theory, which emphasises reciprocal and relational communication (Kent and Lane, 2017), AI marketing may act as a dialogic facilitator. As explained by Abrokwah-Larbi et al. (2024), it strengthens service engagement more effectively than it amplifies symbolic endorsement impact.

This study focuses on consumers who purchase food in culinary tourism areas in one city in East Java. The location was selected because the region has experienced rapid growth in micro-sized food enterprises, making competition highly dynamic. Interestingly, products from SMEs in such a city have expanded beyond local markets and now reach national and even international consumers. This broader market access is closely linked to the region's systematic digitalisation efforts, which have strengthened online visibility, e-commerce participation, and digital payment adoption. So, through digital platforms, micro enterprises are able to promote their culinary products, engage customers, and manage transactions more efficiently. As a result, this city offers a strong empirical context to examine how AI-driven marketing, service enhancement, and

promotional strategies operate within an increasingly digitalised micro-enterprise ecosystem.

Despite growing interest in AI marketing and influencer strategies, several gaps remain. First, extant research largely privileges large or medium-sized firms offering limited evidence from micro-enterprise contexts where resource constraints shape strategic outcomes (Vlačić et al., 2021). Second, servitization literature has predominantly examined manufacturing or technology-intensive sectors, with limited exploration of small tourism-based food enterprises (Rabetino et al., 2018). Third, influencer marketing research frequently isolates endorsement effects from technological infrastructure (Rocha et al., 2020), mainly overlooking how AI systems may structure or fail to structure endorsement effectiveness (Wang and Liu, 2022). Fourth, empirical testing of mediation mechanisms linking AI marketing to financial performance remains sparse, particularly within emerging economy micro-business settings. So, these topical issues remain insufficiently theorized and tested.

More importantly, prior studies often present AI marketing as a tool that improves business performance through better efficiency, automation, and customer targeting (Huang and Rust, 2021; Chintalapati and Pandey, 2022; Basu et al., 2024). However, they give limited attention to how AI creates financial value in micro enterprises. It remains unclear whether AI improves financial performance directly or whether it must first change the way firms create and deliver value (Schweikl and Obermaier, 2023; Favoretto et al., 2022). This study addresses this gap by comparing two different strategic pathways. The novelty of this study goes beyond integrating AI marketing, servitization, and celebrity endorsement into one model. Instead, this study explains how AI creates financial value in micro enterprises. The findings challenge the common assumption that AI directly improves financial performance. They show that AI acts as an enabling capability that improves financial outcomes only through servitization, while celebrity endorsement contributes through a separate pathway. In doing so, this study extends current understanding of AI-enabled SME performance by showing that technology adoption alone is not enough. Firms also need service transformation to convert AI capability into financial value (Gebauer et al., 2021; Favoretto et al., 2022; Rabetino et al., 2018).

Therefore, the aim of the current study is to address such topical issues by examining how AI marketing contributes to financial performance and through which intermediate mechanisms this influence occurs. The novelty of this study lies in integrating AI marketing, servitization, and celebrity endorsement within a unified dialogic framework and empirically testing their direct and mediating relationships in a micro-enterprise culinary tourism context. The findings of this study offer theoretical contributions by refining dialogic theory within digital micro-business ecosystems and provide practical guidance for small enterprises seeking sustainable financial growth. Specifically, this study aims to (1) examine the direct relationship between AI marketing and financial performance, (2) analyse the influence of AI marketing on servitization and celebrity endorsement, (3) evaluate the effects of servitization and celebrity endorsement on financial performance, and (4) test the mediating roles of servitization and celebrity endorsement in the relationship between AI marketing and financial performance.

2. Literature review

2.1 Dialogic theory as underpinning theory

Dialogic theory is a communication framework that emphasizes open, two-way interactions where different voices, perspectives, and ideas are actively engaged in conversation. This theory is rooted in the idea that meaning is not simply transmitted from one party to another but is co-created through interaction (Kent and Lane, 2017). A fundamental principle of dialogic theory is the recognition that communication is dynamic, relational, and context-dependent (Buchanan-Oliver and Fitzgerald, 2016). In traditional models of communication, information is often delivered as fixed content that the audience will receive and interpret it in a predetermined way. Dialogic Theory, however, acknowledges that different individuals and groups bring their own perspectives, experiences, and interpretations to a conversation (Wirtz and Zimbres, 2018). This method leads to persuasion that is not only more ethical but also more sustainable. It is because people develop a sense of ownership over the ideas being discussed (Taylor and Kent, 2014).

We think that persuasive dialogue works best when both sides are willing to engage in genuine conversation, allowing room for new interpretations and mutual adaptation of ideas. This creates a stronger commitment to the message being shared because it is not just imposed but collaboratively explored. This form of communication goes beyond simply conveying information. It actively engages individuals in a meaningful exchange where emotions, personal values, and rational thought all play a role in shaping understanding (Folse et al., 2025). When people are part of an open and interactive discussion, they feel heard, valued, and respected. This emotional engagement is expected to create a stronger bond between participants, increasing the likelihood that they will not only understand the message but also internalise it on a deeper level. It can be proposed that the true dialogue requires openness, respect for differing viewpoints, and a willingness to adapt based on the ongoing exchange of ideas.

2.2 AI marketing as a strategic capability in micro enterprises

Artificial Intelligence (AI) marketing refers to the use of AI technologies to automate, enhance, and optimise marketing strategies (Vlačić et al., 2021), allowing businesses to better understand consumer behaviour and personalise interactions (Haleem et al., 2022). In the context of the current study, small businesses often struggle with time-consuming marketing tasks such as content creation, customer engagement, and data analysis, which AI can streamline through automation. AI-powered tools, such as chatbots, automated email campaigns, and social media scheduling platforms, enable small businesses to maintain an active online presence without requiring extensive manpower (Hoyer et al., 2020; Paschen et al., 2019). These technologies can handle routine customer inquiries, personalise communication, and analyse customer behaviour (Paschen et al., 2019). As such, all of these allow small business owners to focus on other critical operations.

Moreover, Huang and Rust (2021) argue that AI marketing tools are becoming increasingly accessible, with many software providers offering affordable solutions tailored for small businesses. Another major advantage of AI marketing for small-sized enterprises is the ability to create personalised customer experiences without requiring large-scale data analysis teams (Najib et al., 2020). AI-driven recommendation engines

and customer segmentation tools help small businesses understand customer preferences and deliver targeted marketing messages. For example, AI can analyse purchase history and browsing behaviour to suggest products or services that bring into line with individual customer needs. This level of personalisation increases customer satisfaction and enhances brand loyalty (Prentice et al., 2020), which is crucial for small businesses that rely on repeat customers and word-of-mouth marketing. Additionally, AI-powered sentiment analysis allows small businesses to monitor social media conversations, online reviews, and customer feedback in real time. Such frames, according to Thakur and Kushwaha, (2024), provide valuable insights into public perception.

2.3 Servitization and value co-creation in micro enterprises

Servitization is a process where companies move from selling just physical products to offering services alongside or instead of those products (Queiroz et al., 2020). This happens because companies recognise that customers often need more than just a product. They need support, expertise, and solutions that help them achieve better outcomes. Instead of treating a sale as the end of a transaction, servitization turns it into the beginning of a longer relationship between the company and the customer (Lightfoot et al., 2023). This approach allows businesses to provide continuous value, ensuring that their products are used effectively and remain relevant over time (Zahoor et al., 2023). Of course, the adoption of servitization requires a fundamental change in how businesses operate. They must rethink their value proposition and restructure their business models (Chatterjee et al., 2023).

Traditionally, companies have focused on designing, manufacturing, and selling products, with their success measured by the number of units sold. However, servitization changes this focus toward customer outcomes, meaning that success is determined by how well the product performs when combined with supporting services (Zahoor et al., 2023). This change influences every aspect of a business, from marketing strategies to pricing structures. In the context of micro businesses, the level of customer demand and expectations play a crucial role in shaping their servitization strategies (Kowalkowski et al., 2017). These businesses typically serve a smaller customer base, every interaction carries greater significance, meaning service failures or inconsistencies can have a major impact. This means that their strategies to servitization must align with the specific needs of their customers (Le-Dain et al., 2023). If customers do not see value in additional services or are unwilling to pay for them, it becomes difficult for micro-sized enterprises to justify the costs of servitization. On the other hand, if customers expect personalized services and ongoing support, businesses may feel pressured to provide them despite their limited capacity. This dynamic creates a perspective where businesses must carefully balance service offerings with their ability to deliver them effectively.

2.4 Celebrity endorsement and consumer perception

Celebrity endorsement is a marketing strategy in which businesses collaborate with well-known public figures to promote their products or services (Wang and Liu, 2022). For small-sized enterprises, celebrity endorsement can be a powerful marketing tool (Özer et al., 2022), but it comes with unique perspectives and considerations. Instead of relying on national or global celebrities, small enterprises can work with niche influencers on platforms like Instagram, TikTok, and YouTube. These influencers often have dedicated

and engaged followers who trust their recommendations, making their endorsements more authentic and relatable. We propose that a well-executed collaboration with an influencer can generate brand awareness, increase customer trust, and drive sales. Additionally, small businesses can explore barter collaborations, where they provide free products or services in exchange for promotional content, reducing the need for large financial investments.

Despite the potential benefits, small-sized enterprises must also be aware of the risks associated with celebrity endorsements. It is acceptable that the effectiveness of an endorsement depends heavily on how customers interpret the fit between the celebrity and the brand (Osei-Frimpong et al., 2019). However, choosing the wrong celebrity, for instance one who does not correspond with the brand's identity or who lacks credibility, can lead to wasted resources and even damage the brand's reputation (Chatzopoulou and Navazhylava, 2022). Additionally, since small businesses often rely on personal relationships and community trust, an inauthentic or overly commercialised endorsement may not resonate well with their target audience. Unlike large corporations that can afford to use big-name celebrities for mass appeal, small enterprises thrive on customer loyalty and word-of-mouth marketing. If a celebrity endorsement feels forced, insincere, or disconnected from the business's core values, customers may view it as a sales gimmick rather than a genuine recommendation.

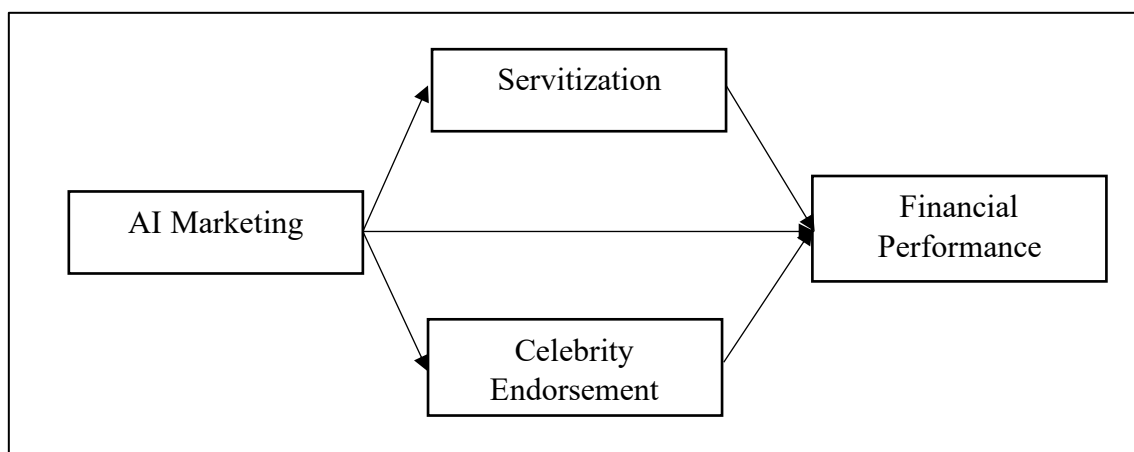
3. Proposed theoretical framework

We propose dialogic theory as the foundational theory to explain financial performance in small-sized enterprises. This theory is particularly relevant because it focuses on open, two-way communication (Uysal, 2018), where businesses actively engage with their customers rather than simply delivering messages in a one-directional manner. In small enterprises, communication is often more personal and interactive compared to large corporations (Centeno and Hart, 2012). As such it makes dialogic theory an ideal framework to understand how businesses build relationships that influence financial outcomes. Similarly, as mentioned by Khan et al. (2022), small businesses rely heavily on trust, reputation, and customer loyalty. This is where AI marketing, servitization, and celebrity endorsement come into play.

In this sense, these marketing and business strategies create various touchpoints for dialogue between businesses and customers. AI marketing, for example, facilitates real-time and personalised interactions ensuring that businesses can respond to customer needs efficiently. However, on its own, AI marketing might not be enough to drive strong financial results unless it leads to deeper customer relationships through additional services (servitization) or stronger brand credibility through endorsements. Servitization ensures that customers continue to interact with the business beyond the initial transactions that reinforce customer loyalty and long-term revenue streams (Queiroz et al., 2022). Meanwhile, celebrity endorsement enhances brand awareness and perceived trustworthiness (Muniz and Guzmán, 2021), which can enhance the impact of AI-driven marketing strategies.

Although both servitization and celebrity endorsement can improve business performance, they operate through different mechanisms. Servitization changes how firms create and deliver value by combining products with services that better meet customer needs (Kowalkowski et al., 2017; Rabetino et al., 2018). AI marketing directly supports this process because it helps firms collect customer data, predict preferences,

and personalise service offerings (Huang and Rust, 2021; Gebauer et al., 2021). As a result, AI and servitization share the same value creation process. In contrast, celebrity endorsement mainly shapes brand image, trust, and emotional appeal (Rocha et al., 2020; Wang and Liu, 2022). Its effectiveness depends on celebrity credibility, brand fit, and consumer identification rather than on AI capability (Albert et al., 2017; Lee et al., 2022). Therefore, AI marketing is expected to create stronger financial value through servitization than through celebrity endorsement. This distinction provides the theoretical basis for comparing the two mediating mechanisms in this study. We visualise our research model in Figure 1. The next discussion about the hypothesis developments examined in this study.



Source: Created by Authors

Figure 1. Research model

3.1 AI marketing and financial performance

AI marketing has increasingly been positioned as a strategic capability that reshapes how firms allocate marketing resources and interact with customers (Thakur and Kushwaha, 2024). For small-sized enterprises, the relevance of AI lies in its capacity to compensate for structural resource limitations. Rather than expanding manpower or advertising budgets, AI-enabled systems allow firms to automate communication, refine targeting accuracy, and monitor campaign effectiveness in real time (Campbell et al., 2020). Then, empirical evidence suggests that AI-powered marketing tools enhance operational efficiency and customer engagement while lowering marketing costs (Abrokwah-Larbi and Awuku-Larbi, 2024). We think that these efficiency gains are particularly meaningful for micro enterprises, where financial sustainability depends heavily on cost control and customer retention.

Beyond operational efficiency, Chintalapati and Pandey (2022) explain that AI marketing strengthens customer relationship management by transforming transactional data into predictive insight. Through behavioural tracking and pattern recognition, AI systems enable firms to segment customers, anticipate purchasing cycles, and personalise promotional messages. Such precision improves conversion rates and reduces promotional waste that marketing expenditure generates measurable returns. Since small enterprises often depend on repeat purchases and positive word-of-mouth to sustain growth (Li et al., 2023), improved retention and satisfaction can directly influence

revenue stability. Additionally, AI supports dynamic pricing strategies by analysing demand fluctuations and consumer responsiveness (Falahat et al., 2020), so that firms can optimise margins without compromising competitiveness. Based on this discussion we propose that:

H1: There is a relationship between AI marketing and financial performance.

3.2 AI marketing and servitization

Servitization requires firms to reconfigure their value logic from discrete product exchange toward continuous solution provision (Kowalkowski et al., 2017). This transformation depends on sustained customer visibility, relational continuity, and adaptive capability. AI marketing strengthens these dimensions by integrating data across customer touchpoints and converting behavioural signals into strategic insight. Through predictive analytics, automated interaction, and real-time feedback analysis, firms gain structured knowledge about preferences, usage cycles, and emerging expectations (Huang and Rust, 2021). Such intelligence reduces ambiguity in service design and supports proactive engagement rather than reactive response. Digital capability literature further suggests that firms equipped with advanced data-processing systems are more likely to pursue outcome-oriented models because they possess the informational depth necessary to personalise offerings and coordinate service delivery (Rabetino et al., 2018). In the micro-enterprise context examined in this study, where competitive advantage relies heavily on personalised experience and repeat patronage, AI marketing provides the structural support necessary to integrate service components into core offerings. Accordingly, firms that adopt AI marketing are expected to exhibit stronger servitization orientation. Based on this discussion we propose that:

H2: There is a relationship between AI marketing and servitization.

3.3 AI marketing and celebrity endorsement

We propose that AI marketing enhances endorsement execution and optimisation. Rather than relying solely on post-campaign evaluation, firms can continuously monitor engagement rates, sentiment polarity, click-through behaviour, and conversion patterns. This ongoing feedback loop enables rapid adjustment of message framing, content timing, and audience targeting. Research in intelligent marketing systems shows that AI-supported analytics improve campaign adaptability and increase communication effectiveness in dynamic digital environments (Hoyer et al., 2020; Vlačić et al., 2021). Because celebrity endorsement outcomes are highly sensitive to audience response (Elango and Suryakumar, 2022), such adaptive capability strengthens the persuasive impact of endorsed messages. For small enterprises that operate with limited promotional budgets (Falahat et al., 2020), analytical precision becomes strategically critical. In the context of celebrity endorsement, such precision allows small firms to maximise the financial impact of each collaboration while maintaining cost discipline and measurable performance outcomes (Abrokwah-Larbi and Awuku-Larbi, 2024). Based on this discussion we propose that:

H3: There is a relationship between AI marketing and celebrity endorsement

3.4 Servitization and financial performance

Prior research demonstrates that servitized firms outperform purely product-oriented firms in terms of financial stability (Kowalkowski et al., 2017). This advantage emerges because service integration deepens relational embeddedness and strengthens competitive insulation. By adding services to their core products, firms shift their focus from short-term sales to long-term customer relationships. Stronger relationships increase trust and commitment, which help secure repeat business and steady demand. Pansari and Kumar (2017) show that closer customer engagement is linked to higher revenue continuity. In the same vein, Lightfoot et al. (2013) argue that integrated services make offerings more distinctive and harder to imitate, which protects firms from direct price competition. Rather than competing on cost reductions, firms compete on reliability, responsiveness, and outcome quality. In a servitized model, we expect that customers assess whether the firm can consistently solve problems, respond quickly to changing needs, and deliver measurable results. So, as reliability improves and service responsiveness becomes visible, customers perceive lower risk and higher overall value. Based on this discussion we propose that:

H4: There is a relationship between servitization and financial performance

Moreover, we expect that servitization mediates the relationship between AI marketing and financial performance. Prior research shows that AI strengthens firms' ability to understand customers through data-driven insights, automation, and predictive analytics (Huang and Rust, 2021; Vlačić et al., 2021). However, digital capability does not automatically improve financial outcomes unless it reshapes how value is delivered. Recent studies on digital transformation emphasise that performance gains occur when technological intelligence is embedded into service-oriented business models rather than remaining at the communication level (Favoretto et al., 2022; Rosário and Dias, 2023). Therefore, the financial impact of AI marketing is not expected to be purely direct. Instead, it operates through servitization as the structural pathway that converts digital intelligence into sustained financial performance. Based on this discussion we propose that:

H5: Servitization mediates the relationship between AI marketing and financial performance.

3.5 Celebrity endorsement and financial performance

Celebrity endorsement has long been associated with improved business outcomes because it strengthens brand meaning and consumer confidence. Endorsers transfer symbolic value, such as credibility, attractiveness, and expertise, to the brand that may shape how consumers interpret product quality and trustworthiness (Rocha et al., 2020; Wang and Liu, 2022). Research in emerging markets, then, shows that celebrity attachment can influence brand attachment and loyalty, which are key drivers of repeat purchase behaviour (Özer et al., 2022; Osei-Frimpong et al., 2019). These psychological mechanisms move beyond simple awareness creation. It means that they influence perceived value, risk reduction, and purchase intention.

From a financial perspective, stronger brand credibility and emotional connection can translate into higher sales growth, improved customer acquisition efficiency, and enhanced retention rates. Muniz and Guzmán (2021) argue that endorsements can elevate brand equity, which strengthens long-term financial resilience. In micro-enterprise contexts, where reputation and word-of-mouth are central to survival (Centeno and Hart, 2012), endorsement-driven trust may accelerate market penetration and reinforce competitive positioning. Accordingly, we expect that celebrity endorsement can stimulate purchasing decisions and support revenue expansion. Based on this discussion we propose that:

H6: There is a relationship between celebrity endorsement and financial performance

The above positive effect of celebrity endorsement can be a mediator for the relationship between AI marketing and financial performance. Endorsement literature consistently demonstrates that credible and well-aligned celebrities enhance brand equity, purchase intention, and loyalty (Rocha et al., 2020; Özer et al., 2022), which in turn contribute to superior financial outcomes (Osei-Frimpong et al., 2019; Muniz and Guzmán, 2021). We see this as a conversion process in which AI-generated market intelligence strengthens the strategic execution of endorsements. As mentioned before, AI marketing improves the precision of audience profiling, content timing, and engagement measurement (Chintalapati and Pandey, 2022; Campbell et al., 2020). So, such analytical capability increases the likelihood that celebrity partnerships are congruent with consumer expectations and brand positioning. We agree with some scholars that stronger congruence enhances perceived authenticity and trust, which are central mechanisms driving endorsement effectiveness (Rocha et al., 2020). As trust and attachment deepen, consumers become more willing to purchase, recommend, and remain loyal to the brand, ultimately improving revenue and profitability. Based on this discussion we propose that:

H7: Celebrity endorsement mediates the relationship between AI marketing and financial performance.

4 Method

4.1 Research location and research procedure

We collected data by questionnaires from individuals purchasing food in culinary tourism areas in one of cities in East Java. It has experienced significant growth in micro-sized enterprises (MSEs), particularly in the culinary tourism sector, which serves as a vital economic driver for the local community. The selection of culinary tourism areas as the research site is highly strategic. As participants, only consumers who had purchased products from the selected micro culinary tourism businesses had direct experience with the firms' AI marketing activities, service offerings, and celebrity endorsement campaigns. This experience enabled respondents to assess the study variables more accurately than individuals who had no prior interaction with these businesses

For this study, the use of questionnaires is to measure multiple dimensions of consumer behaviour, including the impact of AI-driven marketing personalisation, consumer trust in celebrity endorsements, expectations of service quality in micro-businesses, and overall purchasing satisfaction. Of the 210 questionnaires distributed,

186 were returned. However, 28 questionnaires were incomplete and therefore excluded from the analysis. As a result, only 158 questionnaires were considered valid and processed for this study.

If looking at the work of Krieglstein et al. (2023), the questionnaire method allows for both structured responses and consumer insights so that it makes it an effective tool for understanding marketing effectiveness in tourism-based economies. Since food-related purchasing decisions in tourism settings are influenced by impulse, personalisation, and social validation (Kumar and Kumar, 2025), the data collected reflects authentic consumer behaviour rather than self-reported attitudes alone. Ethical considerations were prioritized during the data collection process, with all respondents participating voluntarily and anonymously, thereby improving data reliability. The study also acknowledges the increasing role of AI-powered marketing and celebrity-driven branding in shaping consumer engagement, particularly within emerging micro-enterprise ecosystems.

To deal with bias, the questionnaire also explained that there were no right or wrong answers, which helped reduce evaluation apprehension and social desirability bias. Operationally, respondents were approached on-site after completing their purchases and were briefly informed about the purpose of the study. Participation was voluntary and anonymous. After providing consent, participants were asked to complete a self-administered questionnaire that measured their perceptions of AI-driven marketing activities, service experience, celebrity endorsement influence, and perceived financial performance of the micro enterprises. The questionnaire used a 5 Likert-scale format to ensure consistent responses and required approximately 7–10 minutes to complete. To reduce response bias, researchers clarified that there were no right or wrong answers and that responses would be used solely for academic purposes. Completed questionnaires were screened for completeness before being included in the final dataset for analysis.

4.2 Measurement

The measurements in this study are adopted and refined from prior research. Financial performance was measured using four items developed by Okello et al. (2020), who proposed indicators covering revenue growth, profitability, cost efficiency, and market expansion within small-sized enterprises. These indicators provide a structured approach for assessing economic outcomes while incorporating objective financial metrics and subjective perceptions reported by business owners. AI marketing three measurement items were developed from Haleem et al. (2022), who highlighted AI's role in automation, predictive analytics, and data-driven decision-making.

Moreover, servitization was measured using four items developed from Kowalkowski et al. (2017) and Rabetino et al. (2018), both of which conceptualised servitization as a transition from product-based business models to service-oriented strategies. These items focus on evaluating the extent to which businesses integrate services into their offerings, enhance customer relationships, and establish recurring revenue streams. Finally, celebrity endorsement was measured using four items developed from Rocha et al. (2020), which observed credibility, attractiveness, expertise, and brand-consumer psychological connection in endorsement effectiveness. This construct evaluates how celebrity partnerships influence consumer trust, brand perception, and purchasing decisions. The operational definitions and measurement items are reported in Table 1.

Table 1. Operational Definitions and Measurement Items

Variable	Operational Definition	Measurement Items	Source
Financial Performance (FINPER)	The firm's perceived economic outcomes reflected in growth, profitability, efficiency, and market position.	1. The business experiences steady revenue growth. 2. The business achieves satisfactory profit levels. 3. The business manages operational costs efficiently. 4. The business expands its market share successfully.	Okello et al. (2020)
AI Marketing (AIMAR)	The extent to which a firm uses artificial intelligence technologies to support marketing decisions, automation, and customer engagement.	1. The business uses AI tools to automate marketing activities. 2. AI supports customer data analysis in the marketing strategy. 3. AI helps predict customer needs and preferences.	Haleem et al. (2022)
Servitization (SERV)	The degree to which a firm moves from a product-based model to a service-oriented strategy that strengthens customer relationships and value creation.	1. The business provides services that complement the products I purchase. 2. The business maintains an ongoing service relationship with me as a customer. 3. The business regularly introduces new or improved services to support its products. 4. The services provided by the business are offered on a continuous or subscription basis.	Kowalkowski et al. (2017); Rabetino et al. (2018)
Celebrity Endorsement (CELEN)	The effectiveness of celebrity partnerships in enhancing brand credibility, attractiveness, and consumer trust.	1. The celebrity associated with the brand has strong credibility. 2. The celebrity enhances the brand image and attractiveness. 3. The celebrity strengthens customer trust and connection with the brand. 4. The celebrity associated with the brand attracts many customers	Rocha et al. (2020)

Source: Created by Authors

4.3 Data analysis

We applied ‘Partial Least Squares Structural Equation Modelling’ (PLS-SEM) (Hair et al., 2019), to analyse our data and examine relationships among AI marketing, servitization, celebrity endorsement, and financial performance in small enterprises. This method was selected due to its ability to handle complex models with multiple constructs (Hair et al., 2019). It makes it highly suitable for this study, which investigates direct and indirect effects between marketing strategies and financial outcomes. Moreover, PLS-SEM was particularly relevant for this research due to its capacity to work with small sample sizes, non-normal data distributions, and complex hierarchical models (Hair et al., 2019).

In applying PLS-SEM, we estimated both the measurement and structural models simultaneously, which allowed us to assess the reliability and validity of constructs while identifying significant causal relationships among variables (Hair et al., 2019). As explained by Hair et al. (2019), the measurement model included factor loadings, Cronbach’s alpha, composite reliability, and average variance extracted (AVE). It is to ensure robust construct validity. Then, the structural model assessed path coefficients, t-statistics, R² values, and effect sizes. Practically, bootstrapping was used to increase the statistical rigor of significance testing that make the findings more generalizable and applicable to small business marketing strategies.

5 Results

This section is structured into two main parts: the assessment of the measurement model and the evaluation of the structural model.

5.1 Assessment of the measurement model

According to Hair et al. (2019), the measurement model is examined to evaluate how well the indicators represent the underlying constructs and to ensure the consistency and clarity of the measurement structure. For this study, the results of measurement model assessments are divided by two indicators, such convergent and discriminant validity (Hair et al., 2019). For the convergent validity, the results are reported in Table 2. Table 2 presents the factor loadings, Cronbach’s alpha, composite reliability, and variance inflation factor (VIF) values for each construct. As suggested, all indicator loadings exceed the recommended threshold of 0.50, ranging from 0.552 to 0.916. It indicates acceptable indicator reliability (Hair et al.2019).

Moreover, the Cronbach’s alpha values range from 0.615 to 0.809, and composite reliability values range from 0.776 to 0.874, which exceed the recommended threshold of 0.70. These results suggest satisfactory internal consistency reliability. Additionally, multicollinearity was assessed using the VIF values. All VIF values range from 1.145 to 3.550, which are below the critical value of 5.0 that multicollinearity is not a concern in the measurement model. Therefore, according to the work of Hair et al. (2019), the results demonstrate that the constructs exhibit adequate reliability and indicator validity.

Table 2. Factor loading, Cronbach Alpha and VIF

Variables	Items	Factor Loading	Cronbach Alpha	Composite Reliability	VIF
AI Marketing			0.712	0.835	
	AIM1	0.862			1.623
	AIM2	0.647			1.267
	AIM3	0.856			1.491
Celebrity Endorsement			0.731	0.831	
	CEN1	0.795			1.512
	CEN2	0.753			1.542
	CEN3	0.784			1.540
	CEN4	0.634			1.301
Financial Performance			0.809	0.874	
	FP1	0.676			1.327
	FP2	0.848			2.001
	FP3	0.916			3.550
	FP4	0.731			2.093
Servitization			0.615	0.776	
	SV1	0.762			1.587
	SV2	0.552			1.145
	SV3	0.633			1.170
	SV4	0.765			1.628

Source: Created by Authors

Building on the above, the analysis now proceeds to examine discriminant validity, which assesses the extent to which each construct is distinct from the others in the model (Hair et al., 2019). The results of discriminant validity are illustrated by Tables 3, 4 and 5.

Table 3. Fornell-Larcker Criterion

Variables	AIMAR	CELEN	FINPER	SERV
AIMAR	0.794			
CELEN	0.166	0.744		
FINPER	0.261	0.352	0.798	
SERV	0.345	0.169	0.491	0.684

Source: Created by Authors

Table 4. Cross Loadings

Items	AIMAR	CELEN	FINPER	SERV
AIM1	0.862	0.151	0.258	0.267
AIM2	0.647	-0.022	0.118	0.230
AIM3	0.856	0.202	0.221	0.319
CEN1	0.166	0.795	0.311	0.029
CEN2	0.139	0.753	0.214	0.069

Items	AIMAR	CELEN	FINPER	SERV
CEN3	0.102	0.784	0.283	0.200
CEN4	0.073	0.634	0.223	0.244
FP1	0.179	0.403	0.676	0.229
FP2	0.236	0.262	0.848	0.553
FP3	0.219	0.296	0.916	0.434
FP4	0.195	0.155	0.731	0.255
SV1	0.208	0.109	0.438	0.762
SV2	0.113	0.158	0.294	0.552
SV3	0.262	0.196	0.345	0.633
SV4	0.343	0.007	0.245	0.765

Source: Created by Authors

Table 2 shows that the square root of the AVE for each construct is higher than its correlations with other constructs. For example, the square root of AVE for AI Marketing (0.794) is greater than its correlations with Celebrity Endorsement (0.166), Financial Performance (0.261), and Servitization (0.345). Similar patterns are observed for all constructs, indicating adequate discriminant validity. Furthermore, table 3 presents the cross-loading values of each indicator. The results indicate that each item loads higher on its respective construct than on other constructs. For example, AIM1 loads 0.862 on AI Marketing, which is higher than its loadings on other constructs. This confirms that the measurement items appropriately represent their respective constructs (Hair et al., 2019).

Table 5. Heterotrait-Monotrait Ratio (HTMT)

Variables	AIMAR	CELEN	FINPER	SERV
AIMAR				
CELEN	0.219			
FINPER	0.328	0.448		
SERV	0.510	0.304	0.647	

Source: Created by Authors

For the third indicator of discriminant validity is The Heterotrait-Monotrait Ratio (HTMT). The result is reported in Table 4. As suggested, the HTMT values presented in Table 4 range from 0.219 to 0.647, which are below the recommended threshold of 0.85. This result further confirms that discriminant validity is established among the constructs (Hair et al., 2019). The results from the Fornell-Larcker criterion, cross-loadings, and HTMT ratio demonstrate that the constructs in the model are empirically distinct. Therefore, this gives us confidence that the data are satisfied, and the model is ready for the next step of analysis.

5.2 Assessment of the structural model

We reported our hypothesis testing in separate tables, such as direct effect (Table 6) and indirect effect (Table 7). As shown in Table 6, several hypotheses are supported while others are not. The results indicate that AI Marketing does not have a significant effect on Financial Performance ($\beta = 0.072$, $p = 0.344$), thus $H1$ is rejected. This finding suggests that if it is just the adoption of AI marketing tools, it may not immediately

translate into improved financial outcomes. Instead, the financial benefits of AI-based marketing initiatives may depend on complementary strategic mechanisms within the firm. Then, the study suggests that

AI Marketing has a significant positive effect on Servitization ($\beta = 0.345$, $p < 0.001$), supporting *H2*. This result implies that the implementation of AI-driven marketing capabilities can encourage firms to develop service-oriented offerings and customer-centric solutions. Consequently, AI marketing appears to play a strategic role in facilitating the transformation toward servitization-based business models.

Table 6. Hypothesis testing – Direct Effect

Paths	β	STDEV	Sig.	Notes
H1: AIMAR -> FINPER	0.072	0.076	0.344	Rejected
H2: AIMAR -> SERV	0.345	0.085	0.000	Accepted
H3: AIMAR -> CELEN	0.166	0.088	0.060	Rejected
H4: SERV -> FINPER	0.421	0.081	0.000	Accepted
H6: CELEN -> FINPER	0.269	0.076	0.000	Accepted

Source: Created by Authors

Interestingly, the relationship between AI Marketing and Celebrity Endorsement is not statistically significant ($\beta = 0.166$, $p = 0.060$), leading to the rejection of *H3*. This indicates that the utilization of AI in marketing does not necessarily influence firms' decisions to engage celebrity endorsers. Furthermore, Servitization has a significant positive effect on Financial Performance ($\beta = 0.421$, $p < 0.001$), supporting *H4*. Similarly, Celebrity Endorsement positively influences Financial Performance ($\beta = 0.269$, $p < 0.001$), supporting *H6*. This result indicates that the use of well-known endorsers can strengthen brand credibility and customer trust, which may ultimately improve financial results. Accordingly, celebrity endorsement remains an effective promotional strategy for enhancing firm performance.

Table 7. Hypothesis testing – Indirect Effect

Paths	β	STDEV	Sig.	Notes
H5: AIMAR -> SERV -> FINPER	0.145	0.044	0.001	Rejected
H7: AIMAR -> CELEN -> FINPER	0.045	0.026	0.083	Accepted

Source: Created by Authors

Furthermore, the mediation analysis results are presented in Table 7. As reported, the indirect effect of AI Marketing on Financial Performance through Servitization is significant ($\beta = 0.145$, $p = 0.001$). This finding indicates that servitization serves as an important mechanism through which AI marketing contributes to financial outcomes. In other words, AI-driven marketing capabilities appear to enhance financial performance when they support the development of service-oriented business strategies.

In contrast, the indirect effect of AI Marketing on Financial Performance through Celebrity Endorsement is not statistically significant ($\beta = 0.045$, $p = 0.083$). This result suggests that celebrity endorsement does not function as an effective intermediary channel linking AI marketing initiatives to improved financial performance. Therefore, the role of celebrity endorsement in this model appears to be more direct rather than mediating.

6 Discussion

The findings of this study offer a deeper understanding of how AI marketing connects with financial performance through more subtle and indirect paths. Even though AI marketing does not show a direct impact on financial performance or on celebrity endorsement, it plays an important role in shaping servitization. This means that AI marketing does not automatically translate into higher profits on its own. Instead, it helps firms redesign how they deliver value to customers. Through better data use, personalized communication, and smarter customer insights, AI marketing strengthens service systems and customer-focused strategies (Prentice et al., 2020). These improvements in service structure then create stronger relationships with customers, which eventually support better financial outcomes. In this sense, AI marketing works behind the scenes. It builds internal capabilities that later show their effect on financial results.

At the same time, both servitization and celebrity endorsement show clear contributions to financial performance, but they play different roles. The study suggests that servitization acts as a bridge that carries the influence of AI marketing toward financial outcomes. It transforms technological initiatives into real service improvements that customers can experience directly. Celebrity endorsement, on the other hand, affects financial performance in a more visible and market-oriented way. It strengthens brand image, trust, and attractiveness, which can encourage customer purchase decisions. However, celebrity endorsement does not explain how AI marketing leads to financial success. Only servitization performs this mediating role. This highlights that technology alone is not enough. Firms must translate AI capabilities into service excellence if they want to see meaningful financial benefits.

In terms of how these findings connect with existing scholarly discussions, each result is discussed in relation to its respective hypothesis. In doing so, the discussion does not just report whether a hypothesis is supported or not, but also explains how the evidence confirms, extends, or challenges prior studies. As such, the findings are positioned clearly within the broader academic conversation.

6.1 *The effect of AI marketing on financial performance*

The finding that AI marketing does not directly influence financial performance offers an important contribution to current scholarly debates. This finding does not suggest that AI marketing is ineffective. Instead, it indicates that no significant direct relationship was observed within the proposed model and research context. One possible explanation is that AI marketing creates financial value indirectly by strengthening other organisational capabilities, such as servitization, rather than influencing financial performance on its

own. Therefore, the findings suggest that the impact of AI marketing on financial performance may depend on the presence of intervening mechanisms.

Much of the existing literature presents digital technologies, big data analytics, and artificial intelligence as strategic tools that enhance efficiency, customer targeting, and decision quality, which then lead to superior firm performance (e.g., [Basu et al., 2024](#); [Huang and Rust, 2021](#)). However, many of these studies also imply that the benefits of AI are not automatic or immediate. Instead, they depend on how well organizations embed AI into their structures, routines, and value creation processes ([Chatterjee et al., 2023](#); [Chintalapati and Pandey, 2022](#)). In this sense, the absence of a direct effect in our study does not contradict prior research. Rather, it reinforces the idea that AI marketing is an enabling capability rather than a guaranteed performance driver. AI provides tools and insights, but financial results emerge only when firms translate these technological resources into concrete strategic actions.

This result also broadens prior studies that tend to assume a linear relationship between technological investment and financial outcomes. Research in strategic management and information systems has long argued that technology alone rarely produces competitive advantage unless it is combined with complementary assets such as business processes, culture, and managerial capabilities ([Schweikl and Obermaier, 2023](#)). Our finding supports this perspective by showing that AI marketing, on its own, does not directly raise financial performance. This associates with studies in digital transformation that caution against technological determinism, suggesting that firms often overestimate the immediate financial returns of AI initiatives ([Al-Matari et al., 2022](#); [Kolagar et al., 2022](#)). By showing a non-significant direct path, the study highlights the need to look beyond surface-level technological adoption and examine the mechanisms through which AI becomes strategically meaningful.

6.2 The effect of AI marketing on servitization

The positive relationship between AI marketing and servitization highlights the strategic role of intelligent technologies in reshaping how firms deliver value. This result complements emerging discussions in service-dominant logic and technology-enabled marketing, which argue that value is co-created through processes and interactions rather than generated solely by technological inputs ([da Silva and Cardoso, 2024](#)). As mentioned before, AI marketing enables firms to collect, analyze, and interpret large volumes of customer data, which helps them understand customer needs at a deeper level. This deeper understanding supports the shift from a product-focused logic to a service-oriented approach. Once firms use AI tools to personalize communication, predict preferences, and respond quickly to customer feedback ([Haleem et al., 2020](#)), they naturally move toward offering integrated solutions rather than standalone products. In this sense, AI marketing becomes a mechanism that strengthens servitization by encouraging firms to design experiences, support systems, and continuous service interactions around their core offerings. The study therefore shifts attention from the question of whether AI marketing increases financial performance to the more meaningful question of how and under what conditions it does so.

This finding also supports broader discussions in the servitization and digital transformation literature. Scholars such as argue that value is co-created through ongoing interactions between firms and customers, not through one-time transactions (Sore et al., 2023). AI marketing enhances these interactions by enabling real-time engagement and adaptive responses, which are central to service-based models. In addition, research on digital servitization suggests that advanced technologies play a key role in helping firms transition from product providers to solution providers (Rabetino et al., 2018; Favoretto et al., 2022). The significant link found in this study strengthens this argument by showing that AI marketing is not merely a promotional tool but an important driver that supports the structural shift toward servitization. Therefore, it demonstrates that if firms invest in AI-based marketing capabilities, they strengthen their ability to build service ecosystems that sustain long-term customer relationships and competitive advantage.

6.3 The effect of AI marketing on celebrity endorsement

The absence of a direct effect between AI marketing and celebrity endorsement offers an important theoretical insight. At first glance, one might expect that firms that invest heavily in advanced marketing technologies would also reshape their endorsement strategies. However, our findings suggest that these two domains operate through different strategic logics. AI marketing strengthens analytical capability, customer profiling, automation, and personalization (Gao and Liu, 2023; Huang and Rust, 2021). Celebrity endorsement, in contrast, is rooted in symbolic meaning, social influence, and identity transfer (Jain et al., 2024). This distinction helps explain why improvements in AI-driven marketing systems do not automatically translate into changes in endorsement decisions. This result indicates that traditional mechanisms such as celebrity endorsement retain strategic autonomy. This is attributed to studies that emphasize the continued importance of human and cultural elements in branding despite digital advancement (Jun et al., 2023). In this sense, celebrity endorsement functions through trust, familiarity, and emotional connection, elements that technology can support but not replace. Therefore, the absence of a direct link suggests that AI marketing enhances analytical precision, while celebrity endorsement strengthens symbolic capital.

6.4 The effect of servitization on financial performance

The positive relationship between servitization and financial performance highlights the strategic value of shifting from a pure product focus toward integrated service solutions. For instance, if firms move beyond selling products and begin to offer bundled services, maintenance support, customized solutions, and long-term customer engagement, they create new revenue streams and strengthen customer loyalty. This transition allows firms to build closer relationships with clients, which increases repeat purchases and reduces price competition. Prior studies on servitization argue that service-oriented models help firms differentiate themselves in competitive markets and generate more stable income over time (Rabetino et al., 2018; Favoretto et al., 2022). The significant positive effect found in this study supports this perspective by showing that firms that embrace servitization tend to achieve stronger financial outcomes.

This finding also supports service-dominant logic, which emphasizes that value is co-created through ongoing interaction rather than embedded solely in physical products (Ramaswamy and Ozcan, 2018). We view that servitization encourages firms to understand customer needs more deeply and to design offerings that solve problems rather than simply deliver goods. Such an approach strengthens trust, increases switching costs, and enhances long-term partnerships. From a strategic management perspective, servitization can be viewed as a dynamic capability that allows firms to adapt, reconfigure resources, and respond to changing market conditions (Kanninen et al., 2017). Therefore, as expected, this study extends prior research by providing empirical support for the idea that service transformation is not viewed just as a marketing trend but a core driver of sustainable financial success.

6.5 The mediating role of servitization on AI marketing and financial performance relationship

We suggest that the finding that servitization mediates the relationship between AI marketing and financial performance offers a fresh explanation of how digital capabilities generate economic value. Rather than acting as a direct profit driver, AI marketing appears to function as an enabling infrastructure that reshapes how firms understand, reach, and respond to customers. This insight supports prior research that positions artificial intelligence as a strategic resource that enhances decision quality, personalization, and customer insight (Basu et al., 2024; Huang and Rust, 2021). However, technology alone rarely guarantees superior financial performance. In this context, servitization serves as the capability that transforms AI-driven insights into structured service offerings, integrated solutions, and long-term relational value.

Moreover, this result strengthens and extends the literature on digital servitization. Scholars have argued that advanced technologies play a critical role in enabling firms to move from product-centric models toward service-oriented ecosystems (Gebauer et al., 2021; Chen et al., 2024). AI marketing enhances data visibility, predictive analytics, and customer profiling, which provide the informational backbone necessary for service customization and continuous engagement. Service-dominant logic further suggests that value emerges from ongoing interaction and co-creation rather than isolated transactions (Raddats et al., 2022). This perspective encourages a move from technology adoption toward capability integration. In this context, managers should not focus solely on AI tools but on how those tools reshape service design, customer interaction, and value propositions. In theoretical terms, this result contributes to a process-based understanding of performance generation, where digital capability, organizational transformation, and financial outcomes are sequentially connected.

6.7 The effect of celebrity endorsement and financial performance

The result shows that a positive and significant relationship between celebrity endorsement and financial performance. Through the transfer of image, values, and social status from the celebrity to the brand, ideally, firms are able to create stronger brand associations and higher levels of trust. This meaning transfer process, as explained by

Wang and Liu, (2022), suggests that celebrities carry cultural significance that can elevate brand perception. Moreover, this result broadens current discussions in the digital era by showing that human and cultural elements remain central to financial success. Although firms increasingly rely on data analytics, automation, and artificial intelligence to optimize marketing processes (Mishra et al., 2022), symbolic branding strategies continue to shape consumer attitudes and preferences. Under this study, celebrity endorsement operates through emotional resonance and aspirational appeal, which strengthens external perception and emotional appeal. Then, from a strategic standpoint, celebrity endorsement operates as an intangible asset that enhances competitive positioning. The financial gains associated with endorsement strategies therefore reflect the broader principle that brand-based resources, particularly those rooted in social visibility and reputation, can translate into economic returns.

6.8 The mediating role of celebrity endorsement on AI marketing and financial performance relationship

The absence of a mediating effect of celebrity endorsement on the relationship between AI marketing and financial performance provides an important theoretical insight. Although celebrity endorsement has a direct influence on financial performance, it does not serve as a pathway through which AI marketing translates into financial outcomes. This suggests that AI marketing and celebrity endorsement operate through relatively independent strategic routes. AI marketing strengthens internal capabilities such as data analysis, personalization, and customer insight (Chintalapati and Pandey, 2022), while celebrity endorsement functions as a branding mechanism that enhances image, credibility, and public appeal (Osei-Frimpong et al., 2019). The lack of mediation indicates that improvements in AI-driven marketing systems do not automatically reshape or strengthen endorsement strategies in ways that drive financial returns. In other words, celebrity endorsement contributes to financial success through its own pathway, but it does not carry the influence of AI marketing toward financial performance.

Prior studies show that successful celebrity endorsement depends heavily on congruence between the celebrity and the brand, perceived credibility, and consumer identification (Albert et al., 2017; Lee et al., 2022). These factors are largely independent of AI-driven capabilities. Even firms with advanced AI marketing systems may choose celebrities based on narrative fit, social trends, or reputational considerations. This supports arguments in branding literature that symbolic assets follow a different decision logic from technological resources (Centeno and Wang, 2017). In such contexts, the marginal contribution of AI-enhanced delivery may be limited if consumers question the authenticity or commercial motives of the celebrity. As a result, improvements in AI marketing do not automatically translate into stronger or more effective celebrity endorsement strategies.

7 Conclusion

This study offers a conceptual explanation of how AI marketing contributes to firm value within contemporary markets. The findings indicate that AI marketing does not translate

directly into financial performance. Instead, its influence operates through internal strategic transformation. Within the current study, servitization emerges as the central pathway that connects technological capability with economic outcomes. The results also clarify the distinct position of celebrity endorsement within the broader framework. Celebrity endorsement demonstrates a direct contribution to financial performance as a symbolic and reputational asset, yet it does not serve as a mechanism that links AI marketing to financial outcomes. This pattern indicates that technological resources and symbolic branding strategies operate through different strategic logics. AI marketing strengthens operational and service mechanisms, whereas celebrity endorsement enhances brand meaning and market perception. So we can argue that these elements contribute to firm performance in complementary but separate ways, which highlights that sustainable financial outcomes depend on both internal strategic transformation and external symbolic positioning.

8 Theoretical and practical implications

8.1 Theoretical implications

This study strengthens dialogic theory by demonstrating that financial performance in micro-sized enterprises emerges from relational depth rather than technological presence alone. Dialogic theory emphasises reciprocal and relational communication where meaning is co-created through interaction (Kent and Lane, 2017; Buchanan-Oliver and Fitzgerald, 2016). The findings show that AI marketing does not directly translate into financial gain, which reinforces the view that dialogue must move beyond automated messaging and personalised targeting. In this point, the results suggest that AI should be viewed as an enabling capability rather than a direct driver of financial outcomes. AI creates value only after firms use it to improve service delivery and customer value creation through servitization. This finding extends current understanding of AI-enabled SME performance by showing that technology adoption alone is insufficient. Firms must combine AI capability with service transformation to convert technological resources into financial value.

AI systems may enhance responsiveness and customer insight (Huang and Rust, 2021; Chintalapati and Pandey, 2022), yet economic value materialises only when such intelligence reshapes how firms design and deliver services. This supports the argument that digital tools act as dialogic facilitators rather than performance guarantees (Abrokwah-Larbi et al., 2024). In small enterprises, where trust and relational proximity shape purchasing behaviour (Centeno and Hart, 2012; Khan et al., 2022), financial outcomes depend on how effectively firms embed digital capability into sustained interaction structures.

Moreover, prior studies acknowledge that technology investment produces uneven results, particularly among small firms that face structural constraints (Teirlinck, 2017; Vlačić et al., 2021). Strategic management research further argues that competitive advantage arises from the combination of technological resources with complementary organisational processes (Schweikl and Obermaier, 2023; Al-Matari et al., 2022; Kolagar et al., 2022). The present results reinforce this position by showing that AI marketing functions as an enabling infrastructure rather than a direct profit driver. Servitization

becomes the mechanism that converts digital intelligence into sustained revenue, which supports work that positions service transformation as a stabiliser of financial performance (Kowalkowski et al., 2017; Rabetino et al., 2018). Studies on digital servitization emphasise that performance gains occur when data analytics, predictive insight, and automation are embedded within service-oriented models (Favoretto et al., 2022; Rosário and Dias, 2023). The position of our research broadens that conversation by demonstrating that the pathway from AI to performance operates through structural value reconfiguration rather than through promotional efficiency alone. This perspective moves the focus from AI as a marketing tool to AI as a strategic capability that supports service transformation. It also explains why the direct relationship between AI marketing and financial performance was not significant in this study.

Additionally, the results refine our understanding of how symbolic and technological capabilities coexist in small enterprise strategy. Celebrity endorsement enhances financial performance through trust transfer, brand meaning, and emotional resonance (Rocha et al., 2020; Wang and Liu, 2022; Özer et al., 2022; Osei-Frimpong et al., 2019; Muniz and Guzmán, 2021). At the same time, endorsement effectiveness depends heavily on authenticity and congruence rather than analytical optimisation (Rocha et al., 2020). AI marketing strengthens data precision, customer profiling, and campaign monitoring (Campbell et al., 2020; Huang and Rust, 2021; Chintalapati and Pandey, 2022), yet such capability does not automatically reshape symbolic alignment between brand and celebrity. This distinction shows that technological intelligence and reputational capital follow different strategic logics. In micro-enterprise environments where visibility, responsiveness, and relational credibility determine survival, financial performance depends on how firms balance service-based structural depth with image-based relational trust. The theoretical contribution lies in clarifying that digital capability enhances internal value architecture, while symbolic endorsement strengthens external perception, and sustainable financial outcomes emerge from the deliberate alignment of both domains rather than from technological advancement alone.

8.2 *Practical implications*

Beside the theoretical implications, the findings offer clear practical guidance for owners and managers of micro and small enterprises. First, investment in AI marketing should not be justified solely on the expectation of immediate financial returns. AI tools can improve targeting accuracy, customer profiling, and communication efficiency (Huang and Rust, 2021; Chintalapati and Pandey, 2022), but financial gains appear only when these insights reshape how value is delivered. Managers therefore need to translate customer data into structured service improvements. This may include personalised menus, faster response systems, customised promotions, or bundled service experiences that increase repeat visits. In competitive culinary tourism areas, service depth becomes a stronger driver of revenue stability than promotional sophistication alone. Owners should view AI as a support system that strengthens service design rather than as a shortcut to profit.

The results also provide important direction regarding celebrity endorsement. Although endorsement contributes positively to financial performance through credibility

and trust transfer (Rocha et al., 2020; Wang and Liu, 2022; Muniz and Guzmán, 2021), it does not act as a bridge between AI marketing and financial outcomes. This means firms should manage endorsement and digital capability as complementary but separate strategies. Small enterprises should prioritise authenticity, brand–celebrity fit, and audience relevance rather than relying only on analytical optimisation. Collaboration with niche influencers who share community values may produce stronger relational impact than expensive celebrity contracts (Özer et al., 2022). Managers should ensure that endorsement feels consistent with brand identity and customer expectations, since trust and word-of-mouth remain central to small business success (Centeno and Hart, 2012; Khan et al., 2022). A balanced strategy that combines service excellence supported by AI with credible symbolic partnerships is more likely to generate sustainable financial growth.

9 Limitations and suggestions for further research

This study has several limitations that open space for deeper inquiry. The data rely on a cross-sectional design which captures perceptions at one point in time. Such a design limits the ability to observe how AI marketing strategies and servitization evolve across different business phases. The study also focuses on specific business within a particular context, which may reduce the breadth of generalization across industries or countries that face different technological readiness or market structures. In addition, the use of perceptual measures may reflect managerial views that carry subjective bias, especially in areas such as financial performance and celebrity endorsement effectiveness. Future research may employ longitudinal designs which allow scholars to examine dynamic capability development over time. Researchers may also collect multi-source data that combine financial records, customer evaluations, and digital analytics to strengthen robustness and reduce potential bias. Additionally, future studies may expand the conceptual model by introducing boundary conditions that shape the impact of AI marketing. Variables such as organizational learning capability, digital culture, environmental turbulence, or competitive intensity may clarify under which conditions AI marketing translates into stronger servitization outcomes.

References

- Abrokwah-Larbi, K., & Awuku-Larbi, Y. (2024). The impact of artificial intelligence in marketing on the performance of business organizations: evidence from SMEs in an emerging economy. *Journal of Entrepreneurship in Emerging Economies*, 16(4), 1090-1117.
- Albert, N., Ambroise, L., & Valette-Florence, P. (2017). Consumer, brand, celebrity: which congruency produces effective celebrity endorsements?. *Journal of Business Research*, 81, 96-106.
- Al-Matari, A. S., Amiruddin, R., Aziz, K. A., & Al-Sharafi, M. A. (2022). The impact of dynamic accounting information system on organizational resilience: the mediating role of business processes capabilities. *Sustainability*, 14(9), 4967.
- Basu, R., Aktar, M. N., & Kumar, S. (2024). The interplay of artificial intelligence, machine learning, and data analytics in digital marketing and promotions: A review and research agenda. *Journal of Marketing Analytics*, 1-21.

- Buchanan-Oliver, M., & Fitzgerald, E. M. (2016). Industry and agency views of social media: Issues implementing dialogic communication. *Journal of Marketing Communications*, 22(4), 437-454.
- Campbell, C., Sands, S., Ferraro, C., Tsao, H. Y. J., & Mavrommatis, A. (2020). From data to action: How marketers can leverage AI. *Business horizons*, 63(2), 227-243.
- Centeno, D., & Wang, J. J. (2017). Celebrities as human brands: An inquiry on stakeholder-actor co-creation of brand identities. *Journal of business research*, 74, 133-138.
- Centeno, E., & Hart, S. (2012). The use of communication activities in the development of small to medium-sized enterprise brands. *Marketing Intelligence & Planning*, 30(2), 250-265.
- Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2023). Business hybrid offerings by manufacturing SMEs: impact of servitization on internationalization of manufacturing SMEs. *International Marketing Review*, 40(4), 585-611.
- Chatzopoulou, E., & Navazhylava, K. (2022). Ethnic brand identity work: Responding to authenticity tensions through celebrity endorsement in brand digital self-presentation. *Journal of Business Research*, 142, 974-987.
- Chen, L., Peng, Y., & Luo, J. (2024). Benefit distribution and stability analysis of enterprise digital servitization ecosystems from the perspective of value cocreation. *Journal of Business & Industrial Marketing*, 39(9), 2003-2020.
- Chintalapati, S., & Pandey, S. K. (2022). Artificial intelligence in marketing: A systematic literature review. *International Journal of Market Research*, 64(1), 38-68.
- da Silva, A., & Cardoso, A. J. M. (2024). Value creation in technology-driven ecosystems: Role of coopetition in industrial networks. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(3), 2343-2359.
- Elango, S., & Suryakumar, M. (2022). Entrepreneurial celebrity endorsement and its influences on purchase behaviour. *International Journal of system assurance engineering and management*, 1-9.
- Falahat, M., Ramayah, T., Soto-Acosta, P., & Lee, Y. Y. (2020). SMEs internationalization: The role of product innovation, market intelligence, pricing and marketing communication capabilities as drivers of SMEs' international performance. *Technological forecasting and social change*, 152, 119908.
- Favoretto, C., Mendes, G. H., Oliveira, M. G., Cauchick-Miguel, P. A., & Coreynen, W. (2022). From servitization to digital servitization: how digitalization transforms companies' transition towards services. *Industrial marketing management*, 102, 104-121.
- Cauchick-Miguel, P. A., & Coreynen, W. (2022). From servitization to digital servitization: How digitalization transforms companies' transition towards services. *Industrial marketing management*, 102, 104-121.
- Folse, J. A. G., Bock, D. E., Mangus, S. M., & Hall, K. K. L. (2025). Online chat encounters: Satisfying customers through dialogical interaction. *Journal of Business Research*, 190, 115197.
- Gao, Y., & Liu, H. (2023). Artificial intelligence-enabled personalization in interactive marketing: a customer journey perspective. *Journal of research in interactive marketing*, 17(5), 663-680.

- Gebauer, H., Paiola, M., Saccani, N., & Rapaccini, M. (2021). Digital servitization: Crossing the perspectives of digitization and servitization. *Industrial Marketing Management*, 93, 382-388.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Haleem, A., Javaid, M., Qadri, M. A., Singh, R. P., & Suman, R. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. *International Journal of Intelligent Networks*, 3, 119-132.
- Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of interactive marketing*, 51(1), 57-71.
- Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49, 30-50.
- Jain, P., Jain, P., & Jain, A. (2024). A study on how celebrity endorsements affect business performance through evaluation of consumer preferences. *Global Business Review*, 09721509241257624.
- Jun, M., Han, J., Zhou, Z., & Eisingerich, A. B. (2023). When is celebrity endorsement effective? Exploring the role of celebrity endorsers in enhancing key brand associations. *Journal of Business Research*, 164, 113951.
- Kanninen, T., Penttinen, E., Tinnilä, M., & Kaario, K. (2017). Exploring the dynamic capabilities required for servitization: The case process industry. *Business Process Management Journal*, 23(2), 226-247.
- Kent, M. L., & Lane, A. B. (2017). A rhizomatous metaphor for dialogic theory. *Public Relations Review*, 43(3), 568-578.
- Khan, R. U., Salamzadeh, Y., Iqbal, Q., & Yang, S. (2022). The impact of customer relationship management and company reputation on customer loyalty: The mediating role of customer satisfaction. *Journal of relationship marketing*, 21(1), 1-26.
- Kolagar, M., Parida, V., & Sjödin, D. (2022). Ecosystem transformation for digital servitization: A systematic review, integrative framework, and future research agenda. *Journal of Business Research*, 146, 176-200.
- Kowalkowski, C., Gebauer, H., Kamp, B., & Parry, G. (2017). Servitization and deservitization: Overview, concepts, and definitions. *Industrial Marketing Management*, 60, 4-10.
- Krieglstein, F., Beege, M., Rey, G. D., Sanchez-Stockhammer, C., & Schneider, S. (2023). Development and validation of a theory-based questionnaire to measure different types of cognitive load. *Educational Psychology Review*, 35(9), 1-37.
- Kumar, S., & Kumar, S. (2025). Social media's sway: how social comparison on social media stimulates impulse travelling; serial mediation study on Indian millennials tourists. *Journal of Hospitality and Tourism Insights*, 8(1), 138-160.
- Le-Dain, M. A., Benhayoun, L., Matthews, J., & Liard, M. (2023). Barriers and opportunities of digital servitization for SMEs: the effect of smart Product-Service System business models. *Service Business*, 17(1), 359-393.
- Lee, J. S., Chang, H., & Zhang, L. (2022). An integrated model of congruence and credibility in celebrity endorsement. *International Journal of Advertising*, 41(7), 1358-1381.

- Li, S., Chen, J., & Chen, Y. (2023). The effect of repeat purchase information in electronic word-of-mouth (eWOM) on purchase intention. *Journal of Consumer Behaviour*, 22(6), 1493-1508.
- Lightfoot, H., Baines, T., & Smart, P. (2013). The servitization of manufacturing: A systematic literature review of interdependent trends. *International Journal of Operations & Production Management*, 33(11/12), 1408-1434.
- Martinelli, E. M., & Tunisini, A. (2024). Digitalization in Italian SMEs: the transformation of marketing channels. *Italian Journal of Marketing*, 2024(4), 445-474.
- Mishra, S., Ewing, M. T., & Cooper, H. B. (2022). Artificial intelligence focus and firm performance. *Journal of the Academy of Marketing Science*, 50(6), 1176-1197.
- Muniz, F., & Guzmán, F. (2021). Overcoming the conflicting values of luxury branding and CSR by leveraging celebrity endorsements to build brand equity. *Journal of Brand Management*, 28, 347-358.
- Najib, M., Septiani, S., & Nurlaela, S. (2020). The role of innovation, entrepreneurial self-efficacy and local uniqueness on marketing performance in small and medium-sized restaurants. *Journal of Foodservice Business Research*, 23(6), 499-519.
- Okello Candiya Bongomin, G., Mpeera Ntayi, J., Munene, J. C., & Akol Malinga, C. (2017). The relationship between access to finance and growth of SMEs in developing economies: Financial literacy as a moderator. *Review of International Business and strategy*, 27(4), 520-538.
- Osei-Frimpong, K., Donkor, G., & Owusu-Frimpong, N. (2019). The impact of celebrity endorsement on consumer purchase intention: An emerging market perspective. *Journal of marketing theory and practice*, 27(1), 103-121.
- Özer, M., Özer, A., Ekinci, Y., & Koçak, A. (2022). Does celebrity attachment influence brand attachment and brand loyalty in celebrity endorsement? A mixed methods study. *Psychology & Marketing*, 39(12), 2384-2400.
- Pansari, A., & Kumar, V. (2017). Customer engagement: the construct, antecedents, and consequences. *Journal of the academy of marketing science*, 45(3), 294-311.
- Paschen, J., Kietzmann, J., & Kietzmann, T. C. (2019). Artificial intelligence (AI) and its implications for market knowledge in B2B marketing. *Journal of business & industrial marketing*, 34(7), 1410-1419.
- Prentice, C., Dominique Lopes, S., & Wang, X. (2020). The impact of artificial intelligence and employee service quality on customer satisfaction and loyalty. *Journal of Hospitality Marketing & Management*, 29(7), 739-756.
- Queiroz, S. A., Mendes, G. H., Silva, J. H., Ganga, G. M., Cauchick Miguel, P. A., & Oliveira, M. G. (2020). Servitization and performance: impacts on small and medium enterprises. *Journal of Business & Industrial Marketing*, 35(7), 1237-1249.
- Rabetino, R., Harmsen, W., Kohtamäki, M., & Sihvonen, J. (2018). Structuring servitization-related research. *International journal of operations & production management*, 38(2), 350-371.
- Raddats, C., Naik, P., & Bigdeli, A. Z. (2022). Creating value in servitization through digital service innovations. *Industrial Marketing Management*, 104, 1-13.
- Ramaswamy, V., & Ozcan, K. (2018). What is co-creation? An interactional creation framework and its implications for value creation. *Journal of business research*, 84, 196-205.

- Rocha, P. I., Caldeira de Oliveira, J. H., & Giralaldi, J. D. M. E. (2020). Marketing communications via celebrity endorsement: an integrative review. *Benchmarking: An International Journal*, 27(7), 2233-2259.
- Rosário, A. T., & Dias, J. C. (2023). How has data-driven marketing evolved: Challenges and opportunities with emerging technologies. *International Journal of Information Management Data Insights*, 3(2), 100203.
- Schmitt, M. (2023). Automated machine learning: AI-driven decision making in business analytics. *Intelligent Systems with Applications*, 18, 200188.
- Schweikl, S., & Obermaier, R. (2023). Lost in translation: IT business value research and resource complementarity-an integrative framework, shortcomings and future research directions. *Management Review Quarterly*, 73(4), 1713-1749.
- Sore, S., Saunila, M., Ukko, J., & Helkkula, A. (2023). Business-to-business value co-creation: Suppliers' perspective of essential information systems capabilities. *Journal of creating value*, 9(1), 81-106.
- Taylor, M., & Kent, M. L. (2014). Dialogic engagement: Clarifying foundational concepts. *Journal of public relations research*, 26(5), 384-398.
- Teirlinck, P. (2017). Configurations of strategic R&D decisions and financial performance in small-sized and medium-sized firms. *Journal of Business Research*, 74, 55-65.
- Thakur, J., & Kushwaha, B. P. (2024). Artificial intelligence in marketing research and future research directions: Science mapping and research clustering using bibliometric analysis. *Global Business and Organizational Excellence*, 43(3), 139-155.
- Uysal, N. (2018). On the relationship between dialogic communication and corporate social performance: Advancing dialogic theory and research. *Journal of Public Relations Research*, 30(3), 100-114.
- Vlačić, B., Corbo, L., e Silva, S. C., & Dabić, M. (2021). The evolving role of artificial intelligence in marketing: A review and research agenda. *Journal of business research*, 128, 187-203.
- Wang, S., & Liu, M. T. (2022). Celebrity endorsement in marketing from 1960 to 2021: a bibliometric review and future agenda. *Asia Pacific Journal of Marketing and Logistics*, 35(4), 849-873.
- Wirtz, J. G., & Zimbres, T. M. (2018). A systematic analysis of research applying 'principles of dialogic communication' to organizational websites, blogs, and social media: Implications for theory and practice. *Journal of public relations research*, 30(1-2), 5-34.
- Zahoor, N., Christofi, M., & Nwoba, A. C. (2023). International servitization of SMEs in emerging markets: antecedents and boundary conditions. *International Marketing Review*, 40(4), 693-717.