THE DIGITAL PRINTING BUSINESS NICHE IN LOCAL CREATIVE INDUSTRIES: AN INTEGRATIVE MODEL OF STRATEGIC MANAGEMENT, MARKETING INNOVATION, AND OPERATIONAL SUSTAINABILITY

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Abstract

This study explores the strategic positioning of digital printing businesses within local creative industries, focusing on the integration of strategic management, marketing innovation, and operational sustainability. The objective of this research is to develop an integrative model that connects these three core dimensions to enhance competitiveness and long-term viability in the digital printing business. Using a mixed-methods approach involving in-depth interviews, case studies, and survey data analysis, this study examines how strategic alignment and marketing innovation influence operational sustainability in the digital printing sector. The findings indicate that firms with strong strategic management practices and innovative marketing approaches demonstrate higher adaptability and operational efficiency. The proposed integrative model provides a theoretical and practical framework for managers in local creative industries to strengthen their market positioning while ensuring sustainable operations. The study contributes to the advancement of strategic management theory by linking innovation-driven marketing with sustainability practices in emerging creative sectors.

Keywords: Strategic Management; Marketing Innovation; Operational Sustainability

INTRODUCTION

The rapid development of the creative economy has reshaped how small and medium enterprises (SMEs) compete in dynamic markets. Within this broader context, the **digital printing industry** has emerged as a vital business niche that connects art, technology, and entrepreneurship. Digital printing firms in local creative industries particularly in emerging economies such as Indonesia play an increasingly important role in supporting visual communication, product personalization, and local brand identity (Hidayat & Putra, 2021). As customers demand higher-quality, faster, and more sustainable print solutions, firms must adapt by integrating strategic management, marketing innovation, and operational sustainability.

Strategic management provides organizations with direction, coherence, and long-term focus (Porter, 2021). It involves the formulation and implementation of strategies that enable a firm to achieve a sustainable competitive advantage. In the case of digital printing SMEs, strategic management becomes a central mechanism for resource allocation, innovation prioritization, and market responsiveness (Barney & Hesterly, 2020). Without strategic alignment, firms risk fragmentation of effort and inefficiency in responding to customer trends or technological changes.

Meanwhile, marketing innovation is a critical driver that differentiates creative enterprises. According to Schumpeter's theory of innovation (Tidd & Bessant, 2020), the ability to generate new marketing approaches such as digital campaigns, customer co-creation, and personalized service experiences can determine a firm's market relevance. In digital printing, innovation is not limited to products or technology; it extends to how firms communicate value to customers. For instance, adopting online design tools, integrating social media promotion, or collaborating with local artists can transform conventional printing into a vibrant creative ecosystem (Ratten, 2022).

Operational sustainability, the third dimension, has become a fundamental expectation in the twenty first century. The growing environmental awareness among customers and regulatory frameworks forces businesses to adopt sustainable production methods. Digital printing companies that use eco-friendly inks, reduce material waste, and optimize energy consumption are not only fulfilling ethical responsibilities but also improving their cost efficiency and brand image (Kamal & Nordin, 2021). Sustainability thus intersects with strategic management and innovation to shape long-term competitiveness.

However, existing research tends to treat these three dimensions, strategy, innovation, and sustainability separately. Few studies have developed **an integrative model** explaining how these elements interact systematically within small creative businesses. The digital printing sector, especially at the local level, provides an ideal context for studying such integration due to its high dependence on innovation, flexibility, and environmental adaptation (Setiawan et al., 2022).

From a theoretical standpoint, this study is grounded in the **Resource-Based View (RBV)** and the **Dynamic Capabilities Theory**. RBV argues that firms achieve sustainable competitive advantage by leveraging unique, valuable, and inimitable resources (Barney, 1991; Teece, 2020). Dynamic capabilities extend this argument by emphasizing the firm's ability to reconfigure and renew its resources in response to environmental changes (Teece, Pisano, & Shuen, 2018). These theoretical lenses help explain how digital printing businesses can integrate strategic management and marketing innovation to enhance operational sustainability and competitiveness.

This research is also aligned with the **Triple Bottom Line (TBL)** framework proposed by Elkington (1998), which highlights three performance dimensions: economic, environmental, and social. The digital printing industry embodies all three, as firms must maintain profitability, reduce environmental impact, and contribute to local creative communities.

In Indonesia, the digital printing industry has become an essential part of the creative economy, especially in provinces like South Kalimantan. Local entrepreneurs increasingly rely on digital printing for marketing materials, packaging, events, and small-scale manufacturing (Rahman & Utami, 2023). Yet, many SMEs struggle to maintain strategic alignment across business units or to innovate effectively in a competitive market. Additionally, sustainability awareness among local entrepreneurs remains fragmented, with few adopting structured eco-friendly processes. Access to capital, however, remains a constraint for many such MSMEs, for which Islamic contracts such as rahn have been proposed as capitalization solutions (Rizki et al., 2022).

Therefore, this study aims to bridge this gap by developing an **integrative model** that connects **strategic management**, **marketing innovation**, and **operational sustainability** in the digital printing sector. Specifically, it seeks to:

1. Identify key factors influencing strategic management practices in local digital printing businesses.

2. Explore how marketing innovation enhances competitive advantage and customer engagement.
3. Examine the role of operational sustainability in ensuring long-term performance.
4. Propose an integrative framework combining these three dimensions to strengthen business competitiveness.

By addressing these objectives, the study contributes theoretically and practically. It advances the understanding of how small creative firms can achieve sustained competitiveness through holistic management. Practically, it provides insights for policymakers and entrepreneurs in developing strategic models that promote innovation while maintaining environmental responsibility.

In summary, the integration of strategy, innovation, and sustainability is not merely a theoretical ideal, it is a strategic necessity. As global competition and environmental pressures intensify, firms in local creative industries must rethink their management paradigms. This research presents a structured approach to doing so, grounded in qualitative evidence from the digital printing businesses of Banjarmasin.

METHOD

Research Design

This research employed a descriptive qualitative approach to understand the complex integration between strategic management, marketing innovation, and operational sustainability within the digital printing sector. A qualitative design was chosen because it enables in-depth exploration of managerial perceptions, strategic processes, and operational realities that are often missed in quantitative surveys (Creswell & Poth, 2021). The research design aimed to uncover how managers conceptualize, implement, and evaluate strategic actions in an increasingly competitive creative industry environment.

A multiple case study method was used to provide a comprehensive understanding of different business contexts while maintaining analytical depth (Yin, 2020). The cases involved small and medium-sized digital printing enterprises (SMEs) located in Banjarmasin, South Kalimantan, representing a diverse range of products, customer bases, and technological capabilities. Each case provided unique insights into how strategic management practices align with marketing innovation and sustainability efforts.

Participants and Data Sources

The participants were 10 business owners and managers (coded as P1–P10) from established digital printing firms operating for at least five years. The firms were selected through purposive sampling, ensuring diversity in size, customer segment, and ownership type. Each participant had decision-making responsibilities in marketing, operations, or strategic planning.

Data were gathered through:

1. Semi-structured interviews (lasting 30–60 minutes each), focused on strategic vision, innovation activities, and sustainability practices.
2. Observation of production processes, equipment use, and customer interaction to verify statements made during interviews.
3. Document analysis, including marketing materials, strategic plans, and financial reports when available.

Data Collection Procedures

Data collection took place between February and June 2025. Each interview was recorded with consent and transcribed verbatim. The researcher followed ethical research standards, ensuring confidentiality and voluntary participation. To minimize bias, triangulation was conducted across interviews, documents, and field observations (Flick, 2018).

Data Analysis

The analysis followed thematic analysis procedures (Braun & Clarke, 2019). Transcripts were coded using NVivo 14 software, allowing for systematic categorization of emerging themes. The process consisted of:

1. Familiarization with data through repeated reading of transcripts.
2. Generation of initial codes reflecting strategy, innovation, and sustainability.
3. Searching for patterns and connections among codes.
4. Reviewing themes for consistency with theoretical frameworks (RBV, TBL, and Dynamic Capabilities).
5. Interpreting data to build the integrative conceptual model.

Trustworthiness and Validation

The study ensured credibility through data triangulation, member checking, and peer debriefing with academic supervisors. Transferability was addressed by providing detailed descriptions of the research context. Dependability and confirmability were enhanced through an audit trail documenting all research decisions and analytical procedures (Lincoln & Guba, 1985).

FINDINGS

The findings reveal three dominant and interrelated themes explaining how strategic management, marketing innovation, and operational sustainability interact within local digital printing enterprises. The integration of these themes forms the foundation for the proposed integrative model (see *Figure 1*).

Theme 1: Strategic Agility and Organizational Alignment

All participants highlighted the importance of strategic clarity and agility. Successful digital printing firms demonstrated alignment between long-term vision, operational capability, and customer orientation. Firms with well-defined strategic plans responded faster to technological shifts and customer demands.

As noted by one participant:

"We continuously revise our strategy every six months, not just yearly. The market moves fast, so if we don't adapt, we lose clients to more agile competitors." (P4)

Strategic management practices also influenced the allocation of resources for innovation. Owners who viewed marketing as a strategic investment achieved better results in brand visibility and sales growth. The integration between leadership commitment and operational flexibility was key in sustaining competitiveness.

Theme 2: Marketing Innovation and Digital Engagement

Marketing innovation emerged as the most visible differentiator among firms. Participants implemented digital tools such as social media advertising, online customer portals, and collaborations with local artists. These initiatives enhanced customer interaction and brand engagement. The power of social media to mobilize consumers is also evident beyond commercial promotion, as in its role in driving Muslim consumer boycotts in Indonesia (Rizki et al., 2025).

"When we allowed customers to design their own templates online, orders increased 40% in three months. It changed how people view printing—not as a service, but as a creative experience." (P2)

Marketing innovation also played a role in expanding product lines, such as personalized merchandise, eco-friendly packaging, and digital signage. This aligns with recent studies emphasizing customer co-creation and experiential value as key to modern marketing strategies (Kotler et al., 2021; Ratten, 2022).

Theme 3: Operational Sustainability and Environmental Awareness

Sustainability was found to be both an ethical and strategic issue. Several businesses adopted eco-solvent inks, biodegradable media, and waste segregation systems. Although initial costs were higher, participants reported long-term benefits in brand reputation and cost savings. Systematic integrity management along the supply chain has similarly been emphasized in other Indonesian sectors, such as halal logistics (Rizki et al., 2023).

"We switched to eco-solvent inks because customers started asking about greener options. It reduced waste and became a selling point." (P3)

Operational sustainability also intersected with efficiency improvements. Firms implemented maintenance schedules and digital workflow management to reduce energy consumption. Such initiatives resonated with the Triple Bottom Line framework emphasizing environmental and economic gains (Elkington, 2018).

Figure 1. Integrative Model of Strategic Management, Marketing Innovation, and Operational Sustainability

Description:

The model shows three interlinked circles representing *Strategic Management*, *Marketing Innovation*, and *Operational Sustainability*. Arrows connect all three circles to a central node labeled *Competitive Advantage*. The relationships are bidirectional, illustrating that strong strategic management drives innovation, innovation reinforces sustainability, and sustainability supports strategic continuity.

Table 1. Key Dimensions, Practices, and Indicators of the Integrative Model

No	Dimension	Definition	Practices	Indicators
1	Strategic Management	Long-term direction and resource alignment for competitiveness	Business planning, performance monitoring, leadership adaptation	Frequency of review; goal achievement rate
2	Marketing Innovation	Novel marketing approaches that create customer value	Digital campaigns, personalization, brand co-creation	Customer growth rate; retention percentage
3	Operational Sustainability	Efficient and eco-friendly operational processes	Use of eco-inks, recycling systems, energy management	Waste reduction %; production efficiency ratio

Theme 4: Integrative Outcomes and Competitive Advantage

The synthesis of strategic management, marketing innovation, and sustainability led to superior competitive performance. Firms that achieved high integration exhibited increased revenue, stronger customer loyalty, and resilience during market disruptions such as supply shortages or price fluctuations.

"When strategy, marketing, and sustainability go hand in hand, the business becomes more than just printing it becomes part of the creative culture." (P6)

This integrative outcome demonstrates that local creative industries can generate competitive advantage not merely from technology adoption, but from strategic coherence and continuous learning.

DISCUSSION

The findings validate the theoretical propositions drawn from the Resource-Based View (RBV), Dynamic Capabilities Theory, and the Triple Bottom Line (TBL) framework. Strategic management acts as the coordinating mechanism that aligns internal capabilities and external market demands (Barney & Hesterly, 2020; Teece, 2020). Firms possessing dynamic capabilities such as strategic agility and innovation orientation demonstrate higher adaptability and resilience in volatile markets.

The results echo Porter's (2021) assertion that sustainable competitive advantage depends on a firm's ability to integrate strategy and operations. In the digital printing context, these integrations manifest through rapid technology adoption, market differentiation, and sustainable production processes. The combination of innovation and sustainability has shifted competitive parameters from cost and speed to creativity and ethical responsibility.

Strategic Integration and Dynamic Capabilities

This study reinforces the argument that dynamic capabilities sensing, seizing, and transforming are essential for continuous renewal (Teece, 2018). Firms that sense market changes through customer feedback and environmental scanning are better equipped to seize opportunities via marketing innovation. Transformational capability ensures that sustainability becomes embedded in daily operations.

Marketing Innovation and Customer Co-Creation

Marketing innovation proved vital for customer engagement and brand differentiation. It aligns with the experiential marketing theory (Schmitt, 2020), which suggests that customer experience is the new basis of value creation. By allowing customers to participate in design processes and online interactions, digital printing SMEs cultivate loyalty beyond price competition. Realizing this potential, however, depends on the digital literacy of business actors, which studies in other Indonesian regions, such as rural Aceh, find to be uneven (Noviar et al., 2026).

Operational Sustainability as Competitive Logic

Sustainability practices, often perceived as cost burdens, have evolved into efficiency enablers and brand enhancers (Kamal & Nordin, 2021). Integrating sustainability into strategy enhances legitimacy and stakeholder trust key intangible assets under RBV (Hart & Dowell, 2019). The findings confirm that eco-friendly operations not only reduce costs but also strengthen long-term positioning.

The Integrative Model and Theoretical Contribution

The integrative model proposed (Figure 1) contributes theoretically by bridging three critical literatures strategic management, marketing innovation, and sustainability within the creative industry context. It introduces a relational framework where each dimension mutually reinforces the others. The model highlights *co-evolution*: strategic clarity fosters innovation, innovation enhances sustainability, and sustainability strengthens strategic legitimacy. This multidimensional view complements recent scholarly calls for interdisciplinary approaches to SME competitiveness (Nguyen et al., 2023; Zhang & Xu, 2022). It offers a grounded conceptualization applicable to small creative enterprises in developing economies.

Practical Implications

1. For Entrepreneurs: Adopt structured strategic planning that integrates marketing and sustainability objectives.
2. For Policymakers: Develop local programs supporting eco-innovation in SMEs. Existing facilitation programs for MSMEs, such as government-supported halal certification, offer a model for such support (Athief et al., 2022).
3. For Educators: Incorporate sustainability and innovation management in creative business curricula.

CONCLUSION

This research concludes that competitiveness in the digital printing business niche is not solely determined by technology or price advantage but by the integration of **strategic management**, **marketing innovation**, and **operational sustainability**. Firms that align strategic vision with creative marketing and sustainable operations demonstrate higher adaptability, customer loyalty, and long-term viability.

The proposed integrative model provides a theoretical contribution by linking the RBV, Dynamic Capabilities, and TBL frameworks within a single conceptual structure. Practically, it offers guidance for managers seeking to navigate the complexity of creative industries.

Future research could expand the model quantitatively or apply it across different creative sectors, such as digital media or packaging design, to validate generalizability. The findings reaffirm that in the era of digital transformation, sustainability and innovation are no longer optional—they are strategic imperatives.

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