

# Strategic Integration of Creative and Blue Economies through Digital Media: A Case Study of PT Digipedia Karya Pratama in Indonesia's Maritime Region

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## ABSTRACT

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This study explores the strategic integration of creative industry practices and blue economy principles through the lens of a small digital media enterprise in Indonesia's Riau Islands. Using a qualitative case study approach, it investigates how PT Digipedia Karya Pratama navigates structural constraints—such as limited human capital, financing, and innovation capacity—to engage in sustainable digital innovation. Data were collected through semi-structured interviews, document analysis, and direct observation, and analyzed thematically alongside a SWOT framework. Findings reveal that while the company's strengths lie in institutional networks and cultural embeddedness, it struggles with underdeveloped game development initiatives and insufficient engagement in regional innovation ecosystems. However, its strategic location and narrative capital offer pathways for leveraging marine sustainability themes through serious games and digital storytelling. The study contributes to the literature by highlighting the role of peripheral creative firms in aligning digital transformation with blue economy goals, proposing a replicable model for innovation-driven development in coastal regions. Practical recommendations are offered to strengthen talent development, multi-stakeholder collaboration, and culturally grounded game production. This case contributes to the discourse on inclusive innovation, sustainability communication, and creative economy policy in emerging economies.

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## INTRODUCTION

Globalization has significantly reshaped the contemporary business landscape, fostering an increasingly competitive and dynamic environment. In this context, enterprises, including small and medium-sized enterprises (SMEs), are no longer solely focused on survival but are compelled to engage in continuous innovation and adaptation. Drawing on Schumpeter's theory of innovation (as cited in Tidd in Wuryaningrat, 2020), the entrepreneurial spirit, manifested through innovation, is deemed vital for both large-scale corporations and small businesses to sustain relevance and secure a competitive edge. Here, innovation emerges not merely as a strategic asset but as an imperative response to the shifting demands of global markets.

The creative industry stands as one of the most innovation-intensive sectors. In contrast to traditional industries that predominantly rely on physical capital and natural resources, the creative sector generates economic value from individual talent, creative processes, and intellectual property. It involves the conversion of ideas and artistic expression into marketable products and services. As delineated in Presidential Regulation No. 28/2008, the creative industry is defined as a process through which individual creativity, skills, and talents are transformed into economic value, thereby enhancing the welfare of stakeholders within the sector. This industry is inherently multifaceted, encompassing diverse subsectors such as performing arts, design, film, music, architecture, visual arts, and digital content development.

In recognition of its strategic potential, the Indonesian government institutionalized its support for the creative economy through the establishment of the Creative Economy Agency (Badan Ekonomi Kreatif/Bekraf) under Presidential Regulation No. 6/2015. This agency is tasked with overseeing and advancing 17 subsectors of the creative economy, which are envisioned as a new pillar of sustainable national economic growth. However, the development of the creative industry is not without its challenges. A principal obstacle lies in the integration of technological innovation and digital transformation to enhance creativity, distribution networks, and market accessibility.

Concurrently, Indonesia possesses substantial potential within its maritime economy, conceptualized as the blue economy. This framework encompasses a range of ocean-based economic activities, including fisheries, marine biotechnology, renewable ocean energy, marine tourism, and sea transportation. Central to the blue economy is the principle of sustainability, promoting the responsible utilization of marine resources to achieve economic development, environmental preservation, and social inclusivity. According to Wuryaningrat (2020), the economic potential of Indonesia's blue economy is estimated to reach USD 1.5 trillion annually and generate approximately 45 million jobs. These projections underscore the sector's strategic relevance, particularly for a nation endowed with extensive maritime territories and rich marine biodiversity.

The Riau Islands Province exemplifies the intersection between the creative and blue economies. Geographically situated near Malaysia and Singapore, this archipelagic region is characterized by abundant marine resources and a vibrant cultural heritage. With a greater proportion of sea than land, the Riau Islands are uniquely positioned to cultivate innovative, ocean-based creative industries. As noted by Panjaitan et al. (2021), the region's creative economic potential spans 16 subsectors—including culinary arts, animation, architecture, fashion, film, and marine tourism. When synergized with digital platforms and technological innovation, these subsectors hold the capacity to generate novel, sustainable, and globally competitive forms of economic value.

Despite growing academic and policy interest in both the creative and blue economies, a significant research gap persists at their intersection—particularly when examined through the lens of digital transformation. Much of the extant literature continues to treat these sectors in isolation. Studies on the creative industry frequently emphasize its cultural and artistic dimensions, whereas analyses of the blue economy predominantly focus on fisheries, marine logistics, or biodiversity. Few studies have critically engaged with the potential of digital technologies—such as digital storytelling, social media marketing, e-commerce platforms, mobile applications, and virtual reality—to integrate and enhance both sectors simultaneously. Moreover, the role of small and medium-sized enterprises (SMEs) as agents of innovation within this intersection remains notably underrepresented in academic discourse.

This research gap is particularly salient in peripheral or less industrialized regions, where startups and SMEs face distinctive constraints related to funding, infrastructure, human capital, and digital literacy. Nonetheless, such regions often possess untapped cultural and ecological assets that can be harnessed for innovation-led development. This study seeks to address this lacuna by investigating how digital transformation can empower SMEs operating at the convergence of the creative and blue economies, with a focus on the case of PT Digipedia Karya Pratama, a creative startup based in Tanjung Pinang, Riau Islands.

Established in 2019, PT Digipedia Karya Pratama aims to deliver creative and innovative solutions to a range of sectors, with a particular emphasis on those of local relevance. The company specializes in enhancing the value of regional assets through digital media, branding, and design services. As a small-scale enterprise situated in a geographically remote area, the company faces considerable challenges, particularly in securing sustainable funding, accessing advanced technology, and competing with more established market actors. Nevertheless, its strategic location offers distinct opportunities to leverage the cultural and marine resources of the Riau Islands, allowing it to develop products that are rooted in local identity while appealing to national and international markets.

Despite its potential, the journey of PT Digipedia Karya Pratama underscores a broader issue that remains insufficiently explored in both academic literature and policy frameworks: How can digital innovation be effectively mobilized to support the integration of the creative and blue economies in peripheral regions? What types of digital strategies, cross-sectoral partnerships, and ecosystem supports are necessary to enable small creative enterprises such as PT Digipedia Karya Pratama not only to survive but to flourish? Furthermore, how might government, academia, and private sector stakeholders collaborate to establish enabling environments that foster such innovation?

The creative economy constitutes a transformative economic paradigm that prioritizes the strategic application of individual creativity, skills, and intellectual assets to generate high value-added outputs, contribute to economic development, and promote societal well-being. Rooted in innovation and originality, the creative economy represents a departure from conventional industrial models that are heavily dependent on physical capital and labor. Instead, it is driven by ideas, aesthetics, cultural heritage, and intellectual property as its primary productive resources. This paradigmatic shift toward idea-centered productivity reflects a broader restructuring of global economic systems, wherein the creation of symbolic and cultural goods plays an increasingly central role in determining regional and national competitiveness.

Creative industries—encompassing sectors such as the arts, crafts, design, digital content, fashion, and software—are at the vanguard of this transformation, converting intangible ideas into commercially viable products and services. The sector's strength lies in its sustained capacity for the generation of original and innovative outputs, particularly in domains where artistic value and user experience are critical. As articulated by scholars such as I Gusti Bagus Arjana (2017), the creative economy is intrinsically linked to the human capacity to produce aesthetically and culturally resonant works, thereby positioning it as a key driver of both economic vitality and cultural enrichment.

Cities and regions that prioritize creativity and knowledge production have increasingly emerged as global economic leaders, a phenomenon encapsulated by Richard Florida's concept of the "creative class." This group comprises individuals such as artists, designers, and technology developers whose economic activities are characterized by innovation, originality, and problem-solving. Florida's thesis is further supported by Robert Lucas, who argues that concentrations of talent and creativity act as catalysts for enhanced productivity and regional development. The capacity of these communities to attract and retain creative individuals is closely associated with their economic dynamism and resilience in adapting to global transformations.

Unlocking the full potential of the creative economy necessitates the establishment of collaborative systems that facilitate the exchange of ideas, capital investment, and strategic policy support. The Triple Helix model provides a relevant theoretical framework, emphasizing the synergetic interplay between academia, industry, and government. Within this triadic configuration, universities contribute through research and technological advancement, businesses serve as conduits for commercialization and innovation diffusion, and governments create enabling environments through infrastructure and regulatory frameworks. This integrative model constitutes the foundation of a sustainable creative ecosystem, supporting the expansion of creative industries while aligning their growth with societal objectives.

Accordingly, the creative economy is increasingly recognized not only as a catalyst for economic diversification and employment generation but also as a mechanism for sustainable development and cultural preservation. By intersecting with sectors such as tourism, digital technology, and education, creative industries establish multidimensional value chains that foster cultural appreciation, environmental consciousness, and community empowerment. In this regard, the creative economy transcends its role as a discrete economic sector, emerging as a comprehensive development strategy that harmonizes innovation with inclusion and bridges culture with commerce.



**Figure 1.** The Three Main Actors in the Creative Industry

This study seeks to investigate the aforementioned questions by positioning PT Digipedia Karya Pratama as a case study to examine the practical implications of digital transformation at the intersection of the creative and blue economies. By integrating literature analysis, empirical data, and contextual evaluation, the research aims to address a critical gap in existing academic discourse while offering actionable insights for both policymakers and entrepreneurs.

In doing so, the study aspires to illuminate the potential of digital media and technology as catalysts for inclusive, sustainable, and culturally grounded economic development—particularly in maritime and coastal regions that have historically remained peripheral to national innovation agendas.

## METHOD

This study employed a qualitative approach using a case study method to examine innovation strategies and organizational dynamics at PT Digipedia Karya Pratama, a creative enterprise located in the Riau Islands. The qualitative approach was selected to facilitate an in-depth understanding of non-numerical data, including stakeholder perspectives, lived experiences, and organizational practices, which were collected through interviews, document analysis, and direct observation (Sulistyo & Basuki, 2006). The case study method, as advocated by Yin (2014), enabled a detailed, context-

specific exploration of the internal processes, challenges, and strategic orientations of PT Digipedia Karya Pratama.

Key informants included the company's founder and CEO, two project managers, one marketing strategist, and a community partner—each purposively selected for their involvement in decision-making and operational implementation. Semi-structured interviews were conducted to ensure consistency in questioning while allowing flexibility to explore emergent themes such as innovation practices, project development, digital adaptation, and inter-organizational collaboration.

Supplementary data were obtained through document analysis, involving a review of the company's profile, internal project reports, promotional materials, and proposals submitted to external stakeholders. These documents were selected based on their relevance to the study's focus on creative strategies and stakeholder engagement. Additionally, direct observation was conducted within the company's studio environment, with particular attention paid to collaborative workflows, the use of digital tools, and interactions among team members and clients.

The data were analyzed thematically and further supported by a SWOT analysis (Fatimah, 2016) to evaluate the internal strengths and weaknesses as well as external opportunities and threats affecting the enterprise. To enhance data credibility, triangulation was applied by comparing findings across multiple sources, while member checking was conducted by consulting selected informants to validate the accuracy of interpretations. This methodological approach ensured a comprehensive and trustworthy understanding of PT Digipedia Karya Pratama's position within the evolving nexus of the creative and blue economies.

## FINDINGS AND DISCUSSION

### A. Overview Of Creative Industries At PT Digipedia Karya Pratama

PT Digipedia Karya Pratama is a small-scale creative enterprise based in Tanjungpinang, the capital city of Indonesia's Riau Islands Province. Situated within the broader framework of the creative economy, Digipedia exemplifies the characteristics of what scholars refer to as a "peripheral creative firm"—an enterprise operating outside major metropolitan centers yet actively engaged in the digital creative sector. According to its corporate profile, Digipedia is involved in five creative industry sub-sectors: application development, video game development, visual communication design, animated and video production, and advertising. These sub-sectors encompass both service-oriented and product-oriented activities, reflecting an integrated business model adapted to the specific opportunities and constraints of its regional setting. However, empirical findings from interviews, internal documents, and field observations reveal that the company's operations are predominantly service-based, with product innovation occupying a relatively minor role.

In a detailed interview, Zainuddin, the company's Operational Director, elaborated that Digipedia's activities are categorized into two main segments: services and products. The service portfolio includes digital content creation, website and application development, and digital marketing campaigns, primarily delivered to institutional clients. On the product side, Digipedia has developed several digital platforms, notably *kepripedia.com*—a regional news aggregator and media outlet—and social media-based brands such as *Piloka* and *Melayunesia*, which aim to promote local culture and youth narratives within the Riau Islands. In addition, the company provides customized digital tools for government institutions, including online data dashboards, survey applications, and interactive information portals. Despite this range of offerings, internal assessments suggest an imbalanced allocation of resources and attention across sub-sectors. Among the five officially listed domains, video game development remains underdeveloped, both in terms of project output and team capacity.

Between 2019 and 2023, PT Digipedia Karya Pratama completed 79 service-based projects and launched three digital products, serving a total of 33 institutional clients. A significant proportion of these clients are government bodies, including local electoral commissions, regional tourism departments, and public relations offices. Document analyses reveal that most contracts were secured through government tenders or informal networks involving state-affiliated stakeholders. This pattern illustrates the firm's embeddedness within a regulatory-driven ecosystem, where project availability and funding streams are largely influenced by public sector priorities and political cycles. While such positioning offers a degree of short-term project stability, it simultaneously presents risks—most notably, the stagnation of product innovation in sub-sectors requiring long-term research and development. The absence of a clearly defined roadmap for innovation, particularly in areas such as game development and immersive media, serves as a key indicator of this constraint.

A recurring issue identified through interviews and internal assessments is the persistent shortage of skilled human resources. Digipedia's creative and technical teams are composed of a small number of generalist practitioners, many of whom undertake multiple roles simultaneously. During periods of heightened demand—such as national elections or peak tourism seasons—the workload often exceeds the team's capacity, resulting in project delays or the reduction of project scope. As noted by Operational Director Zainuddin and Product Coordinator Lukman Ibrahim, the sustainability of the enterprise is heavily contingent upon creativity, interpersonal trust, and long-standing relationships with institutional clients. Nonetheless, the limited availability of specialized personnel—such as game designers, animators, and data



analysts—constitutes a significant constraint on the firm's ability to scale operations or diversify service offerings.

This condition closely mirrors Angela McRobbie's (2016) theory of "precarious creativity," which conceptualizes the structural vulnerabilities that characterize small-scale creative enterprises. McRobbie contends that while creative labor is often framed through discourses of autonomy, passion, and flexibility, it is in practice shaped by conditions of insecurity, multitasking, and a reliance on social capital. Digipedia exemplifies this paradox. Although the company envisions the development of culturally embedded digital products—such as educational games centered on Malay history and local folklore—such initiatives frequently remain unrealized due to resource limitations and operational pressures. One notable example is the planned gamified narrative on traditional maritime life, which was indefinitely suspended in 2021 despite initial concept development and internal enthusiasm. This case illustrates the difficulty faced by peripheral creative firms in translating ideas into scalable innovations when operating without dedicated research and development infrastructure, institutional partnerships, or access to innovation financing.

The relational foundations of Digipedia's business model are also evident in its client acquisition strategies. Many of the firm's early contracts were secured through informal networks involving former colleagues, community leaders, and local bureaucrats. This relational embeddedness has played a crucial role in establishing trust and ensuring project continuity. However, it also points to the relational dependency often observed in small-scale creative enterprises, particularly in non-metropolitan regions where formal market institutions remain underdeveloped. In this regard, the theoretical perspective offered by Pratt (2008) is particularly instructive. He argues that creative industries in non-core regions frequently operate within "cultural economies," wherein trust, geographic proximity, and shared communal identities substitute for contractual formalism. Digipedia's trajectory resonates with this conceptualization, as the firm leverages not only technical expertise but also its cultural and social embeddedness within the bureaucratic and community networks of the Riau Islands.

Despite structural constraints, Digipedia's geographic location presents untapped strategic advantages. Tanjungpinang lies within a transnational corridor that links Indonesia to Singapore and Malaysia. Notably, its proximity to Batam provides potential access to the Nongsa Digital Park (NDP), a designated Special Economic Zone for digital innovation positioned as a regional hub for Southeast Asian technology enterprises. NDP hosts a range of start-ups, incubators, and collaborative technology programs supported by multinational firms and Singaporean investment. In theory, Digipedia could leverage this spatial capital to establish regional collaborations, access specialized talent pools, and engage in joint innovation ventures. As Pratt (2008) argues, creative clusters with transnational linkages are often better equipped to overcome local limitations through mechanisms such as knowledge transfer and shared infrastructure. Nevertheless, Digipedia's engagement with the Nongsa ecosystem remains limited. To date, its involvement has been confined to participation in a few training sessions and forums, without progressing into substantive collaborations or incubator partnerships capable of addressing its innovation gaps.

This limited regional engagement reflects a broader institutional deficiency: the absence of long-term strategic planning. A review of internal documents and strategic statements indicates the lack of a formal innovation roadmap, market expansion strategy, or targeted investment in workforce development. Rather than proactively shaping its business trajectory, Digipedia tends to operate reactively, responding to project opportunities as they arise. In the volatile and competitive landscape of digital creative industries, such an ad hoc operational model constrains long-term growth and weakens competitiveness. While the firm has demonstrated adaptability in delivering short-term contracts, it lacks the organizational architecture necessary to scale operations, foster innovation, or enter international markets. This reinforces McRobbie's (2016) observation that creative micro-enterprises often function in a state of "survival mode," balancing the immediate demands of project delivery against a backdrop of inadequate institutional support for innovation.

Compounding this structural inertia is the company's limited collaboration with academic institutions and vocational training centers. In a region where higher education infrastructure focused on digital skills remains sparse, partnerships with universities or polytechnics could offer access to a pipeline of emerging creative talent. However, such collaborations have largely failed to materialize. According to interview data, several initial efforts to establish joint programs with local colleges have been impeded by bureaucratic delays and misaligned expectations. Meanwhile, many promising graduates from digital media programs in Batam or Jakarta seek employment in larger urban centers that offer higher compensation, more dynamic work environments, and clearer career progression. This outmigration of talent—often referred to as brain drain—undermines the long-term sustainability of peripheral creative enterprises such as Digipedia, which struggle to match the incentives provided by metropolitan firms.

Nonetheless, Digipedia's contributions to the local digital ecosystem should not be understated. Through initiatives such as kepripedia.com and its suite of cultural content brands, the company has established a distinct space for the articulation of regional narratives within the digital domain. These platforms operate as hybrid spaces that merge journalism, creative storytelling, and community engagement. Although modest in scale, they constitute a significant form of cultural production, offering alternative perspectives that challenge the metropolitan bias prevalent in national media and dominant tech development narratives. In this regard, Digipedia functions not only as a creative service provider but also as a cultural intermediary—mediating between localized identities and the broader digital infrastructures through

which they are increasingly represented and disseminated.

In light of these dynamics, the future trajectory of PT Digipedia Karya Pratama will depend on its capacity to reposition itself strategically within the evolving contours of the creative economy. Several pathways for organizational development can be identified. First, the establishment of a dedicated research and development unit would enable the firm to innovate across formats, including serious games, interactive storytelling, and data-driven journalism. Second, strategic collaboration with educational institutions could facilitate the development of a localized talent pipeline, thereby addressing the ongoing challenges associated with brain drain. Third, diversification of the client base to include private sector entities and regional organizations may reduce the company's current dependency on government contracts. Finally, deeper integration into regional innovation ecosystems—particularly through more active engagement with Nongsa Digital Park—could provide critical access to funding opportunities, mentorship, and cross-border market expansion.

## **B. Analysis of Creative Industry Development of PT Digipedia Karya Pratama**

To gain a deeper and more strategic understanding of the developmental trajectory of PT Digipedia Karya Pratama (DKP), a comprehensive SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was conducted. This analysis triangulates data obtained from in-depth interviews with company stakeholders, a thorough review of organizational documents, and direct field observations. The methodological framework is grounded in classical strategic planning models, such as those outlined by Fatimah (2016), and is further informed by critical perspectives on regional creative economies (UNCTAD, 2022) and theoretical insights related to organizational capabilities, market dynamics, and the conditions of creative labor.

### **1. Strengths: Organizational Assets and Regional Positioning**

PT Digipedia Karya Pratama's principal internal strengths are anchored in five core areas: an established client base, a professional and experienced internal team, strategic regional positioning, a favorable regulatory environment, and robust institutional partnerships.

The company's client portfolio comprises a range of regional government bodies, educational institutions, and public sector agencies, which collectively contribute to a relatively stable stream of commissioned projects. This sustained collaboration with governmental stakeholders attests to the company's credibility and reliability—qualities that are particularly valuable within bureaucratic procurement processes. As Grant (2010) emphasizes, such long-term client relationships constitute a form of intangible capital within the resource-based view (RBV) of the firm, enhancing competitive advantage by ensuring income continuity and reducing client acquisition costs.

Furthermore, despite its relatively small size, DKP's internal team demonstrates a high degree of professionalism and adaptability. Interview data indicate that team members frequently assume cross-functional responsibilities, which enables the organization to respond flexibly to evolving client needs. This organizational agility is particularly evident in DKP's capacity to execute complex, time-sensitive projects, such as real-time electoral quick-count platforms or urgent multimedia content for public information campaigns.

DKP's strategic location in a coastal city constitutes an additional contextual strength. Its proximity to government offices and local community institutions facilitates direct engagement and expedites project implementation processes. Moreover, the regional government has consistently expressed support for creative economy initiatives, aligning with broader national policy frameworks aimed at fostering local innovation ecosystems.

A further significant strength is DKP's robust network of partnerships with diverse stakeholders, including government agencies, universities, and non-governmental organizations. These partnerships enhance the firm's operational reach and create opportunities for co-creation and resource sharing. For instance, DKP has collaborated with local universities on digital literacy initiatives and partnered with NGOs on participatory media projects. Such engagements not only expand DKP's functional capacity but also strengthen its social capital and institutional legitimacy within the regional creative ecosystem.

### **2. Weaknesses: Structural Deficits and Innovation Constraints**

Despite its notable strengths, DKP faces several internal weaknesses that impede its capacity for sustainable growth. These include a shortage of highly qualified human resources, underutilization of digital platforms, limited geographic market penetration, a lack of product innovation, and underdeveloped branding strategies.

Human capital constraints are particularly acute. Observational data and internal documentation reveal that DKP consistently struggles to recruit and retain personnel with advanced technical competencies, especially in specialized domains such as software development, digital animation, and game design. This shortage reflects a broader structural challenge common to regional creative enterprises situated outside metropolitan centers, where the availability of skilled labor is often limited (Hesmondhalgh & Baker, 2011). Moreover, much of DKP's workforce is employed on a project-by-project basis, contributing to labor precarity and hindering the accumulation of institutional memory and expertise over time.

A second area of concern is the underperformance in digital media utilization. Despite operating within the creative sector, DKP's own branding and online presence remain weak. The company's website is infrequently updated, and its use of social media platforms is inconsistent. Consequently, prospective clients—particularly those from the private sector or international networks—have limited exposure to DKP's portfolio. This absence of a coherent promotional strategy significantly undermines the firm's positioning within broader creative markets. The problem is further compounded by limited geographic reach; the majority of DKP's clients are concentrated within a specific provincial region, restricting market diversification and increasing vulnerability to local economic fluctuations.

More critically, the company demonstrates a reactive rather than proactive orientation toward innovation. While DKP is capable of delivering high-quality outputs in response to specific client requests, there is minimal evidence of structured research and development (R&D) activities or long-term product innovation strategies. This condition aligns with Scott's (2014) characterization of "peripheral" creative firms—entities situated at the margins of national innovation systems and structurally dependent on short-term contractual work rather than systematic innovation planning.

Finally, weak branding and promotional strategies further erode DKP's competitive positioning. Interview data suggest that many potential collaborators—particularly from private sector and international circles—remain unaware of the company's capabilities. The absence of consistent messaging, coupled with a lack of professionally developed branding materials, undermines DKP's visibility and diminishes its perceived credibility as a creative enterprise.

### **3. Opportunities: Policy Alignment and Emerging Markets**

DKP is situated within a policy and economic environment that offers multiple strategic opportunities. These include the expanding integration of digital technologies across sectors, increasing governmental support for the blue economy, and a renewed policy focus on strengthening the creative industries at both national and regional levels.

The ongoing digital transformation is reshaping both public and private sector landscapes. The proliferation of digitized governance systems, e-learning platforms, and e-commerce infrastructures has opened new and substantial markets for creative content producers such as DKP. By integrating digital technologies not only as delivery tools but also as creative mediums, DKP can significantly enhance its value proposition and improve operational efficiency.

A particularly promising avenue for strategic development lies in the alignment with Indonesia's emerging blue economy agenda. As a creative enterprise located in a coastal region, DKP is well-positioned to engage in projects that promote marine biodiversity, environmental awareness, and sustainable development. Potential initiatives include the development of marine-themed educational games, interactive digital storytelling platforms, and community-based sustainability applications. These forms of "creative sustainability," as described by Bennett et al. (2022), have the potential to simultaneously enhance market competitiveness and deepen social and environmental impact.

Furthermore, recent policy directions from the Ministry of Tourism and Creative Economy underscore the importance of regional creative actors in contributing to national development goals. These frameworks provide a range of institutional supports, including funding schemes, capacity-building programs, and promotional platforms—resources that DKP can leverage for strategic expansion. For example, collaboration with regional digital innovation hubs such as Nongsa Digital Park may offer access to advanced technologies, business mentorship, and pathways to international exposure, thereby strengthening DKP's positioning within transnational creative networks.

### **4. Threats: Market Volatility and Systemic Challenges**

Alongside emerging opportunities, DKP faces a series of external threats that may hinder its long-term viability. These include heightened market competition, policy instability, and the proliferation of informal market practices.

The creative sector is marked by intense and growing competition, particularly from larger, urban-based firms that possess superior resources, broader professional networks, and stronger brand recognition. DKP's limited scalability and the absence of distinctive product innovation increase its vulnerability in competitive bidding processes and in efforts to expand into new markets. The firm's relatively modest operational scale places it at a disadvantage when vying for large-scale contracts or entering more saturated creative domains.

Policy inconsistency represents another critical threat. Although the development of the creative economy is a declared national priority, its implementation is uneven across regions and often contingent on the agendas of local administrations. Shifts in political leadership can result in sudden changes to funding priorities, regulatory frameworks, or partnership modalities. Such volatility introduces uncertainty into DKP's planning processes, potentially disrupting ongoing projects and delaying innovation initiatives.

Additionally, the presence of unregulated or informal competitors presents a structural challenge to market stability. Numerous content producers operate outside the formal economy, offering comparable services at significantly lower prices and without adherence to professional or legal standards. This undermines fair competition, exerts downward pressure on pricing structures, and places formal enterprises like DKP in a precarious position—often forcing them

to choose between maintaining quality and remaining cost-competitive. Such dynamics not only jeopardize the firm's financial sustainability but also risk compromising creative integrity.

### 5. Strategic Synthesis: Toward a Transformative Development Model

By aligning DKP's internal strengths with emerging external opportunities, a strategic pathway emerges that is consistent with the resource-based view (Grant, 2010), while also accounting for the structural constraints outlined in Porter's (2008) Five Forces framework. To evolve from a predominantly service-oriented agency into a more resilient and diversified creative enterprise, DKP must operationalize a transformative development model built around three core strategies:

- a. **Strengthen Strategic Partnerships:** Expanding partnerships with digital innovation hubs (e.g., Nongsa Digital Park), non-governmental organizations, academic institutions, and international creative networks can significantly broaden DKP's access to technology, talent, and new markets. Importantly, such partnerships should be structured not merely for project-based collaboration, but as platforms for knowledge exchange, co-creation, and sustained innovation.
- b. **Invest in Talent Development and Organizational Learning:** Enhancing internal capacity is essential for long-term growth. This entails formalizing employee training programs, establishing mentorship arrangements with industry professionals, and implementing a robust knowledge management system. Strategic linkages with regional universities, technical colleges, or bootcamp programs can offer context-sensitive, cost-effective pathways for upskilling, especially in specialized areas such as digital media production, software development, and creative entrepreneurship.
- c. **Embed Sustainability and Innovation in Creative Output:** To move beyond short-term service delivery, DKP should invest in research and development (R&D) aimed at producing proprietary creative products, particularly in domains such as marine education, local folklore, and digital tourism. By embedding environmental narratives and sustainability themes into these outputs, the company can simultaneously strengthen market differentiation and enhance social relevance.

### 6. Conclusion: Unlocking Regional Creative Potential

PT Digipedia Karya Pratama occupies a distinctive position at the nexus of regional development, creative innovation, and ecological transformation. While the organization faces notable internal constraints and external pressures, it also holds significant latent potential. By strategically prioritizing partnership-building, talent development, and the integration of sustainability into its creative outputs, DKP can reposition itself not merely as a regional content provider, but as a nationally relevant actor aligned with Indonesia's blue economy and digital transformation agendas.

Realizing this potential will require deliberate and sustained effort, guided by a clear strategic vision, a commitment to organizational learning, and a strong theoretical foundation. As global trajectories increasingly converge around the intersections of creativity, technology, and sustainability, DKP's evolution into a diversified and impact-driven enterprise may serve as a replicable model for other peripheral creative firms navigating similar developmental contexts.

## C. Innovation and Development

Building upon the SWOT analysis and triangulated findings from interviews, document analysis, and direct observation, this section proposes a strategic innovation pathway for PT Digipedia Karya Pratama: the development of digital games embedded with blue economy values. This proposal is grounded in the company's unique spatial and cultural positioning within the Riau Islands—an archipelagic region characterized by rich maritime heritage, ecological diversity, and increasing policy emphasis on sustainable development.

### 1. Rationale for Game Development as a Strategic Sub-sector

- a. **Current Status of the Game Development Sub-sector**  
Although PT Digipedia Karya Pratama formally identifies as an actor within the video game development sub-sector, evidence from internal documentation and stakeholder interviews indicates limited activity in this domain. To date, the company has developed only two client-commissioned game prototypes and does not currently hold any independent intellectual property (IP) or proprietary game titles. Furthermore, field observations confirm the absence of a dedicated game development team or a structured research and development (R&D) unit, highlighting a significant underutilization of this sub-sector when compared to the company's more established operations in digital media production and social content marketing.
- b. **Unlocking Latent Innovation Capacity**  
This underdevelopment, while presenting clear challenges, simultaneously reveals significant opportunities. Drawing on Howkins' (2013) concept of latent innovation capacity, it becomes evident that creative enterprises often possess untapped potential within underutilized sectors—potential that can be activated



when supported by conducive institutional and market ecosystems. In the case of Digipedia, the convergence of growing global interest in environmental education and the rapid expansion of Indonesia's gaming market offers a promising context for strategic activation.

Recent data from We Are Social and Kepios (2024) indicate that Indonesia now leads Southeast Asia in terms of the number of active gamers. Complementing this, Statista (2024) projects that the national gaming industry will generate over USD 505 million in revenue, primarily driven by mobile gaming, microtransactions, and expanding digital infrastructure. Furthermore, as of early 2024, VirtualSEA (as cited in Muhammad, 2024) reported that Indonesia had contributed 256 games to the Steam platform, signaling both a growing domestic development capacity and an increasingly vibrant market for locally produced, culturally relevant gaming content.

c. Strategic Differentiation through Eco-Cultural Narratives

Entering a competitive gaming market with a clearly defined and distinctive value proposition—namely, games that integrate environmental sustainability and local maritime narratives—would enable Digipedia to achieve strategic differentiation. As Caves (2000) argues, the value of creative goods extends beyond their functional utility to include symbolic, emotional, and narrative dimensions. Games infused with blue economy themes can provide not only entertainment but also ecological insight, thereby constituting what Throsby (2008) describes as “cultural products with ecological value.”

Such games would extend Digipedia's reach beyond the entertainment sector to encompass educational, advocacy, and behavioral change objectives related to marine conservation, cultural heritage, and sustainability. This approach is particularly well aligned with the increasing demand for purpose-driven gaming experiences, especially among Gen Z audiences and educational institutions seeking meaningful, interactive content.

## 2. The Blue Economy as a Narrative Framework

a. Conceptual Alignment and Local Relevance

The blue economy, as defined by the World Bank (2017), emphasizes the inclusive and sustainable utilization of ocean resources to drive economic growth, improve livelihoods, and maintain the health of marine ecosystems. This conceptual framework holds particular relevance for the Riau Islands, a region whose socioeconomic identity is deeply intertwined with maritime livelihoods, fishing communities, and rich ecological assets such as mangroves, coral reefs, and coastal biodiversity.

Document analysis of the Riau Islands' Regional Development Plans (RPJMD) and Indonesia's long-term development blueprint (RPJPN 2045) reveals a growing institutional commitment to advancing blue economy principles. National ministries—particularly the Ministry of Maritime Affairs and Fisheries—have introduced campaigns and funding mechanisms aimed at promoting marine sustainability, while regional governments have articulated strategies to strengthen maritime cultural heritage and eco-tourism. These converging policy trajectories indicate a strategic opening for alignment between the creative industries and blue economy objectives, offering fertile ground for narrative-driven innovation that supports both cultural expression and environmental stewardship.

b. Serious Games as Tools for Education and Advocacy

By leveraging the interactive affordances of digital games, Digipedia has the potential to create content that is not only entertaining but also educational and socially impactful. The concept of “serious games,” as articulated by Jenkins et al. (2009), refers to games intentionally designed to communicate critical messages, facilitate learning, and influence behavior in domains such as science, public health, and environmental stewardship. In this context, several game prototypes can be envisioned as aligned with both blue economy narratives and local cultural heritage: Marine Ecosystem Simulators are interactive platforms where players manage coral reef systems, address pollution, or navigate biodiversity challenges; Sustainable Fishing RPGs are role-playing games that integrate traditional ecological knowledge and contemporary marine science to promote responsible fishing practices; Mythical Ocean Adventures are story-driven games that translate local legends and maritime folklore into gamified, immersive experiences; and Strategic Resource Management Games are simulation games that challenge players to make sustainable trade-offs in managing coastal resources and virtual island economies. Interviews with local educators and marine education practitioners indicate strong interest in adopting interactive games as pedagogical tools. This points to the existence of a viable user base and a clear entry point into educational and community-based markets—further reinforcing the potential of serious games to serve as both commercial products and advocacy instruments within the broader digital creative ecosystem.

c. Leveraging Local Knowledge as Narrative Capital

The Riau Islands possess a rich repository of intangible cultural heritage, encompassing oral traditions, maritime rituals, sea mythology, and indigenous ecological knowledge. These forms of local wisdom

represent valuable narrative capital that can be effectively adapted into game design. Elements such as knowledge of sea currents, seasonal wind patterns, traditional fishing techniques, and folklore—such as the legend of Putri Bungsu dari Laut—offer compelling material for immersive gameplay, character development, and dynamic storytelling arcs.

This approach aligns with Jenkins' (2006) concept of transmedia storytelling, wherein narratives are expanded across multiple platforms and media forms to enrich audience engagement. By embedding localized knowledge into game mechanics, world-building, and plot progression, Digipedia can create culturally resonant game environments that not only appeal to regional users but also capture the interest of global audiences seeking authentic, contextually rich digital content.

### 3. Strategic Recommendations for Implementation

While Digipedia demonstrates strong potential for strategic innovation in the digital creative sector, it must address several internal constraints identified in the preceding SWOT analysis. To facilitate the transition from conceptualization to implementation, the following actionable strategies are proposed:

#### a. Human Capital Development

A critical limitation currently facing Digipedia is the absence of personnel with specialized expertise in game design, software development, narrative construction, and environmental science. To address this gap, we recommend the establishment of strategic partnerships with regional higher education institutions such as Universitas Maritim Raja Ali Haji (UMRAH) and Politeknik Negeri Batam. Potential initiatives include joint curriculum development, where interdisciplinary modules are collaboratively designed to integrate game development, marine science, and creative writing into vocational and undergraduate programs; project-based internships that embed students in live game development projects as part of their capstone or final-year assignments, allowing them to apply theoretical knowledge in real-world creative production contexts; and faculty exchange and mentorship programs that facilitate the involvement of guest lecturers, industry experts, and practitioners to provide hands-on mentoring and capacity-building for both students and Digipedia staff. These initiatives align with the learning-by-doing pedagogical approach (Oakley & O'Brien, 2016), which emphasizes experiential learning in creative industries and encourages innovation through practice-based engagement.

#### b. Building Collaborative Ecosystems

To strengthen its innovation capacity, Digipedia must engage in multi-stakeholder partnerships that span key sectors of the creative and environmental ecosystem. This includes collaborating with Non-Governmental Organizations (NGOs) such as conservation groups like WWF Indonesia and Yayasan Terumbu Karang Indonesia to co-develop educational content grounded in ecological expertise. Additionally, securing funding, promotional support, and policy alignment through engagement with relevant government agencies and local bodies is crucial. Furthermore, Digipedia can leverage the infrastructure, mentorship, and network opportunities available in technology hubs like Nongsa Digital Park and other regional tech ecosystems. This multi-actor approach aligns with the Triple Helix Model (Etzkowitz & Leydesdorff, 2000), which emphasizes the synergistic interaction between academia, industry, and government as a catalyst for robust and sustainable innovation ecosystems. By positioning itself within such a collaborative framework, Digipedia can enhance its capacity for product innovation, ecosystem integration, and long-term impact.

#### c. Prototyping and Market Testing

Rather than investing in the development of a fully polished game at the outset, Digipedia should adopt agile development methodologies (Beck et al., 2001) that prioritize flexibility, user feedback, and iterative design. The following phased approach is recommended: Low-Fidelity Prototyping involves developing simplified visual elements and core mechanics to explore conceptual ideas and test gameplay feasibility in an efficient, cost-effective manner. Next, User Testing in Local Schools and Communities suggests conducting pilot testing with students, educators, and coastal stakeholders to gather feedback on usability, narrative resonance, and educational value. Finally, Iterative Refinement utilizes insights from user testing to inform continuous adjustments in game mechanics, aesthetics, and content, better aligning with user expectations and contextual relevance. This lean, user-centered development approach reduces financial and operational risk, promotes innovation through experimentation, and enhances the likelihood of producing a culturally and functionally resonant game product tailored to target audiences.

#### d. Branding and Market Positioning

To ensure that its game-based initiatives reach wider audiences and achieve meaningful impact, Digipedia must invest in strategic communication and brand positioning. This involves several integrated approaches. First, establishing a consistent online presence through social media campaigns that include narrative-driven content such as storytelling elements, developer diaries, and behind-the-scenes visuals can humanize the development process and foster community engagement. Second, actively participating in developer

forums and public expositions—such as BEKRAF Game Prime, Indonesia Comic Con, and Indie Game Festivals—will allow Digipedia to showcase prototypes, gather feedback, and build credibility within the gaming and creative industries. Additionally, framing the game as a digital artifact not only preserves and promotes cultural heritage but also advances environmental awareness and stewardship. By crafting a strong narrative identity around its products, Digipedia can position its games not merely as entertainment commodities, but as culturally grounded, socially transformative tools. This dual positioning enhances both market appeal and the company's legitimacy as a creative enterprise aligned with broader developmental and cultural objectives.

#### 4. Broader Implications and Contributions

##### a. Redefining Game Development in Indonesia

This strategy positions Digipedia Karya Pratama as a pioneer in eco-cultural game development within Indonesia's emerging digital creative landscape. By centering its design philosophy on environmental sustainability and cultural narratives, the company contributes to the thematic diversification of the national game industry, which remains predominantly saturated with mainstream genres such as action, fantasy, and horror. Such diversification not only enriches the domestic creative ecosystem but also opens new pathways for the development of export-ready cultural content—aligning with Indonesia's broader national objectives to establish itself as a regional leader in the creative economy.

##### b. Alignment with Sustainable Development Goals

By embedding themes of marine sustainability and ecological literacy into its digital products, Digipedia actively contributes to the advancement of the United Nations Sustainable Development Goals (SDGs), particularly SDG 14: Life Below Water. Serious games can function as powerful awareness and educational tools, especially among youth audiences, fostering early engagement with issues related to ocean conservation, biodiversity protection, and sustainable resource management.

This initiative also aligns with Indonesia's long-term development vision, RPJPN 2045, which identifies environmental sustainability and digital transformation as interdependent pillars of national progress. Through the convergence of creative innovation and sustainability advocacy, Digipedia's efforts represent a concrete expression of these policy priorities, reinforcing the role of digital media in advancing both educational and developmental agendas.

##### c. Peripheral Innovation and Global Resonance

As Flew and Cunningham (2010) contend, creative industries in the Global South can achieve competitive advantage by mobilizing local knowledge systems and spatial identities to produce culturally specific yet globally resonant content. This form of peripheral innovation not only challenges the dominance of Western-centric media narratives but also contributes to a more pluralistic and inclusive global cultural economy.

By translating the Riau Islands' maritime heritage into immersive, interactive, and exportable digital experiences, Digipedia has the potential to establish a distinctive niche within the international indie game market. Simultaneously, such efforts reinforce local cultural pride and promote ecological consciousness, demonstrating how regionally grounded creative practices can attain both global visibility and local relevance.

## CONCLUSION

This study set out to explore the development potential of the creative industry—specifically the game development sub-sector—at PT Digipedia Karya Pratama, within the broader context of the blue economy in the Riau Islands. The research identifies critical challenges and emerging opportunities for the enterprise, particularly in relation to human capital, product innovation, and the strategic use of regional assets.

Findings indicate that while Digipedia Karya Pratama has demonstrated competence in creative content production, application development, and digital marketing, it faces substantial barriers to expanding its game development activities. These constraints are primarily linked to limitations in specialized human resources and the lack of robust promotional strategies. However, the company's geographical positioning in the Riau Islands—an area rich in maritime heritage and aligned with Indonesia's growing blue economy agenda—presents a distinctive opportunity to create digital games that embed themes of marine ecosystem sustainability and cultural heritage.

Theoretically, this study underscores the potential for integrating blue economy principles into the creative industries as a means of achieving both cultural and market differentiation. This approach aligns with broader global trends toward sustainability and offers a competitive niche within the evolving digital game sector. From a practical perspective, the findings suggest that Digipedia Karya Pratama should prioritize capacity-building in game development, strengthen its branding and outreach strategies, and align future projects with the growing demand for educational and sustainability-driven content.

In sum, for Digipedia Karya Pratama to effectively expand into the game development sub-sector and capitalize on the opportunities presented by the blue economy, it must address internal capacity challenges, invest in human resource development, and strategically align its creative outputs with regional and global sustainability objectives. By doing so, the company can not only enhance its market positioning but also contribute meaningfully to the growth of the creative and blue economy sectors in the Riau Islands.

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