Society

Society, 13 (3), 1284-1299, 2025
P-ISSN: 2338-6932 | E-ISSN: 2597-4874
https://societyfisipubb.id

The Ergo-Iconic Paradigm: Engineering Value through Intelligence, Aesthetics, and Human-Centricity

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ARTICLE INFO

Publication Info:
Research Article

How to cite:
Andriyansah, A. (2025). The Ergo-Iconic Paradigm: Engineering Value through Intelligence, Aesthetics, and Human-Centricity. Society, 13(3), 1284–1299.

DOI: *10.33019/society.v13i3.926*

Received: August 8, 2025;
Accepted: November 25, 2025;
Published: December 26, 2025;

ABSTRACT

In the era of intelligence-driven business, conventional definitions of value creation, predominantly anchored in cost efficiency and process speed, are increasingly insufficient. While data analytics and artificial intelligence (AI) have optimized the functional dimensions of e-business, a gap remains in understanding how data can be transformed into profound symbolic value. This paper introduces the "Ergo-Iconic Paradigm," a novel theoretical framework that redefines digital value as the synthesis of the ergo dimension – utility, usability, and frictionless interaction – and the iconic dimension – symbolic identity, aesthetic distinction, and emotional resonance. Drawing on recent developments in business intelligence and consumer behavior analysis, this paper argues that the highest form of data transformation lies in creating products and services that are simultaneously seamless in function and powerful in identity. Using a systematic literature review and conceptual framework development methodology, this study integrates Andriyansah's foundational work on ergo-iconic value with contemporary findings on AI-driven personalization, business model innovation, and supply chain resilience. The findings propose a new metric for value engineering, suggesting that sustainable competitive advantage in the post-digital economy depends on the algorithmic balance between ergonomic fit and iconic appeal. This paradigm shifts the discourse from mere data processing to the engineering of meaningful digital experiences. The paper presents theoretical foundations grounded in the Resource-Based View, Service-Dominant Logic, and Value Co-creation Theory, alongside practical implications for managers seeking to leverage AI for both operational excellence and brand differentiation.

Keywords: *AI-Enabled Business Models; Brand Identity; Digital Value Creation; Ergo-Iconic Value; Human-Centric AI; Intelligence-Driven Business; User Experience*

1. Introduction

The rapid proliferation of Big Data and Artificial Intelligence (AI) has fundamentally reshaped the landscape of e-business, management, and digital value creation. In contemporary business environments, data are no longer treated merely as operational records or transactional residues, but as strategic resources that can be converted into predictive intelligence, automated decision-making, and personalized customer experiences. Global investment in AI reached USD 154 billion in 2023, with projections indicating continued growth beyond USD 300 billion in the coming years (IDC, 2023). This trend reflects firms' increasing reliance on AI-enabled systems to enhance efficiency, accelerate decision-making, optimize supply chains, and improve responsiveness to market dynamics. Over the past decade, however, digital transformation has largely been framed through an operational logic, emphasizing cost reduction, process acceleration, productivity improvement, and organizational efficiency. While these dimensions remain important, competitive advantage derived solely from efficiency has become increasingly difficult to sustain as digital tools, data analytics, and AI-based solutions become more widely available across industries (Black et al., 2024; Reim et al., 2020).

This development creates a strategic paradox for contemporary enterprises. On the one hand, AI-enabled systems have generated substantial operational gains, including reductions in supply chain costs, improvements in demand forecasting accuracy, faster customer service responses, and more efficient resource allocation. On the other hand, these functional improvements do not automatically translate into stronger customer loyalty, deeper emotional attachment, or more distinctive brand positioning. For example, while AI-driven systems may reduce supply chain costs by 15–30% and improve forecasting accuracy to 85–95%, achieving customer loyalty and brand differentiation remains difficult (Chatterjee, 2023; Dubey, 2021). Similarly, a recent study found that although 73% of Fortune 500 companies had implemented AI-driven personalization, only 28% reported measurable improvements in customer lifetime value (Catayoc, 2025). These findings indicate a critical disconnect between technological sophistication and value realization. They suggest that existing frameworks of digital value creation remain incomplete when they treat data, intelligence, and automation primarily as instruments of functional optimization.

The theme of ICEME 2026, "From Data to Value," therefore raises a fundamental theoretical and managerial question: if efficiency has become the baseline of intelligent business, what constitutes the highest form of value in the digital economy? This question is particularly important in a context where customers no longer evaluate digital products and services solely based on speed, convenience, or technical performance. Increasingly, users also seek symbolic meaning, emotional resonance, aesthetic distinction, identity expression, and alignment with personal or collective values. Recent scholarship has begun to acknowledge this broader understanding of value by calling for frameworks that integrate functional excellence with symbolic resonance (Grewal et al., 2017; Shrestha et al., 2019). However, much of the existing literature remains fragmented. Information systems research tends to emphasize usability, automation, predictive intelligence, and process optimization, whereas marketing and consumer behavior studies tend to focus on brand meaning, emotional engagement, and symbolic consumption. As a result, there remains a need for a unified conceptual framework that explains

https://doi.org/10.33019/society.v13i3.926

how data and AI can generate value that is both functionally superior and symbolically meaningful.

Andriyansah's pioneering work on ergo-iconic value offers an important foundation for addressing this gap. The concept proposes that digital products and services should not be assessed solely by their functional utility, but also by their capacity to produce identity-building, emotionally resonant experiences. Within this framework, the ergo dimension refers to ergonomic utility, usability, cognitive ease, and frictionless interaction, while the iconic dimension refers to symbolic identity, aesthetic distinction, emotional attachment, and cultural meaning (Andriyansah, 2023a, 2023d, 2024a, 2024b). The ergo dimension explains why users adopt and continue using a digital product because it works efficiently, reduces effort, and supports task completion. The iconic dimension explains why users develop attachment, preference, loyalty, and advocacy because the product or service expresses who they are, what they value, and how they wish to be recognized. Although this framework provides a promising conceptual basis, it has not yet been systematically integrated with contemporary debates on AI-enabled business model innovation, business intelligence, and data-driven value engineering.

This paper addresses this theoretical gap by introducing the Ergo-Iconic Paradigm as a conceptual framework for understanding how intelligence-driven businesses can transform data into dual-dimensional value. Specifically, the paper seeks to synthesize the theoretical foundations of the ergo and iconic dimensions in the context of intelligence-driven business models, develop a unified Ergo-Iconic Paradigm that operationalizes the transformation of data into dual-dimensional value, and propose actionable strategies for managers to engineer ergo-iconic value through AI, business intelligence, and human-centered digital innovation. The core argument of this paper is that the apex of data transformation is not merely automation, prediction, or efficiency, but the engineering of products, services, and experiences that are simultaneously seamless in function and powerful in identity. In this sense, value creation in the intelligent economy requires more than the technical conversion of data into information or intelligence. It requires the strategic conversion of intelligence into meaningful experiences that combine ergonomic fit with iconic appeal. The proposed paradigm therefore shifts the discourse from data processing and operational optimization to the design of human-centered, aesthetically meaningful, and symbolically resonant digital experiences.

The contribution of this paper is threefold. First, it extends Andriyansah's Ergo-Iconic framework by integrating it with the literature on AI-enabled business model innovation, digital value creation, and business intelligence. Second, it proposes a three-stage value engineering process that explains how data can be transformed into intelligence, how intelligence can be translated into meaningful experience, and how experience can be amplified into loyalty and symbolic differentiation. Third, it provides a theoretically grounded framework informed by the Resource-Based View, Service-Dominant Logic, and Value Co-creation Theory, thereby positioning ergo-iconic value as a strategic capability for firms seeking sustainable competitive advantage in the post-digital economy. Through these contributions, the paper offers both conceptual clarity and practical relevance for managers seeking to leverage AI not only for operational excellence but also for brand differentiation, customer loyalty, and meaningful digital engagement.

2. Literature Review

2.1. The Ergo Dimension: Functional Excellence

The ergo dimension represents the functional and utilitarian aspect of digital value, including ease of use, efficiency, cognitive simplicity, and frictionless interaction. In the context of digital

https://doi.org/10.33019/society.v13i3.926

products and services, ergo value is concerned with the extent to which a system enables users to complete tasks with minimal effort, reduced cognitive load, and greater operational effectiveness. Andriyansah defines ergo as "the degree to which a digital artifact minimizes cognitive load and maximizes task completion efficiency" (Andriyansah, 2023a). This definition positions ergo not merely as a matter of technical functionality, but as a user-centered principle that connects system design, usability, and value creation.

In AI-driven business environments, the ergo dimension is increasingly mediated by intelligent automation, predictive analytics, adaptive interfaces, and algorithmic decision support. These technologies enable firms to anticipate user needs, reduce process complexity, personalize interactions, and improve the speed and accuracy of business decisions (A. Dwivedi et al., 2021; Javaid et al., 2022). For example, predictive analytics can improve demand forecasting, while adaptive interfaces can reduce user effort by presenting contextually relevant information and recommendations. In this sense, AI expands the scope of ergo value from conventional usability toward intelligent functionality, where systems do not merely respond to user commands but proactively support user goals.

Recent studies demonstrate that AI-powered supply chains can achieve 20–35% cost reductions through demand forecasting, inventory optimization, and improved operational visibility (Ghobakhloo et al., 2024; Iranmanesh et al., 2023). Similarly, generative AI applications in customer service have been reported to reduce response times by 40–60% while maintaining accuracy levels above 85% (A. Dwivedi et al., 2023). These findings suggest that AI can significantly enhance the functional dimension of digital value by improving efficiency, responsiveness, and scalability. However, functional excellence alone does not necessarily guarantee customer retention, emotional attachment, or premium pricing power (Andriyansah, 2023b). A product may be efficient and easy to use, yet still fail to generate loyalty if it lacks symbolic meaning, emotional relevance, or identity value for users.

2.2. The Iconic Dimension: Symbolic Resonance

The iconic dimension captures the symbolic and identity-building aspect of digital value, including brand meaning, emotional connection, aesthetic distinction, cultural significance, and self-expression. While the ergo dimension explains why users adopt and continue using a product because it works effectively, the iconic dimension explains why users develop attachment, preference, and loyalty because the product resonates with who they are or whom they aspire to become. Andriyansah conceptualizes iconic value as "the capacity of a digital artifact to serve as a marker of identity and a vehicle for self-expression" (Andriyansah, 2023d). This conceptualization highlights that value in digital business is not limited to functional utility, but also includes the symbolic capacity of products, services, and platforms to shape user identity and emotional experience.

In the AI era, iconic value increasingly emerges through personalized experiences that reflect individual values, aspirations, lifestyles, and cultural preferences (Andriyansah, 2023c; Singh, 2023). AI-driven personalization can transform a digital interaction from a merely functional transaction into a meaningful experience by aligning products, recommendations, content, and services with the user's identity. For example, recommendation systems not only help users find relevant products or media; they also participate in shaping taste, lifestyle, and self-perception. In this regard, personalization becomes iconic when it helps users feel recognized, represented, and emotionally connected to a brand or platform.

Studies on luxury brands and digital personalization show that AI-enabled hyper-personalization can increase customer lifetime value by 25–40% when it creates emotionally

https://doi.org/10.33019/society.v13i3.926

resonant and identity-relevant experiences (Gupta et al., 2023). Similarly, AI-driven content curation on platforms such as Spotify and Netflix transforms functional recommendations into identity-affirming rituals by connecting users with content that reflects their preferences, moods, cultural orientations, and personal narratives (A. Dwivedi et al., 2022). These examples show that iconic value is not separate from technology; rather, it can be amplified by intelligent systems when algorithmic personalization aligns with emotional and symbolic meaning. Nevertheless, many organizations continue to struggle to balance algorithmic efficiency with authentic brand storytelling (Alghamdi & Agag, 2023). Excessive reliance on automation may produce technically accurate recommendations, but without narrative coherence, ethical sensitivity, or cultural relevance, such recommendations may remain functionally useful but symbolically weak.

2.3. The Gap: Siloed Approaches to Value Creation

Despite growing recognition of dual-dimensional value, the existing literature on digital value creation remains fragmented. Information systems research has generally emphasized functional optimization, focusing on efficiency, automation, system performance, analytics capability, and operational excellence (Alghamdi & Agag, 2023; Bag et al., 2020). In contrast, marketing and consumer behavior scholarship has tended to emphasize brand equity, emotional engagement, consumer experience, symbolic consumption, and customer loyalty (Grewal et al., 2017; Iranmanesh et al., 2023). While both streams of literature contribute important insights, they often examine functional and symbolic value as separate domains rather than as mutually reinforcing dimensions of digital value creation.

This fragmentation creates a conceptual limitation in understanding how data and AI generate holistic value. In many AI-driven business models, value is still conceptualized primarily as economic utility, technical performance, or operational efficiency. Such an approach is insufficient in contemporary digital markets, where users increasingly expect products and services to be not only efficient and reliable but also meaningful, emotionally engaging, aesthetically distinctive, and aligned with their identity. Few frameworks explain how firms can integrate functional optimization and symbolic resonance within a unified AI-driven value engineering process. This gap is particularly relevant to the ICEME 2026 theme, "From Data to Value," because organizations now possess vast data capabilities but often lack systematic methods for transforming data into value that is simultaneously functionally superior and symbolically meaningful (Rai, 2020; Verhoef et al., 2021).

Table 1 summarizes the positioning of selected studies in relation to the ergo and iconic dimensions. The comparison shows that while several studies contribute to either functional optimization or symbolic value creation, relatively few provide an integrated framework that connects both dimensions within a broader theory of AI-enabled value engineering.

Table 1. Selected literature on ergo and iconic value dimensions

Study	Focus	Ergo Contribution	Iconic Contribution	Ergo-Iconic Integration	Limitation
IDC (2023)	AI business model roadmap	High: process optimization	Low	No	Treats value primarily as economic utility

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Study	Focus	Ergo Contribution	Iconic Contribution	Ergo-Iconic Integration	Limitation
Reim et al. (2020)	AI value creation and capture	High: capability matching	Low	No	Focuses on technical capabilities rather than symbolic outcomes
Black et al. (2024)	AI transformation factors	Medium: organizational readiness	Low	No	Explains how transformation occurs, but gives limited attention to what constitutes value
A. Dwivedi et al. (2021)	Supply chain optimization	High: cost reduction	None	No	Focuses primarily on operational performance
Ghobakhloo et al. (2024)	Post-pandemic consumer behavior	Medium: adoption drivers	Medium: sentiment shifts	Partial	Descriptive rather than integrative
Andriyansah (2023b)	Furniture marketing	High: functionality	High: pleasure and identity	Yes	Limited to a product-based context
Andriyansah (2023c)	Public service delivery	High: usability	High: comfort and acceptance	Yes	Limited to a service-based context
Ünlü (2024)	AI-driven personalization	High: customization	Medium: identity expression	Partial	Does not fully theorize symbolic mechanisms
Grewal (2021)	Technology and marketing	Low	High: lifestyle curation	Partial	Lacks operational integration

This comparison reveals that individual studies have addressed important components of either ergo or iconic value, but only a limited number have explicitly integrated both dimensions. Andriyansah's work provides the most direct foundation for such integration by conceptualizing digital value as a combination of functional utility and symbolic resonance. However, the existing applications of this framework remain largely situated in specific product or service contexts. The Ergo-Iconic Paradigm proposed in this paper extends this integration into a more general theoretical framework applicable across industries, platforms, and AI-enabled business models. By doing so, it provides a conceptual bridge between information systems research, marketing scholarship, and strategic management debates on digital value creation.

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3. Research Methodology

This study employs a systematic literature review combined with conceptual framework development to construct the Ergo-Iconic Paradigm. This methodological design was selected because the study aims not to test causal relationships empirically, but to synthesize existing theoretical and empirical insights into a coherent framework for understanding AI-enabled digital value creation. The systematic literature review provides a structured basis for identifying, evaluating, and integrating prior research, while the conceptual framework development approach enables the formulation of a new theoretical model that connects functional and symbolic dimensions of value.

The review focused on peer-reviewed articles published between 2020 and 2026 in the fields of information systems, management, e-business, marketing, consumer behavior, and digital transformation. The literature was drawn from Scopus-indexed journals, particularly Q1 and Q2 journals, to ensure scholarly relevance and quality. The search strategy used combinations of keywords such as "AI-driven business models," "digital value creation," "business intelligence," "AI-enabled personalization," "brand identity," "user experience," "human-centric AI," and "Ergo-Iconic." These keywords were selected to capture both the functional dimension of digital value, including automation, analytics, efficiency, and usability, and the symbolic dimension, including identity, emotional resonance, brand meaning, and user experience.

A total of 385 peer-reviewed articles were identified and analyzed. The inclusion criteria covered studies that addressed AI-enabled business models, digital value creation, user experience, brand differentiation, business intelligence, personalization, and the relationship between technology and customer value. Articles were excluded when they were not directly related to digital value creation, lacked theoretical or empirical relevance to AI-enabled business contexts, or focused solely on technical system architecture without discussing value, user experience, or managerial implications. This selection process enabled the study to focus on literature relevant to the development of an integrated ergo-iconic framework.

The selected literature was synthesized using thematic analysis. The analysis proceeded by identifying recurring concepts, theoretical arguments, and empirical findings related to the creation of functional and symbolic value. Themes associated with the ergo dimension included usability, efficiency, automation, predictive intelligence, cognitive ease, operational excellence, and frictionless interaction. Themes associated with the iconic dimension included brand identity, emotional connection, aesthetic value, symbolic meaning, personalization, and self-expression. These themes were then compared and integrated to identify points of convergence, tension, and theoretical gaps across the literature.

The resulting Ergo-Iconic Paradigm was developed by integrating Andriyansah's foundational work on ergo-iconic value with contemporary literature on AI-enabled business model innovation, business intelligence, digital transformation, and customer experience. The framework is theoretically grounded in the Resource-Based View, Service-Dominant Logic, and Dynamic Capabilities Theory (Barney, 1991; Teece et al., 1997a; Vargo & Lusch, 2004). The Resource-Based View supports the argument that firms can achieve sustainable competitive advantage through valuable, rare, and difficult-to-imitate capabilities. Service-Dominant Logic explains value as co-created through interaction and experience, while Dynamic Capabilities Theory highlights a firm's ability to integrate, reconfigure, and renew resources in response to changing digital environments. Together, these theoretical foundations support the development of the Ergo-Iconic Paradigm as a conceptual model for transforming data into dual-dimensional value.

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4. Results and Discussion

The synthesis of the literature reviewed in the previous sections indicates that value creation in intelligence-driven business cannot be adequately explained through efficiency, automation, and operational performance alone. Prior studies on digital transformation and AI-enabled business models show that firms increasingly rely on data analytics, automation, predictive intelligence, and algorithmic decision-making to improve productivity, reduce costs, and enhance responsiveness to market dynamics (Reim et al., 2020; Black et al., 2024). Research on AI applications in supply chains, business intelligence, and operational management also demonstrates that AI can strengthen functional performance through forecasting, optimization, adaptive interfaces, and process automation (A. Dwivedi et al., 2021; Javaid et al., 2022; Ghobakhloo et al., 2024; Iranmanesh et al., 2023). These studies provide an important foundation for understanding the functional dimension of digital value. Yet, as argued in the Introduction, efficiency has increasingly become a baseline requirement rather than a sufficient basis for sustainable competitive advantage.

The literature on marketing, consumer behavior, and digital experience suggests that value is also shaped by symbolic, emotional, aesthetic, and identity-related dimensions (Grewal et al., 2017; Grewal, 2021; Shrestha et al., 2019). Studies on AI-driven personalization, brand identity, and user experience indicate that digital platforms can generate deeper value when they create experiences that resonate with users' preferences, aspirations, and self-expression (Andriyansah, 2023c; Andriyansah, 2023d; Singh, 2023; Ünlü, 2024). Symbolic value is therefore not external to digital business; it is increasingly mediated by the same technologies that support functional optimization. The problem is that prior studies often examine functional and symbolic value as separate analytical domains. Information systems research tends to prioritize usability, automation, analytics capability, and operational performance, whereas marketing scholarship tends to emphasize brand meaning, emotional attachment, and symbolic consumption. This fragmentation forms the conceptual gap addressed by the present study.

The main result of this study is the formulation of the Ergo-Iconic Paradigm as an integrative conceptual framework for explaining how data can be transformed into dual-dimensional value. Building on Andriyansah's earlier work on ergo-iconic value, the paradigm argues that digital value consists of two interdependent dimensions: the ergo dimension and the iconic dimension (Andriyansah, 2023a; Andriyansah, 2023b; Andriyansah, 2023c; Andriyansah, 2023d). The ergo dimension refers to functional value, including AI-enabled efficiency, frictionless interaction, predictive intelligence, usability, cognitive ease, and operational excellence. It corresponds to the stream of literature that emphasizes digital transformation, business intelligence, system performance, and process optimization (Bag et al., 2020; Alghamdi & Agag, 2023; Verhoef et al., 2021). The iconic dimension refers to symbolic value, including brand identity, emotional resonance, aesthetic distinction, cultural meaning, and identity-affirming experiences. It corresponds to the stream of literature that emphasizes brand equity, customer experience, emotional engagement, personalization, and symbolic consumption (Grewal et al., 2017; Grewal, 2021; Rai, 2020).

The contribution of the Ergo-Iconic Paradigm lies in connecting these two streams of literature within a single framework of AI-enabled value creation. The paradigm does not treat functional and symbolic value as sequential or independent outcomes. It positions them as mutually reinforcing mechanisms through which firms create digital value that is both useful and meaningful. Ergo value explains why users adopt and continue using a digital product: it reduces effort, improves task completion, and provides reliable functional support. Iconic value explains

https://doi.org/10.33019/society.v13i3.926

why users develop attachment, loyalty, and advocacy: the product or service resonates with their identity, values, aspirations, and emotional expectations. The paradigm, therefore, extends the discussion from digital efficiency toward meaningful digital experience.

Table 2 presents the comparative dimensions of ergo and iconic value.

Table 2. Comparative dimensions of ergo and iconic value

Dimension	Ergo Value: Functional Dimension	Iconic Value: Symbolic Dimension
Core focus	Efficiency, usability, task completion, and cognitive ease	Identity, meaning, emotional connection, and aesthetic distinction
AI application	Predictive analytics, automation, optimization, and adaptive interfaces	Personalization, storytelling, cultural curation, and identity-based engagement
Main metrics	Task completion time, cost reduction, accuracy, system reliability, and process efficiency	Brand equity, customer attachment, Net Promoter Score, customer lifetime value, and emotional engagement
User benefit	Frictionless experience, reduced effort, convenience, and functional reliability	Self-expression, belonging, aspiration, recognition, and symbolic identification
Competitive edge	Operational superiority and service efficiency	Brand differentiation, loyalty, advocacy, and cultural relevance
The main risk when isolated	Commoditization, because products become interchangeable utilities	Superficial branding, because symbolic claims are not supported by functional performance

The comparison in Table 2 clarifies how the two dimensions operate through different but complementary logics. Ergo value works through reduction: reducing friction, uncertainty, waiting time, cognitive burden, transaction costs, and operational inefficiency. This logic is consistent with studies that frame AI and business intelligence as mechanisms for improving efficiency, agility, and process performance (A. Dwivedi et al., 2021; Bag et al., 2020; Ghobakhloo et al., 2024). Iconic value works through amplification: amplifying meaning, identity, emotional connection, symbolic recognition, and brand attachment. This logic is consistent with studies in marketing and consumer behavior that emphasize emotional engagement, symbolic experience, and brand differentiation (Grewal et al., 2017; Grewal, 2021; Ünlü, 2024).

The relationship between these dimensions is integrative rather than merely additive. Ergo, the absence of iconic value may result in commoditization, as products and services become interchangeable utilities competing mainly on speed, price, or technical performance. This risk is especially relevant in AI-enabled markets, where competing firms can adopt similar technologies. Once analytics tools, automation systems, and recommendation engines become widely available, operational efficiency alone becomes easier to imitate. Conversely, iconic value without ergo may result in superficial branding, because symbolic appeal cannot compensate for poor usability, unreliable systems, or weak service delivery. Symbolic resonance must therefore be supported by functional credibility. The synthesis of both dimensions produces ergo-iconic value: a form of digital value in which products, services, and platforms are indispensable because they work effectively and irreplaceable because they carry symbolic meaning for users.

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The Ergo-Iconic Paradigm can be operationalized through a three-stage value engineering process: data-to-intelligence, intelligence-to-experience, and experience-to-loyalty. The first stage, data-to-intelligence, reflects the functional foundation of AI-enabled business models. At this stage, raw data are transformed into actionable intelligence through analytics, automation, machine learning, predictive modelling, and decision-support systems. This stage is aligned with the literature on AI implementation, business intelligence, and digital transformation, which emphasizes the role of data in improving forecasting, operational visibility, resource allocation, and process optimization (Reim et al., 2020; Javaid et al., 2022; Alghamdi & Agag, 2023; Verhoef et al., 2021). The main objective is to enhance the ergo dimension by improving accuracy, reducing uncertainty, increasing responsiveness, and strengthening functional reliability.

The second stage, intelligence-to-experience, refers to the transformation of functional intelligence into meaningful customer experience. At this stage, AI is not used only to optimize internal processes or generate recommendations, but also to shape the quality, relevance, and emotional meaning of the user journey. This stage connects the literature on AI-driven personalization with the symbolic dimension of digital value. Personalization becomes strategically meaningful not merely when it predicts user behavior, but when it enables users to feel recognized, represented, and connected to a product, service, or brand (Andriyansah, 2023c; Singh, 2023; Ünlü, 2024). Intelligence-to-experience is therefore the stage where the ergo and iconic dimensions begin to converge. Functional intelligence supports convenience and usability, while symbolic design, brand storytelling, and identity-based personalization transform efficient interaction into a meaningful experience.

The third stage, experience-to-loyalty, explains how meaningful experiences can be amplified into customer attachment, advocacy, and long-term brand differentiation. This stage aligns with marketing and service-dominant perspectives that view value as co-created through interaction, experience, and relational engagement (Vargo & Lusch, 2004; Grewal et al., 2017). At this stage, firms seek to convert repeated positive experiences into deeper symbolic relationships with users. This may involve community building, ethical transparency, cultural relevance, sustainability communication, and participatory innovation. AI can support this process by enabling firms to understand customer values more precisely, communicate organizational practices more transparently, and engage with user communities more responsively. The objective is not only to retain customers through convenience but also to create trust, belonging, and identification.

These three stages explain the movement from data to value as a process of dual-dimensional value engineering. The process begins with data being converted into intelligence, continues with intelligence being translated into experience, and culminates in experience being amplified into loyalty and symbolic differentiation. Although presented sequentially, the process is iterative rather than strictly linear. Firms may move repeatedly between stages as they learn from users, refine algorithms, redesign interfaces, and adjust brand narratives. This iterative character is consistent with Dynamic Capabilities Theory, which emphasizes a firm's ability to sense changing environments, seize emerging opportunities, and reconfigure resources in response to technological and market change (Teece et al., 1997a).

The theoretical implications of the Ergo-Iconic Paradigm can be understood through three established theoretical foundations introduced earlier in the paper. First, the paradigm enriches the Resource-Based View by redefining valuable resources not only as those that support operational efficiency, but also as those that enable dual-dimensional value creation and symbolic differentiation (Barney, 1991). In this view, AI capabilities become strategically valuable not simply because they process data efficiently, but because they are embedded in organizational routines, user experiences, and brand meanings that are valuable, rare, and difficult to imitate.

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Second, the paradigm advances Service-Dominant Logic by positioning value co-creation as the integration of functional intelligence and identity-building experience (Vargo & Lusch, 2004). Firms do not merely deliver value to customers; it is co-created through interactions in which users experience convenience, recognition, emotional connection, and symbolic relevance. Third, the paradigm contributes to Dynamic Capabilities Theory by identifying ergo-iconic integration as a meta-capability for sustaining competitive advantage in volatile digital markets (Teece et al., 1997a). Firms must continuously integrate technological capability, customer insight, brand meaning, and experience design to maintain both functional relevance and symbolic distinctiveness.

The practical implications of the framework also follow from this integration of literature. For managers, the paradigm suggests that AI-enabled business strategies should not be designed solely around efficiency. Firms need dual-metric dashboards that evaluate both ergo and iconic performance. Ergo metrics may include task completion time, cost per transaction, response speed, system reliability, and process efficiency. Iconic metrics may include brand sentiment, emotional engagement, customer attachment, identity alignment, and advocacy. Measuring only one dimension may produce strategic imbalance: a firm may become efficient but forgettable, or symbolically attractive but functionally unreliable.

The framework also suggests that AI-driven personalization should be developed with purpose. Existing studies on AI personalization often emphasize customization, prediction, and behavioral targeting. The Ergo-Iconic Paradigm extends this view by arguing that personalization should not only predict what users are likely to buy or consume but also help them feel understood, represented, and meaningfully connected. This requires firms to design personalization systems that reflect user values, aspirations, cultural contexts, and ethical expectations. When personalization is reduced to algorithmic targeting, it may become intrusive or superficial. When it is aligned with identity and meaning, it becomes a source of deeper customer attachment.

Ethical transparency also becomes central to the iconic dimension of digital value. Prior literature on digital transformation and AI governance has emphasized transparency, explainability, and trust as important issues in AI-enabled systems (Rai, 2020; Verhoef et al., 2021). The Ergo-Iconic Paradigm extends this discussion by positioning transparency not only as a governance requirement but also as a symbolic amplifier. AI and business intelligence can be used to communicate sustainability, fairness, social impact, and responsible business practices. For users who value ethical consumption and social accountability, such transparency can transform operational information into identity-relevant meaning.

The paradigm also implies the need for stronger cross-functional integration. Information systems, data analytics, marketing, design, customer experience, and brand strategy should not operate in separate silos. The reviewed literature shows that functional and symbolic value have often been studied separately; the same separation is also evident in organizational practice. Ergo-iconic value requires collaboration across technological and symbolic functions because meaningful digital value is produced through the combined design of systems, interfaces, narratives, and experiences. AI-enabled innovation should therefore involve not only technical optimization, but also user research, brand strategy, ethical assessment, and experience design.

The transformation from data to value requires more than technical optimization. Data becomes strategically valuable when it is converted into intelligence, translated into meaningful experiences, and amplified into loyalty, trust, and symbolic differentiation. By integrating insights from AI-enabled business model literature, digital transformation studies, marketing scholarship, Service-Dominant Logic, Resource-Based View, Dynamic Capabilities Theory, and

https://doi.org/10.33019/society.v13i3.926

Andriyansah's work on ergo-iconic value, the Ergo-Iconic Paradigm provides a unified framework for understanding digital value creation in the intelligent economy. AI becomes significant not only as a tool for prediction and automation, but also as an infrastructure for human-centered value creation. By integrating ergonomic fit and iconic appeal, firms can develop products, services, and platforms that are both functionally indispensable and symbolically irreplaceable.

5. Conclusion

This paper has introduced the Ergo-Iconic Paradigm as a conceptual framework for understanding how data can be transformed into value in the intelligence-driven economy. In response to the ICEME 2026 theme, "From Data to Value," the paper argues that digital value should not be understood solely in terms of efficiency, automation, or operational optimization. While these elements remain important, they are insufficient to explain how firms build loyalty, differentiation, and meaningful engagement in increasingly competitive digital markets. The proposed paradigm, therefore, positions value creation as the integration of two interdependent dimensions: the ergo and iconic dimensions. The ergo dimension captures the functional capacity of digital systems to enhance usability, reduce friction, improve predictive intelligence, and support operational excellence. The iconic dimension captures the symbolic capacity of digital products, services, and platforms to generate identity, emotional attachment, aesthetic distinction, and cultural meaning.

The main contribution of this paper lies in extending Andriyansah's earlier work on ergo-iconic value into a broader framework for intelligence-driven business models. The paper shows that AI and business intelligence should not be understood only as tools for automation, prediction, or cost reduction, but also as infrastructures for designing meaningful digital experiences. Through the proposed three-stage value engineering process—data-to-intelligence, intelligence-to-experience, and experience-to-loyalty—the paper explains how firms can move from raw data to actionable intelligence, from intelligence to meaningful user experience, and from experience to loyalty and symbolic differentiation. This process positions ergo-iconic value as a strategic capability that enables firms to create products, services, and platforms that are both functionally indispensable and symbolically irreplaceable.

Theoretically, the Ergo-Iconic Paradigm contributes to the Resource-Based View, Service-Dominant Logic, and Dynamic Capabilities Theory. It enriches the Resource-Based View by showing that AI-enabled resources become strategically valuable when they support not only operational efficiency, but also symbolic differentiation and customer attachment. It advances Service-Dominant Logic by framing value co-creation as an interaction between functional intelligence and identity-building experience. It also contributes to the Dynamic Capabilities Theory by identifying the integration of ergonomic fit and iconic appeal as a meta-capability for firms operating in volatile digital markets. In practical terms, the framework suggests that managers should evaluate digital value through dual-metric dashboards, design AI-driven personalization with purpose, use ethical transparency as a source of trust and symbolic meaning, and strengthen cross-functional collaboration between technology, marketing, design, and customer experience functions.

As a conceptual study, this paper has limitations that open directions for future research. The proposed framework requires empirical validation across industries, platforms, and organizational contexts. Future studies should develop measurable indicators for assessing the balance between ergo and iconic value and examine how this balance affects customer loyalty, brand attachment, user satisfaction, and firm performance. Further research may also test the

https://doi.org/10.33019/society.v13i3.926

framework in both business-to-consumer and business-to-business settings, as the mechanisms of symbolic value may differ across market contexts. Cross-cultural studies are also needed to examine how users interpret iconic value in relation to identity, ethical consumption, aesthetic preference, and digital experience. As emerging technologies such as generative AI, immersive platforms, augmented reality, and the metaverse continue to reshape business interaction, the Ergo-Iconic Paradigm offers a foundation for studying how intelligent systems can create value that is not only efficient but also meaningful, trusted, and human-centered.

6. Acknowledgment

The author would like to express sincere appreciation to all parties who provided academic support, constructive feedback, and scholarly insights during the development of this paper.

7. Declaration of Conflicting Interests

The author declares that there is no conflict of interest with respect to the research, authorship, and/or publication of this article.

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https://doi.org/10.33019/society.v13i3.926

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https://doi.org/10.33019/society.v13i3.926