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The impact of artificial intelligence and digital social media on business model innovation: Literature review and mechanism analysis

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Abstract: Digital technologies (i.e., Artificial Intelligence (AI) and Digital Social Media (DSM)) are key factors driving business model innovation (BMI). Based on Technology Affordances and Constraints (TAC) theory, Resource-based View (RBV) theory, and relevant literature, this paper analyzes the relationship among these factors, their roles, and explores the mediating effect of value integration and the moderating role of strategic alliances. It clarifies the conceptual definitions and dimensions of BMI, AI, DSM, value integration, and strategic alliances. The findings indicate that AI influences BMI by improving decision-making efficiency and optimizing business processes, while DSM promotes innovation and transformation through user interaction and market feedback. Value integration acts as a mediator to facilitate transforming technological resources into innovation value, and strategic alliances enhance technology application effects through resource and risk sharing. This paper reveals the synergistic effects of technology application, resource integration, and alliance collaboration in BMI, providing both theoretical references and practical insights for enterprise digital transformation and BMI.

Keywords: *Artificial intelligence, Business model innovation, Digital social media, Strategic alliance, Value integration.*

1. Introduction

The emergence of digital technologies has accelerated the pace of BMI, facilitating process automation and more informed decision-making [1]. However, the interaction between digital technology and BMI is often oversimplified and seen as a simple fusion of them [1]. This paper examines how digital technologies shape business model innovation by analyzing their application across organizational contexts and the ways in which specialized actors contribute to innovation processes.

In the rapidly evolving environment of science, technology, and innovation, new technologies are constantly emerging. Although digital technologies offer great potential for business development, they are gradually penetrating into the production and business activities of different industries and are changing the way companies produce and operate, such as AI and DSM. However, enterprise BMI and digital transformation are not inevitable. In reality, many companies still face a high risk of failure in advancing BMI and digital transformation [2]. AI is a digital innovation foundation [3]. In some high-technology industries, innovative companies such as Facebook, Apple, and Google utilize advanced AI technologies to generate profits and benefit their customers [4]. In high-end, technology-intensive industries, AI supports three business types: automation of back-office execution, data review and analysis, and interaction with employees and consumers. Many top technology companies have invested heavily in applying AI. Conversely, companies in the middle or lower parts of the chain, especially those in traditional industries, often lack the ability to apply AI to specific business models [3]. And the speed of adaptation in the industry cannot keep up with the development of AI technologies, for example, some traditional firms may not be able to move forward with BMI due to the low adoption rate of digital technologies in the market [5]. Therefore, academics have indicated that firms need to develop

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new resources and capabilities and introduce very different business models to fit in order to achieve circular business models and corporate sustainability [3].

In the Internet era, using social media platforms positively impacts businesses, especially small and medium-sized enterprises (SMEs) [6]. Companies can use social media platforms to obtain online consumer reviews to predict consumer demand [7]. Moreover, social media benefits firms by enhancing their performance [8]. However, organizations lack the ability to manage social media and still face failure in digital transformation Gebauer et al. [2]. Zhang and Zhu [9] show that experts predict that the size of the business economy in Asian countries (e.g., China) will be larger than that of Western countries combined. Therefore, it is essential to apply social media to businesses in Asian countries such as China [9].

Therefore, this paper further analyzes how AI and DSM promote BMI and the specific mechanisms of action according to the TAC theory and the RBV theory. Given that there are many definitions of the three in the literature, this paper also summarizes the dimensional division of these three variables in different literatures to provide readers with diverse perspectives.

2. Theoretical Foundations

In order to explain the relationship between AI, DSM, and BMI, this paper introduces the TAC theory and the RBV theory as the theoretical foundations. The TAC theory emphasizes how AI technology affects firm operations and BMI. The RBV theory reveals how firms can innovate their business models through AI and DSM.

2.1. Technology Affordances and Constraints Theory

The TAC theory evolved from A theory of affordances proposed by Gibson [10] and was eventually proposed by Majchrzak and Markus [11]. The theory aims to explore the opportunities and limitations that technology presents to organizations and individuals. In this theory, availability refers to the potential opportunities presented by technology, while constraints refer to the constraints faced by technology during its use. The TAC theory emphasizes that technology is not only a static tool or resource but also a dynamic system shaped by user, organizational, and environmental factors in its practical application [12].

Under the application of AI and DSM, the TAC theory explains the value that AI brings to the innovation of an organisation's business model. The availability of AI technology is reflected in the analytical capabilities, data processing capabilities, and automated decision-making functions it provides. [11]. Through algorithms such as deep learning and machine learning, AI can extract valuable information from large amounts of data to help companies predict market trends, optimise operations, and improve customer experience. For example, AI would analyse consumer behaviour in real-time and provide personalised recommendations, which can drive BMI for customised services or products [13]. At the same time, DSM offers rich availability for businesses. For example, customers share experiences with specific products on these platforms. Through these social interactions, firms can communicate directly with consumers, obtain feedback, and conduct market testing opportunities that will drive data-driven BMI. While AI and social media provide technological availability for businesses, more importantly, businesses can identify, apply, and combine the resources these technologies bring [14]. Value integration, on the other hand, as a mediating variable, helps firms achieve BMI. By integrating the resources brought by AI and social media, firms can co-create value with external partners and reconfigure the value chain, thus breaking through the technology and firm structure constraints mentioned in the TAC theory. Therefore, value integration, as a mediating variable, is an indispensable part for enterprises to realize BMI.

However, the limitations of AI and DSM cannot be ignored. The complexity of the technology and the management capabilities of the organization are two key constraints. Despite the strong potential of

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AI in data processing and analytics, if firms lack effective data management and technical support, then the application of AI may encounter bottlenecks and fail to maximize its business value [11]. Meanwhile, although DSM provides companies with direct access to consumers, they may face brand crises or the spread of negative information if they fail to effectively manage social media interactions. Therefore, by emphasizing the duality of technological opportunities and limitations, the TAC theory helps managers to more fully understand how AI and DSM can drive BMI in practical applications.

Overall, the TAC theory focuses on the process of actualization of technology, examining both the opportunities for use and the constraints that technology provides. It explains how AI and DSM can be used in practice by organizations to drive BMI. For example, AI, with its data analysis and prediction capabilities, can help firms identify new market opportunities, while DSM provides channels to interact directly with consumers, driving the creation of new marketing models.

2.2. Resource-Based View Theory

In Barney [15] proposed the RBV theory, which is one of the key theories in the field of strategic business management, arguing that firm-specific resources and capabilities play a central role in shaping strategic outcomes. And firms can achieve sustained advantage by controlling and integrating valuable resources [16]. These resources can be tangible (e.g., capital, equipment) or intangible (e.g., technological innovation capability, brand value, management model, etc.) [17].

In the context of digitalisation, AI technology and social media can be regarded as important strategic resources for firms [18]. AI, as a highly sophisticated technology, has resource attributes that are consistent with the requirements of scarcity and inimitability in the RBV theory. Advanced AI technology is an exclusive resource of high-end technology companies, such as Google, Apple, and Amazon [19]. By continuously optimizing their AI algorithms and data models, these firms have developed strong competitive barriers that drive innovation in their business models. For example, Amazon has transformed itself from a traditional retailer to the world's largest e-commerce platform by optimizing its recommendation system through AI technology [20]. In addition, social media can help organizations establish channels for direct interaction with consumers, thereby increasing brand awareness, driving sales, and enhancing customer loyalty [21]. User data generated by DSM and user comments are key resources that can be utilized by businesses. Through value integration, firms can turn the potential resources offered by social media into value creation, providing better services or even actual innovations to consumers [22].

2.3. Summary

In summary, the RBV theory emphasizes how AI and DSM, as unique resources, can help enterprises build competitive advantages from the perspective of strategic resources. Through the integration and optimization of these resources, enterprises can achieve continuous innovation and expansion of their business models. The TAC theory and the RBV theory explain the role of AI and DSM in BMI from different perspectives. The combination of these two theories helps us to fully understand how AI and DSM can work together to drive BMI and transformation through the integration of technology applications and strategic resources.

3. Literature Review

AI and DSM are gradually becoming important parts of enterprise BMI, and related studies are increasing, exploring their impact on enterprise innovation and performance from different perspectives. However, there are still some differences in the research focus of existing studies, with different analyses from various dimensions. Therefore, this paper compiles and summarizes relevant literature around the five themes of BMI, AI, DSM, value integration, and strategic alliance, to analyze the relationship between these variables and provide a theoretical basis for subsequent research.

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3.1. BMI

In a rapidly evolving digital environment, where new technologies are emerging, and business models often have limited lifecycles, previously successful business models in competitors' domains are under threat. This means firms must proactively seek new compositions of business models before external pressures force them to change.

3.1.1. Concept Definition and Dimension of BMI

The concept of BMI has received the attention of many scholars, and different scholars have different definitions of BMI. The following table compiles the conceptual definitions and dimensions of BMI by different scholars in the past five years to help readers fully understand the meaning and influencing factors of BMI.

Table 1.
Conceptual Definition of BMI and Dimensional Classification

Author	Time	Conceptual Definition	Dimensional Classification
Zhou et al. [23]	2020	BMI is an important way for companies to gain a competitive advantage. Efficiency-centered BMI, innovation-centered BMI.	Efficiency-centred BMI, innovation-centred BMI
Åström et al. [24]	2022	BMI is as important a solution as advanced technology.	value flow structure, contractual agreements, and revenue models
Ancillai et al. [25]	2023	BMI is as important a solution as advanced technology.	Digital BMI, digital servitising
Sjödin et al. [26]	2023	BMI presents a new opportunity for companies to adapt to innovative methods of generating revenue, increasing their value, income, and impact.	Augmentation business model、Automation business model
Kanbach et al. [27]	2024	BMI is fueled by new markets and services. And BMI requires advances in both technology and management practices to make it happen. Companies need to make good use of technological innovation and adapt existing structures.	Value Creation Innovation, New Proposition Innovation, and Value Capture Innovation
Yu and Chen [28]	2024	BMI is a new concept that focuses on innovation in products and production processes.	Novel BMI, Efficiency BMI
Wang et al. [29]	2025	BMI is the creation of new ways of creating value by going beyond traditional business models.	Novel BMI, Efficiency BMI

Based on the table, BMI is influenced by multiple factors, including innovation orientation, value structure, enterprise digitalization drive, technology application, and novelty perspectives. These perspectives reflect the diversity and complexity of BMI from different dimensions. Although these divisions reveal the characteristics of BMI from different perspectives, this paper divides BMI into novelty and efficiency BMI. Because this dimension has strong theoretical support, we refer to the efficiency and novelty BMI measurement scale designed by Zott and Amit [30]. Novelty-based BMI refers to new activities, new management styles, and new product designs created by a firm for the purpose of novelty [30]. Efficiency-based BMI, on the other hand, is how firms can use new business models to increase efficiency while reducing costs [30].

3.1.2. Impact Factors of BMI

Based on the above literature, the main factors affecting BMI can be divided into internal and external factors. Internal factors include technological resources and organizational management, while external factors include market competition and policy regimes.

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For internal factors, previous research suggests that digital technology affects BMI to some extent [31]. As firms' adoption of technological resources can help change the way they capture value, for example, Voith, a manufacturer of traditional public transport equipment, successfully penetrated the market with a digital distribution approach by connecting its in-vehicle systems to the cloud to enable a data-driven business model [32]. In terms of organizational management, it is a significant barrier to BMI [33]. This is because some organizations experience change inertia when innovating business models. When there is a behavioral change in the organization, it automatically reacts by reverting to past experiences and resists change. Therefore, for some SMEs lacking sufficient resources, external forces are necessary to carry out innovation activities.

However, market competition is often considered a disadvantage [34]. This is because market competition may lead to a smaller market share for the firm, and there may be organizational changes when business models are innovated. An uncertain market can further exacerbate mistrust among employees or partners, thus hindering the efficiency of innovation [35]. Despite these challenges, studies have shown that firms can use effective policy regimes to stabilize innovation [36]. For instance, the implementation of the new energy vehicle policy, which expanded government subsidies to new energy vehicle firms, also had a positive impact on firms' technological innovation [37].

3.2. AI

Artificial intelligence encompasses systems capable of supporting cognitive and interactive functions. AI technology is widely recognized across industries for its impact on how information is used, content is generated, and organizations operate [38].

3.2.1. Concept Definition and Dimension of AI

It has been noticed that AI is not just a technology, and it has penetrated into enterprise development, value integration, and business models. Numerous scholars have also defined and categorized it.

Table 2.
Conceptual Definition of AI and Dimensional Classification.

Author	Time	Conceptual Definition	Dimensional Classification
Sjödin et al. [3]	2021	AI is defined as the smartest form of digitization and fundamentally changes the way businesses integrate and create value to meet the need to keep up.	Data AI, Algorithmic AI, and AI Democratisation Capabilities
Mishra and Tripathi [4]	2021	AI is the most comprehensive generalization engine.	Continuous Intelligence, Applied Intelligence, Data Intelligence
Kar et al. [38]	2022	AI is a powerful tool with human-like learning capabilities.	Supervised Learning Methods, Unsupervised Learning Methods
Johnson et al. [39]	2022	AI is part of the deep impact of digitalization on innovation. AI raises new questions and pushes companies to face the challenge of product and service innovation.	Automated AI, Augmented AI
Gama and Magistretti [40]	2025	AI is the ability of machines to think and mimic human behavior.	Strong AI, Weak AI

Comprehensive form, AI can be divided from the perspective of technical attributes and application functions. In this paper, based on existing research, AI is divided into three dimensions: AI application, convenience AI, and personalized AI. The AI application dimension refers to the use of AI in enterprises, including data analysis, optimization solutions, etc. [41]. Convenience AI refers to robots or applications that are able to execute various commands from users [42]. Personalized AI refers to AI

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that provides customized services based on user preferences, behavior, and historical data, based on algorithms and data analysis [43].

3.2.2. The Impact of AI on BMI

Research has shown that AI can not only influence organizational innovation but also accelerate it [40]. AI can help organizations improve their decision-making based on massive amounts of data and carry out different forms of innovation [44]. For example, data-driven companies such as Google and Baidu have made it an innovation goal to integrate AI into their daily operations [45]. Previously, BMI by companies often required a lot of experimentation, market research, and resource investment, resulting in long innovation cycles [46]. However, with the help of AI, firms are able to understand market trends in real time, quickly simulate the possible outcomes of different business models, and automatically optimize innovation solutions [47]. This means that companies are able to increase the success rate of their innovations at a much lower cost.

The impact of AI on BMI is also reflected in the drive to reposition firms strategically and identify sources of competitive advantage. In the age of AI, firms' competitiveness no longer comes exclusively from traditional resources but includes algorithmic capabilities and the ability of organizations to integrate AI into their main strategies [47]. As a result, organizations often need to reassess their position in the market when adopting AI [48]. For example, through AI-driven process automation and intelligent analytics, firms can differentiate themselves from the competition and open new market spaces through efficiency gains and value innovation. AI may even change the industry landscape, causing firms that were in dominant positions to be overtaken and forcing them to transform their business models to cope with competitive pressure from other firms [49].

3.2.3. Impact of AI on Value Integration

The impact of AI on value integration is seen both internally and externally. For internal enterprises, research has shown that the more information AI collects about the user, the more value the enterprise has for the user [50]. AI creates value together with the enterprise by collecting and analyzing data from the enterprise's user platforms and understanding users' needs to personalize the service [25]. This process is not just a mere aggregation of data, but AI analyzes it through algorithms and transforms dispersed data into key data resources that can create value for the enterprise. In addition, AI helps to innovate the organizational structure within the business. AI gives employees data platforms and intelligent management systems so that information barriers between different departments are broken down.[51]. For example, the marketing department is able to share consumer behavior data with the product development department through AI. This cross-departmental integration driven by AI helps to form efficient internal resource sharing [51]. On the external side, value integration is often targeted at partners because they need complementary resources to run their business. For example, Assa Abloy, a Swedish manufacturer, partnered with Google to develop smart door locks; Assa Abloy provided hardware manufacturing, and Google provided the AI system application. Ultimately, this collaboration led to a significant increase in profits for Assa Abloy [52] and an innovative attempt by Google to use AI in manufacturing.

Overall, the impact of AI on value integration is reflected in internal resource integration as well as external collaboration. AI not only optimizes internal resource allocation and work processes but also strengthens resource sharing between firms and external partners, making value integration an important variable in driving BMI and competitive advantage.

3.3. DSM

Social media plays an important role in corporate BMI. Social media has been defined as a technological component of corporate communication, transaction, and relationship building [53].

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Organizations increase consumer engagement and gain useful consumer insights by using social media in their marketing objectives and strategies.

3.3.1. Concept Definition and Dimension of DSM

Since the development of the Internet, more social media platforms have emerged, such as Instagram and Facebook, and the following table collates some scholars' views on DSM.

Table 3.
Conceptual Definition of DSM and Dimensional Classification.

Author	Time	Conceptual Definition	Dimensional Classification
Mariani and Nambisan [54]	2021	ORP carries many consumer experiences, comments, and suggestions about products.	Information-driven social media, transaction-driven social media, research-driven social media.
Cartwright et al. [55]	2021	DSM is any technology that enhances social interaction and can be used by salespeople to generate content (e.g., blogs, tweets, Wikipedia articles) and develop networks (e.g., social networks, online communities).	Sales promotion tools, Integrated communication tools, Employee engagement tools
Li et al. [56]	2021	Social media is viewed as a platform for people to build a network of contacts and share information and ideas.	Social commerce strategy, Social content strategy, Social monitoring strategy, and Social CRM strategy
Feng et al. [57]	2024	Social media, also known as social media, is a platform for users to communicate and share their moods.	Social media relationship interaction behaviour, Social media task interaction behaviour
Zhang and Liu [58]	2024	Social media is an important platform for businesses to communicate and build relationships, driven by data to make users dependent on DSM.	Emotional attachment, Job need, Accumulation
Li and Wang [59]	2025	Social media is a personalized platform, as each user's interface is driven by algorithms that are personalized.	Technical soundness, Content soundness

Based on the table, scholars feel that DSM can be divided in terms of user experience and business communication. This paper focuses on the effect of social media in business, so social media is divided into social media relationship interaction behavior and social media business interaction behavior. Social media relationship interaction behaviors refer to users' interactions on social media platforms to establish, maintain, or strengthen social relationships, including likes, comments, and retweets [59]. Whereas social media business interaction behaviors refer to behaviors related to business objectives that users exhibit when interacting with brands or companies on social media platforms [59].

3.3.2. The Impact of DSM on BMI

Existing studies have shown that DSM drives BMI by enhancing the strategic social media capabilities of enterprises [60]. In the digital era, social media has changed the way firms conduct business models, communication, and value creation. Social media strategic capabilities emphasize a firm's ability to plan and leverage digital social tools at a strategic level, including content production capabilities, social data analytics capabilities, user interaction management capabilities, and integration capabilities to incorporate social media into value chain operations. The deep interactions and real-time nature of DSM enable firms to develop new models in the logic of value creation, thus driving a holistic reconfiguration of business models [55]. For example, by obtaining customer feedback through social platforms, firms are able to create personalized services and so on to achieve a user-centric business model that gains user trust and support and drives innovation in the value proposition [61]. However, because BMI requires firms to build entirely new business models, this may conflict with existing

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practices, leading to organizational inertia that can impede BMI; therefore, firms need to have the strategic flexibility to rapidly change the distribution of value [60].

3.3.3. The Impact of DSM on Value Integration

DSM also facilitates the co-creation of value between businesses and users. Firms can use social media to integrate user needs, and this ability can help resist instability in service innovation [54]. Before social media emerged, most people's ideas were passed on by word of mouth, a method prone to error because people have limited memory and cannot remember everything the other person told them for a long time [62]. However, online reviews on social media are now widely used by data algorithm scientists and information management scholars to better integrate consumer thoughts and behaviors [54]. DSM also provides businesses with assistance in finding partners. Previously, companies seeking partners mainly relied on long-term supply chain relationships or fixed cooperation models. Now, however, firms can choose partners based on their real-life performance on social platforms [63]. For example, companies can decide with whom to collaborate based on the number of brand interactions on social media and user feedback. However, this new resource carries risks, including disinformation [64]. Most false information impacts users' judgment. Therefore, regulators must regularly review social media for false information, and companies need to be prepared for public relations challenges.

3.4. Value Integration

Value integration typically involves unifying technology, data, and organizational capabilities into an operational system through the coordination of internal resources and external players. This process aims to achieve an innovative business model. As the application of new technologies deepens, enterprises must embed technological capabilities into existing activities via value integration to support new business models and operational approaches.

3.4.1. Concept Definition and Dimension of Value Integration

Value integration is viewed as a mediating variable for firms to achieve value co-creation and enhance competitive advantage. The following is a compilation of relevant literature on value integration from the past five years.

Table 4.
Conceptual Definition of Value Integration and Dimensional Classification.

Author	Time	Conceptual Definition	Dimensional Classification
Sjödin et al. [65]	2020	Value integration is the consolidation and allocation of resources already available to the organization to maximize value.	Value Creation, Value Capture
Sjödin et al. [66]	2020	There is a need to incorporate multiple customer personas into the development cycle and facilitate joint learning before and after delivery.	Digital Requirements, Value Prioritisation, Value Expansion
Burström et al. [5]	2021	Value integration concerns how various resources are integrated and allocated to fulfill a core value proposition.	Value Creation, Value Delivery, Value Capture
Klos et al. [67]	2021	Value Integration is a new digital technology for organizations to facilitate BMI.	Value Proposition, Value Creation, Value Capture
Mariani et al. [45]	2023	Value Integration refers to the synergistic integration of internal resources and capabilities by an organization, as well as the coordination between the organization and external partners in the value creation process.	Value Creation, Value Allocation, Value Delivery

Based on the table, scholars mainly categorize value integration into value creation, value allocation, and value delivery. These three components together influence the company's value proposition. In this

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paper, value integration is divided into two dimensions: value proposition and value creation. Value proposition refers to how a firm delivers its products or services to customers and interacts with them. Digital technologies have made the value proposition more personalized [67]. Value creation involves how firms generate value along the value chain by leveraging resources and capabilities within internal and inter-organizational processes [67].

3.4.2. Impact of Value Integration on BMI

Firms need to make changes in one dimension of value integration (value proposition and value creation) to achieve BMI [45]. However, markets are dynamic, and firms need to continuously develop new products or services relevant to other stakeholders to realize new value and maintain competitiveness [68]. Firstly, value integration drives BMI by enhancing customer insights. Firms are no longer just selling products but delivering results or effects, such as increased efficiency, reduced costs, or improved operational performance [65]. To do this, organizations must have a more comprehensive understanding of what customers really want. The process of value integration facilitates the sharing of data, knowledge, and cross-organizational resources, which helps firms identify customer needs more accurately [67]. By analyzing customer data and sharing operational information, firms can design new value propositions that are more closely aligned with the actual needs of customers, which in itself is the starting point for BMI. To achieve BMI, companies often need to integrate resources from technology providers, data platforms, service teams, etc., to optimize the overall solution through collaboration [69]. The better the value integration, the more a firm can build a stable and flexible value network that allows it to rapidly iterate on solutions and develop more valuable products or services [66]. This continuous solution optimization not only demonstrates BMI but also increases firm competitiveness.

3.4.3. The Mediating Role of Value Integration

Value integration plays a key mediating role in exploring how AI and DSM can drive BMI. While AI enables firms to identify consumer needs and improve efficiency by providing intelligent data analytics and predictive capabilities, these increased capabilities do not automatically translate into BMI being measured more accurately. The user data, behavioral preferences, and operational performance information provided by AI are capable of creating new opportunities such as personalized services, intelligent product upgrades, or preventive maintenance [1]. However, companies need to integrate these insights into product design, operational processes, or service systems to develop new value propositions that can drive substantial shifts in business models. For DSM, it facilitates interactions between companies and consumers, enabling companies to understand market trends and user preferences faster. However, these benefits must be integrated into product development, marketing strategies, and service systems to create new value and achieve BMI [67]. Secondly, enterprises use platform data to select partners and build partner value networks through social platforms [70]. However, the innovation of the business model lies in how firms integrate these partnerships. In conclusion, DSM does not directly change business models, but rather, through value integration, it prompts enterprises to reorganize value resources and form innovative business models.

3.5. Strategic Alliance

Strategic alliances are often defined as cooperative relationships between enterprises that share resources and risks. Through strategic alliances, firms can access additional resources, such as technological data and platform resources, to compensate for the lack of internal resources. Existing studies indicate that strategic alliances help firms improve their coping capacity in uncertain and complex market environments and support the application of new technologies and the adaptation of business models.

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3.5.1. Concept Definition and Dimension of Strategic Alliance

In order to cope with uncertainties and risks in the business environment, enterprises cooperate with resources to achieve common goals. Different scholars have different definitions of strategic alliances, and the following is an elaboration of the concept of strategic alliances in the last five years.

Table 5.
Conceptual Definition of Strategic Alliance and Dimensional Classification.

Author	Time	Conceptual Definition	Dimensional Classification
Keller et al. [71]	2021	A strategic alliance is one in which partners work together normally.	Contractual mechanism alliances, relationship mechanism alliances
Lu et al. [72]	2021	Strategic alliances are an important way for companies to gain access to external resources.	Marketing alliances, competitive alliances
Li et al. [73]	2022	A strategic alliance is when two or more organizations reach a consensus on a common goal and become partners who share resources.	Competence-oriented strategic alliances, legitimacy-oriented strategic alliances
Li et al. [74]	2022	A strategic alliance is when two or more different companies develop a cooperative relationship to achieve a win-win situation.	Technology alliances, marketing alliances
Kim and Hu [75]	2022	An example of a joint product or service launch of two brands is called a co-branding alliance.	Retail purchasing alliances, horizontal strategic alliances

According to the table, scholars define strategic alliances in terms of organizational learning, partner diversity, and governance structure. In this paper, strategic alliances are classified into technology alliances, marketing alliances, and competition alliances. A technology alliance refers to the joint development of new technologies by sharing data resources with other partners to share the risk of developing new technologies [73]. Marketing alliance refers to business cooperation in which firms use the brand influence of partners to jointly promote their products to expand market share and achieve resource sharing [74]. Competitive alliances are partnerships in which competitors in the same industry choose to cooperate to meet common market challenges [74].

3.5.2. The Moderating Role of Strategic Alliances

Strategic alliances play a moderating role in firms' BMI in the context of digital technology adoption. Firms in strategic alliances are more likely to take better advantage of AI and DSM than firms that are not in alliances with other firms [71]. This is because strategic alliances can provide firms with complementary resources as well as richer opportunities for value integration, thus enhancing the effectiveness of digital technology-driven innovation.

From an AI perspective, through strategic alliances, firms can share data resources or technical experience with partners to enable the application of AI in a wider range of business scenarios. Enterprises wanting to make good use of AI technology usually need high-quality data, equipment support, and professional technicians, and it may be difficult for a single enterprise to have all of these resources at the same time in a short period. Strategic alliances enable enterprises to share data resources, algorithmic experience, and technological infrastructure through cooperation, which is more conducive to their BMI [74]. Strategic alliances also reduce the trial-and-error cost of firms. By collaborating with other firms, firms can share costs and risks with them. In contrast, firms that do not engage in strategic alliances need to bear the risk of BMI failure alone [74].

Strategic alliances also enhance the role of DSM in facilitating BMI. Social media platforms can help firms obtain user feedback, interact with customers, and learn about other firms [73]. These advantages may be better utilized within strategic alliance firms. This is because firms in strategic alliances can

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leverage the brand influence and user base of their partners to transform the interactive value of DSM into resources for BMI, such as brand co-branding or cross-domain collaboration. As a result, the contribution of AI and DSM applications to BMI is enhanced for firms in strategic alliances compared to firms not in strategic alliances.

3.6. Overview

In general, existing research has discussed the relationship between AI, DSM, value integration, strategic alliances, and BMI from multiple perspectives and has developed a certain theoretical foundation. The relevant literature generally agrees that AI and DSM, as key digital technologies, are changing the business models of enterprises. Some studies have pointed out that the ability of enterprises to effectively combine the resources brought by AI and DSM with the internal management of the organization is a key factor in determining whether the value of the technology can be transformed into the results of BMI. In the case of strategic alliances, research has shown that they help firms share risks and gain access to resource support. However, existing research discusses AI and social media usually separately and lacks a comparative analysis of their paths of action under the same framework. Therefore, in this paper, the role mechanisms of AI and DSM influencing BMI are sorted out under the perspectives of resource-based view theory and technology availability and constraint theory, and value integration and strategic alliance are introduced as mediating and moderating variables, respectively, to make up for the shortcomings of existing studies.

4. Mechanism

This paper focuses on the impact of AI and DSM on BMI as the core topic and integrates the mediating role of value integration and the moderating role of strategic alliance. The specific mechanism is as follows (see Figure 1).

4.1. The Direct Mechanism of AI and DSM on BMI

The direct impact of AI on BMI is mainly reflected in how it changes the way enterprises obtain information and make decisions. Through analyzing large amounts of data, AI helps enterprises better understand user behavior, operational efficiency, and market changes. Additionally, AI's big data analysis and real-time simulation enable enterprises to avoid high-cost, long-cycle traditional research, allowing them to evaluate the feasibility of different options more quickly. This shortens the BMI cycle and enhances efficiency.

The direct effect of DSM on BMI is mainly reflected in interaction with users. Through social media platforms, companies can collect user feedback and preferences to understand market needs and make changes more promptly. Companies can also test new products or marketing approaches via social media. Judging market potential based on user responses gives companies more flexibility in choosing innovation paths and helps reduce uncertainty in BMI. Overall, DSM reduces the information gap between companies and consumers by providing a communication platform that offers feedback for BMI.

4.2. The Indirect Mechanism of Value Integration on BMI

Value integration plays an intermediary role in the process of AI and DSM influencing BMI. Whether it is AI or DSM, the advantages it brings will not be automatically transformed into changes at the business model level; instead, it requires enterprises to integrate internal and external resources and coordinate with multiple stakeholders to indirectly promote business model adjustment and innovation. For example, it is necessary to apply AI to existing business processes or combine social media data with marketing decisions and product design. At the same time, at the external level, companies need to coordinate with customers, platforms, technology providers, and other partners.

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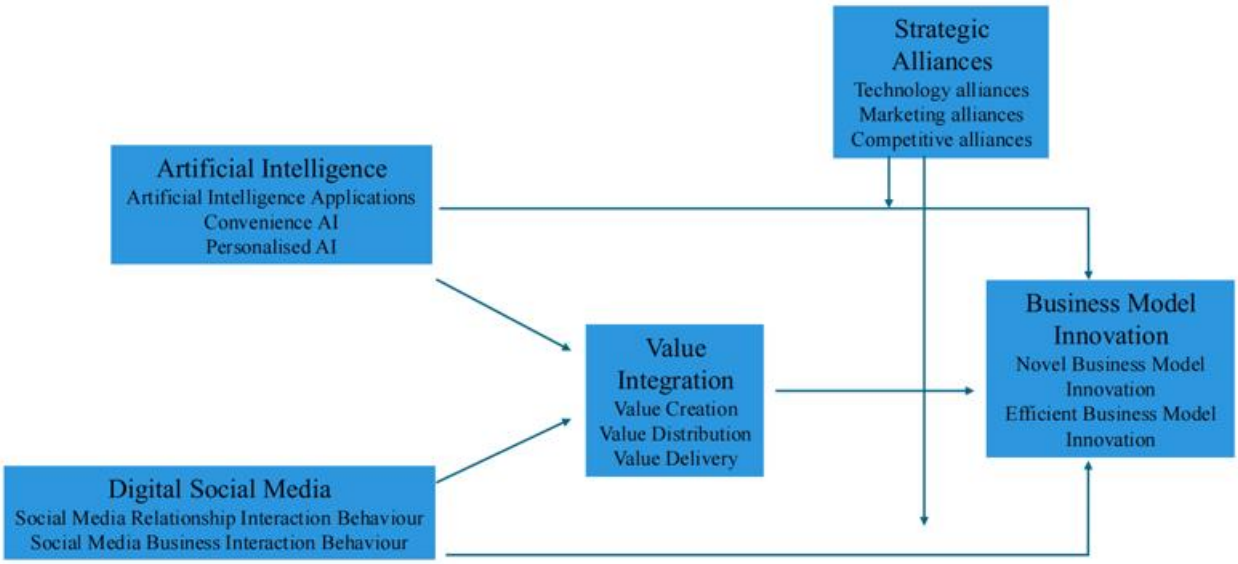

Figure 1.
Mechanism.

4.3. Indirect Mechanisms of Strategic Alliances on BMI

Strategic alliance is a moderating variable that influences BMI in AI and DSM. From the perspective of AI, enterprises share data and technology or jointly develop with partners through strategic alliances to promote the application of AI in BMI. For DSM, joint marketing activities and sharing of user data between enterprises and alliance partners help enterprises integrate more complete user profiles and expand their user bases, thus promoting the expansion of value integration from a single enterprise to the partner companies of the alliance. When the scope of value integration is expanded, it is easier for enterprises to adjust the way they create and capture value, which in turn promotes BMI.

In summary, AI and DSM provide the technology and consumer interaction conditions for BMI. It is only with effective value integration that companies can truly translate these conditions into changes at the business model level. At the same time, strategic alliances moderate this process by extending cooperation. As a result, BMI is not driven by a single technology or platform, but rather by a combination of AI, DSM, value integration, and strategic alliances.

5. Conclusions and Recommendations

Overall, based on the TAC theory and the RBV theory, this paper analyzes the mechanism of AI and DSM on BMI, and further discusses value integration as a mediating variable and strategic alliance as a moderating variable.

5.1. Conclusions

Based on the theoretical analysis and discussion of the mechanism of action in this paper, this paper comprehends the path of action of AI and DSM affecting BMI from the perspectives of technological availability and constraints, resource integration, and cross-organizational collaboration, and the main findings can be summarized in the following five aspects:

First, according to the theory of technological availability and constraints, AI and DSM provide new possibilities for enterprises, such as more accurate market insights, more direct user interactions,

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and more flexible collaboration methods. Accurate market insights, more direct user interactions, and more flexible ways of collaboration.

Second, the adoption of digital technologies is also constrained by organizational inertia, technological maturity, and business structure. Based on resource-based view theory, this paper finds that although AI and DSM are important resources for corporate innovation, these technologies can only be effectively utilized and transformed into competitive advantages when they are effectively integrated into the corporate operating system.

Third, existing studies generally suggest that AI contributes to BMI by enhancing decision-making efficiency and optimizing core business processes. Through advanced data analytics, automation, and predictive capabilities, AI enables firms to reduce operational uncertainty and respond more effectively to changing market conditions, supporting the redesign and innovation of business models.

Fourth, the paper further points out that value integration indirectly facilitates the application of AI and DSM in BMI as a mediating variable. The impact of AI and DSM on BMI is realized indirectly through enhanced value integration.

Fifth, this paper also highlights the moderating role of strategic alliances in the above path of action. Firms in strategic alliances have easier access to different resources and collaboration opportunities, thus amplifying the effect of AI and DSM in BMI.

5.2. Research Contribution

The findings of this paper provide several important insights for companies undertaking BMI. By introducing new analytical perspectives and mechanisms, this paper enriches existing research on the relationship between digital technology and BMI in the following ways.

First, this paper simultaneously analyzes the impact of AI and DSM on BMI, bridging the gap that most existing studies only analyze a single digital technology. Integrated perspectives in this paper offer a more comprehensive understanding of how multiple digital technologies jointly shape BMI.

Second, this paper introduces two theories to analyze not only what technology can do but also how firms use it. By combining these theories, the paper moves beyond the explanatory limits of a single theory and provides nuanced digital innovation processes within organizations.

Third, this paper introduces value integration as a mediating variable and strategic alliance as a moderating variable into the process of analyzing the impact of AI and digital sociality on BMI, emphasizing the focus of BMI research on process mechanisms. Strategic alliances can strengthen the role of AI and digital sociality in driving BMI through value integration.

5.3. Recommendations

In promoting the process of BMI, enterprises need to focus on the long-term role of value integration in the process of AI and social media on BMI, in order to enhance the ability to integrate digital technology into the operational system, rather than relying solely on technology. At the same time, when introducing AI and using social media for publicity, enterprises should combine their own resource base and cautiously adjust their business model structure to reduce the innovation difficulties caused by organizational inertia. And when choosing partners, enterprises should pay attention to the consistency of their technological capabilities, platform resources, and cooperation goals, in order to improve the efficiency and stability of strategic alliances.

Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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DOI: 10.55214/2576-8484.v10i3.12386

References
[1] L. J. Zheng, J. Z. Zhang, L. Y. S. Lee, S. M. Jasimuddin, and M. M. Kamal, "Digital technology integration in business model innovation for carbon neutrality: An evolutionary process model for SMEs," *Journal of Environmental Management*, vol. 359, p. 120978, 2024. https://doi.org/10.1016/j.jenvman.2024.120978

[2] H. Gebauer *et al.*, "How to convert digital offerings into revenue enhancement – Conceptualizing business model dynamics through explorative case studies," *Industrial Marketing Management*, vol. 91, pp. 429-441, 2020. https://doi.org/10.1016/j.indmarman.2020.10.006

[3] D. Sjödin, V. Parida, M. Palmié, and J. Wincent, "How AI capabilities enable business model innovation: Scaling AI through co-evolutionary processes and feedback loops," *Journal of Business Research*, vol. 134, pp. 574-587, 2021. https://doi.org/10.1016/j.jbusres.2021.05.009

[4] S. Mishra and A. R. Tripathi, "AI business model: An integrative business approach," *Journal of Innovation and Entrepreneurship*, vol. 10, no. 1, p. 18, 2021. https://doi.org/10.1186/s13731-021-00157-5

[5] T. Burström, V. Parida, T. Lahti, and J. Wincent, "AI-enabled business-model innovation and transformation in industrial ecosystems: A framework, model and outline for further research," *Journal of Business Research*, vol. 127, pp. 85-95, 2021. https://doi.org/10.1016/j.jbusres.2021.01.016

[6] P. S. Borah, S. Iqbal, and S. Akhtar, "Linking social media usage and SME's sustainable performance: The role of digital leadership and innovation capabilities," *Technology in Society*, vol. 68, p. 101900, 2022. https://doi.org/10.1016/j.techsoc.2022.101900

[7] S. Bresciani, K.-H. Huarng, A. Malhotra, and A. Ferraris, "Digital transformation as a springboard for product, process and business model innovation," *Journal of Business Research*, vol. 128, pp. 204-210, 2021. https://doi.org/10.1016/j.jbusres.2021.02.003

[8] U. S. Yadav, S. Vyas, Kanchan, I. Ghosal, and A. K. yadav, "Impact of entrepreneurial leadership, Social media, digital technology, Entrepreneurial orientation and innovation on business performance in the handicraft sector: Talent management as mediating construct," *Journal of Innovation and Entrepreneurship*, vol. 13, no. 1, p. 72, 2024. 10.1186/s13731-024-00434-z

[9] F. Zhang and L. Zhu, "Social media strategic capability, organizational unlearning, and disruptive innovation of SMEs: the moderating roles of TMT heterogeneity and environmental dynamism," *Journal of Business Research*, vol. 133, pp. 183-193, 2021. https://doi.org/10.1016/j.jbusres.2021.04.071

[10] J. Gibson, *Perceiving, acting and knowing: Toward an ecological psychology, R. Shaw and J. Bransford*. Hillsdale, NJ, USA: Lawrence Erlbaum Associates, 1977.

[11] A. Majchrzak and M. L. Markus, *Technology affordances and constraints in management information systems (MIS). In E. H. Kessler (Ed.), Encyclopedia of Management Theory*. Thousand Oaks, CA: SAGE Publications, 2013.

[12] A. Novales, M. Mocker, E. van Heck, and J. Dul, "Realizing desired effects from digitized product affordances: A case study of key inhibiting factors," *Decision Support Systems*, vol. 189, p. 114365, 2025. https://doi.org/10.1016/j.dss.2024.114365

[13] F. Olan, J. Suklan, E. O. Arakpogun, and A. Robson, "Advancing consumer behavior: The role of artificial intelligence technologies and knowledge sharing," *IEEE Transactions on Engineering Management*, vol. 71, pp. 13227-13239, 2021. https://doi.org/10.1109/TEM.2021.3083536

[14] S. Chowdhury *et al.*, "Unlocking the value of artificial intelligence in human resource management through AI capability framework," *Human Resource Management Review*, vol. 33, no. 1, p. 100899, 2023. https://doi.org/10.1016/j.hrmr.2022.100899

[15] J. Barney, "Firm resources and sustained competitive advantage," *Journal of Management*, vol. 17, no. 1, pp. 99–120, 1991. https://doi.org/10.1177/014920639101700108

[16] R. E. Freeman, S. D. Dmytriyev, and R. A. Phillips, "Stakeholder theory and the resource-based view of the firm," *Journal of Management*, vol. 47, no. 7, pp. 1757-1770, 2021. https://doi.org/10.1177/0149206321993576

[17] S. A. Zahra, "The resource-based view, resourcefulness, and resource management in startup firms: A proposed research agenda," *Journal of Management*, vol. 47, no. 7, pp. 1841-1860, 2021. https://doi.org/10.1177/01492063211018505

[18] O. B. d. S. Moderno, A. C. Braz, and P. T. d. S. Nascimento, "Robotic process automation and artificial intelligence capabilities driving digital strategy: A resource-based view," *Business Process Management Journal*, vol. 30, no. 1, pp. 105-134, 2024. https://doi.org/10.1108/BPMJ-08-2022-0409

[19] P. W. Beamish and D. Chakravarty, "Using the resource-based view in multinational enterprise research," *Journal of Management*, vol. 47, no. 7, pp. 1861-1877, 2021.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 10, No. 3: 329-345, 2026
DOI: 10.55214/2576-8484.v10i3.12386

[20] S. Akter, K. Michael, M. R. Uddin, G. McCarthy, and M. Rahman, "Transforming business using digital innovations: The application of AI, blockchain, cloud and data analytics," *Annals of Operations Research*, vol. 308, no. 1, pp. 7-39, 2022. https://doi.org/10.1007/s10479-020-03620-w

[21] W. M. Lim and T. Rasul, "Customer engagement and social media: Revisiting the past to inform the future," *Journal of Business Research*, vol. 148, pp. 325-342, 2022. https://doi.org/10.1016/j.jbusres.2022.04.068

[22] M. Brinch, A. Gunasekaran, and S. Fosso Wamba, "Firm-level capabilities towards big data value creation," *Journal of Business Research*, vol. 131, pp. 539-548, 2021. https://doi.org/10.1016/j.jbusres.2020.07.036

[23] Q. Zhou, J. Su, Q. Chang, and L. Zhang, "The mechanism through which strategic orientation influences firm performance: A business model innovation perspective," *Science of Science and Management of S&T*, vol. 41, no. 10, pp. 74–92, 2020.

[24] J. Åström, W. Reim, and V. Parida, "Value creation and value capture for AI business model innovation: A three-phase process framework," *Review of Managerial Science*, vol. 16, no. 7, pp. 2111-2133, 2022. https://doi.org/10.1007/s11846-022-00521-z

[25] C. Ancillai, A. Sabatini, M. Gatti, and A. Perna, "Digital technology and business model innovation: A systematic literature review and future research agenda," *Technological Forecasting and Social Change*, vol. 188, p. 122307, 2023. https://doi.org/10.1016/j.techfore.2022.122307

[26] D. Sjödin, V. Parida, and M. Kohtamäki, "Artificial intelligence enabling circular business model innovation in digital servitization: Conceptualizing dynamic capabilities, AI capacities, business models and effects," *Technological Forecasting and Social Change*, vol. 197, p. 122903, 2023. https://doi.org/10.1016/j.techfore.2023.122903

[27] D. K. Kanbach, L. Heiduk, G. Blueher, M. Schreiter, and A. Lahmann, "The GenAI is out of the bottle: Generative artificial intelligence from a business model innovation perspective," *Review of Managerial Science*, vol. 18, no. 4, pp. 1189-1220, 2024. https://doi.org/10.1007/s11846-023-00696-z

[28] D. Yu and S. Chen, "Information technology and firm performance: The chain mediating roles of knowledge management capability and business model innovation," *Science & Technology Progress and Policy*, vol. 41, no. 8, pp. 117–128, 2024.

[29] X. Wang, Y. Cui, and J. Meng, "Can adherence to tradition still foster innovation? The impact of leaders' moral ownership on business model innovation," *Management Review*, vol. 37, no. 5, pp. 108–120, 2025.

[30] C. Zott and R. Amit, "Business model design: An activity system perspective," *Long Range Planning*, vol. 43, no. 2-3, pp. 216-226, 2010. https://doi.org/10.1016/j.lrp.2009.07.004

[31] G. George, R. K. Merrill, and S. J. Schillebeeckx, "Digital sustainability and entrepreneurship: How digital innovations are helping tackle climate change and sustainable development," *Entrepreneurship Theory and Practice*, vol. 45, no. 5, pp. 999-1027, 2021.

[32] J. Soluk, I. Miroshnychenko, N. Kammerlander, and A. De Massis, "Family influence and digital business model innovation: The enabling role of dynamic capabilities," *Entrepreneurship Theory and Practice*, vol. 45, no. 4, pp. 867-905, 2021.

[33] E. Moradi, S. M. Jafari, Z. M. Doorbash, and A. Mirzaei, "Impact of organizational inertia on business model innovation, open innovation and corporate performance," *Asia Pacific Management Review*, vol. 26, no. 4, pp. 171-179, 2021. https://doi.org/10.1016/j.apmrv.2021.01.003

[34] S. Handoyo, H. Suharman, E. K. Ghani, and S. Soedarsono, "A business strategy, operational efficiency, ownership structure, and manufacturing performance: The moderating role of market uncertainty and competition intensity and its implication on open innovation," *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 9, no. 2, p. 100039, 2023. https://doi.org/10.1016/j.joitmc.2023.100039

[35] X. Xin, X. Miao, and R. Cui, "Enhancing sustainable development: Innovation ecosystem coopetition, environmental resource orchestration, and disruptive green innovation," *Business Strategy and the Environment*, vol. 32, no. 4, pp. 1388-1402, 2023. https://doi.org/10.1002/bse.3194

[36] C. Zhang, B. Zhou, and X. Tian, "Political connections and green innovation: The role of a corporate entrepreneurship strategy in state-owned enterprises," *Journal of Business Research*, vol. 146, pp. 375-384, 2022. https://doi.org/10.1016/j.jbusres.2022.03.084

[37] Z. Jiang and C. Xu, "Policy incentives, government subsidies, and technological innovation in new energy vehicle enterprises: Evidence from China," *Energy Policy*, vol. 177, p. 113527, 2023. https://doi.org/10.1016/j.enpol.2023.113527

[38] A. K. Kar, S. K. Choudhary, and V. K. Singh, "How can artificial intelligence impact sustainability: A systematic literature review," *Journal of Cleaner Production*, vol. 376, p. 134120, 2022. https://doi.org/10.1016/j.jclepro.2022.134120

[39] P. C. Johnson, C. Laurell, M. Ots, and C. Sandström, "Digital innovation and the effects of artificial intelligence on firms' research and development – Automation or augmentation, exploration or exploitation?," *Technological Forecasting and Social Change*, vol. 179, p. 121636, 2022. https://doi.org/10.1016/j.techfore.2022.121636

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 10, No. 3: 329-345, 2026
DOI: 10.55214/2576-8484.v10i3.12386

[40] F. Gama and S. Magistretti, "Artificial intelligence in innovation management: A review of innovation capabilities and a taxonomy of AI applications," *Journal of Product Innovation Management*, vol. 42, no. 1, pp. 76-111, 2025. https://doi.org/10.1111/jpim.12698

[41] M. Pournader, H. Ghaderi, A. Hassanzadegan, and B. Fahimnia, "Artificial intelligence applications in supply chain management," *International Journal of Production Economics*, vol. 241, p. 108250, 2021. https://doi.org/10.1016/j.ijpe.2021.108250

[42] R. Cai, L. N. Cain, and H. Jeon, "Customers' perceptions of hotel AI-enabled voice assistants: Does brand matter?," *International Journal of Contemporary Hospitality Management*, vol. 34, no. 8, pp. 2807-2831, 2022. https://doi.org/10.1108/IJCHM-10-2021-1313

[43] M. Mende, M. L. Scott, V. O. Ubal, C. M. Hassler, C. M. Harmeling, and R. W. Palmatier, "Personalized communication as a platform for service inclusion? Initial insights into interpersonal and AI-based personalization for stigmatized consumers," *Journal of Service Research*, vol. 27, no. 1, pp. 28-48, 2024.

[44] Y. Hu, "Research on the impact and implementation strategy of artificial intelligence and digital social media on business model innovation in high-end intelligent manufacturing enterprises," *Journal of Contemporary Research in Business, Economics and Finance*, vol. 7, no. 2, pp. 109-121, 2025. https://doi.org/10.55214/jcrbef.v7i2.9944

[45] M. M. Mariani, I. Machado, and S. Nambisan, "Types of innovation and artificial intelligence: A systematic quantitative literature review and research agenda," *Journal of Business Research*, vol. 155, p. 113364, 2023. https://doi.org/10.1016/j.jbusres.2022.113364

[46] T. Şimşek, M. A. Öner, Ö. Kunday, and G. A. Olcay, "A journey towards a digital platform business model: A case study in a global tech-company," *Technological Forecasting and Social Change*, vol. 175, p. 121372, 2022. https://doi.org/10.1016/j.techfore.2021.121372

[47] O. E. Olabode, N. Boso, M. Hultman, and C. N. Leonidou, "Big data analytics capability and market performance: The roles of disruptive business models and competitive intensity," *Journal of Business Research*, vol. 139, pp. 1218-1230, 2022. https://doi.org/10.1016/j.jbusres.2021.10.042

[48] H. Wen, Q. Zhong, and C.-C. Lee, "Digitalization, competition strategy and corporate innovation: Evidence from Chinese manufacturing listed companies," *International Review of Financial Analysis*, vol. 82, p. 102166, 2022. https://doi.org/10.1016/j.irfa.2022.102166

[49] G. Secundo, C. Spilotro, J. Gast, and V. Corvello, "The transformative power of artificial intelligence within innovation ecosystems: A review and a conceptual framework," *Review of Managerial Science*, vol. 19, no. 9, pp. 2697-2728, 2025. https://doi.org/10.1007/s11846-024-00828-z

[50] R. W. Gregory, O. Henfridsson, E. Kaganer, and H. Kyriakou, "The role of artificial intelligence and data network effects for creating user value," *Academy of Management Review*, vol. 46, no. 3, pp. 534-551, 2021.

[51] R. Chen, D. Gu, C. Liang, and L. Jiang, "A multi-skilled staff scheduling and team configuration optimisation model for artificial intelligence project portfolio considering competence development and innovation-driven," *International Journal of Production Research*, vol. 62, no. 21, pp. 7763-7792, 2024. https://doi.org/10.1080/00207543.2024.2328131

[52] J. Björkdahl, "Strategies for digitalization in manufacturing firms," *California Management Review*, vol. 62, no. 4, pp. 17-36, 2020.

[53] Y. K. Dwivedi, E. Ismagilova, N. P. Rana, and R. Raman, "Social media adoption, usage and impact in business-to-business (B2B) context: A state-of-the-art literature review," *Information Systems Frontiers*, vol. 25, no. 3, pp. 971-993, 2023. https://doi.org/10.1007/s10796-021-10106-y

[54] M. M. Mariani and S. Nambisan, "Innovation analytics and digital innovation experimentation: The rise of research-driven online review platforms," *Technological Forecasting and Social Change*, vol. 172, p. 121009, 2021. https://doi.org/10.1016/j.techfore.2021.121009

[55] S. Cartwright, H. Liu, and C. Raddats, "Strategic use of social media within business-to-business (B2B) marketing: A systematic literature review," *Industrial Marketing Management*, vol. 97, pp. 35-58, 2021. https://doi.org/10.1016/j.indmarman.2021.06.005

[56] F. Li, J. Larimo, and L. C. Leonidou, "Social media marketing strategy: Definition, conceptualization, taxonomy, validation, and future agenda," *Journal of the Academy of Marketing Science*, vol. 49, no. 1, pp. 51-70, 2021. https://doi.org/10.1007/s11747-020-00733-3

[57] C. Feng, H. Chen, and Q. Yang, "The impact of corporate social media behavior on governance of network embeddedness: A social network theory perspective," *Business Economics and Management*, vol. 4, pp. 18–30, 2024.

[58] Y. Zhang and M. Liu, "Mechanisms of digital hoarding behavior among mobile social media users from the perspective of phenomenography," *Journal of Modern Information*, vol. 44, no. 7, pp. 3–12, 2024. https://doi.org/10.3969/j.issn.1008-0821.2024.07.001

[59] G. Li and M. Wang, "The rationality of personalized recommendation on content platforms: Constructs and effects," *Journal of Modern Information*, vol. 45, no. 3, pp. 10–24, 2025. https://doi.org/10.3969/j.issn.1008-0821.2025.03.002

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 10, No. 3: 329-345, 2026
DOI: 10.55214/2576-8484.v10i3.12386

[60] F. Zhang and L. Zhu, "Promoting business model innovation through social media strategic capability: A moderated mediation model," *European Management Journal*, vol. 40, no. 1, pp. 56-66, 2022. https://doi.org/10.1016/j.emj.2021.02.003

[61] C. Pardo, M. Pagani, and J. Savinien, "The strategic role of social media in business-to-business contexts," *Industrial Marketing Management*, vol. 101, pp. 82-97, 2022. https://doi.org/10.1016/j.indmarman.2021.11.010

[62] J. T. Wixted, "Atkinson and Shiffrin's (1968) influential model overshadowed their contemporary theory of human memory," *Journal of Memory and Language*, vol. 136, p. 104471, 2024. https://doi.org/10.1016/j.jml.2023.104471

[63] X. Liu, H. Shin, and A. C. Burns, "Examining the impact of luxury brand's social media marketing on customer engagement: Using big data analytics and natural language processing," *Journal of Business Research*, vol. 125, pp. 815-826, 2021. https://doi.org/10.1016/j.jbusres.2019.04.042

[64] F. Olan, U. Jayawickrama, E. O. Arakpogun, J. Suklan, and S. Liu, "Fake news on social media: The impact on society," *Information Systems Frontiers*, vol. 26, no. 2, pp. 443-458, 2024. https://doi.org/10.1007/s10796-022-10242-z

[65] D. Sjödin, V. Parida, M. Jovanovic, and I. Visnjic, "Value creation and value capture alignment in business model innovation: A process view on outcome-based business models," *Journal of Product Innovation Management*, vol. 37, no. 2, pp. 158-183, 2020. https://doi.org/10.1111/jpim.12516

[66] D. Sjödin, V. Parida, M. Kohtamäki, and J. Wincent, "An agile co-creation process for digital servitization: A micro-service innovation approach," *Journal of Business Research*, vol. 112, pp. 478-491, 2020. https://doi.org/10.1016/j.jbusres.2020.01.009

[67] C. Klos, P. Spieth, T. Clauss, and C. Klusmann, "Digital transformation of incumbent firms: A business model innovation perspective," *IEEE Transactions on Engineering Management*, vol. 70, no. 6, pp. 2017-2033, 2021. https://doi.org/10.1109/TEM.2021.3075502

[68] S.-L. Wamba-Taguimdje, S. Fosso Wamba, J. R. Kala Kamdjoug, and C. E. Tchatchouang Wanko, "Influence of artificial intelligence (AI) on firm performance: the business value of AI-based transformation projects," *Business Process Management Journal*, vol. 26, no. 7, pp. 1893-1924, 2020. https://doi.org/10.1108/BPMJ-10-2019-0411

[69] M. Palmié, L. Miehé, P. Oghazi, V. Parida, and J. Wincent, "The evolution of the digital service ecosystem and digital business model innovation in retail: The emergence of meta-ecosystems and the value of physical interactions," *Technological Forecasting and Social Change*, vol. 177, p. 121496, 2022. https://doi.org/10.1016/j.techfore.2022.121496

[70] A. Liu, H. Liu, and J. Gu, "Linking business model design and operational performance: The mediating role of supply chain integration," *Industrial Marketing Management*, vol. 96, pp. 60-70, 2021. https://doi.org/10.1016/j.indmarman.2021.04.009

[71] A. Keller, F. Lumineau, T. Mellewigt, and A. Ariño, "Alliance governance mechanisms in the face of disruption," *Organization Science*, vol. 32, no. 6, pp. 1542-1570, 2021. https://doi.org/10.1287/orsc.2021.1437

[72] Y. Lu, W. Li, and Y. Li, "Strategic alliances, market ambidexterity and performance of rural start-ups," *Journal of Southwest University Social Science Edition*, vol. 47, no. 1, pp. 62-71, 2021.

[73] W. Li, H. Ming, and Q. Pang, "The inhibiting effect of path dependence on corporate digital entrepreneurship and its immunity mechanisms," *Science & Technology Progress and Policy*, vol. 39, no. 4, pp. 91–100, 2022. https://doi.org/10.6049/kjjbydc.2021080793

[74] W. Li, L. Tan, and Y. Zhang, "Borrowing a hen to lay eggs or 'letting a wolf into the house'? Mechanisms of strategic alliance effects in new ventures," *Journal of Industrial Engineering and Engineering Management*, vol. 36, no. 2, pp. 1–10, 2022.

[75] C. Kim and B. Hu, "Role of brand equity and competitive strategies in the relation between horizontal alliances and its benefits," *Journal of Business & Industrial Marketing*, vol. 37, no. 9, pp. 1903-1914, 2022. https://doi.org/10.1108/JBIM-02-2021-0115

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