Exploration of Support Pathways for Corporate Knowledge Innovation Based on Media and Information Literacy: Postprint

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Abstract

[目的/意义] Based on individual media and information literacy, this study explores the supporting pathways for enterprise knowledge innovation, providing new perspectives and specific approaches for promoting knowledge innovation in enterprises. [方法/过程] First, it differentiates and analyzes the connotations of data, information, and knowledge in the big data era, while simultaneously conducting theoretical synthesis and analysis of media and information literacy and knowledge innovation by combining their overall interrelationships. Then, based on the three dimensions of media and information literacy, it explores the supporting pathways for enterprise knowledge innovation through analysis of relevant cases, and proposes corresponding countermeasures and measures. [结果/结论] The study shows that information demand awareness, new media technology application capability, and data and information integration capability constitute the supporting pathways for enterprise knowledge innovation, among which awareness of information demand is the fundamental source of knowledge innovation, new media technology application capability is an important means of knowledge innovation, and data and information integration is a necessary process for completing knowledge innovation.

Full Text

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Exploring the Supporting Path of Enterprise Knowledge Innovation Based on Media and Information Literacy*

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Abstract: [Purpose/Significance] This paper explores the supporting path of enterprise knowledge innovation based on individual media and information literacy, providing a new perspective and specific methods for promoting enterprise knowledge innovation. [Method/Process] First, it defines and distinguishes the connotations of data, information, and knowledge in the big data era, and conducts theoretical review and analysis of media and information literacy and knowledge innovation based on their overall relevance. Then, grounded in the three dimensions of media and information literacy, it investigates the supporting paths of enterprise knowledge innovation through case analysis, and proposes corresponding countermeasures. [Result/Conclusion] The study reveals that information demand consciousness, new media technology application ability, and data-information integration capability constitute the supporting paths for enterprise knowledge innovation. Specifically, information demand consciousness serves as the fundamental source, new media technology application ability acts as the crucial means, and data-information integration represents the essential process for completing knowledge innovation.

Keywords: knowledge innovation; supporting path; media and information literacy; big data
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At the 19th National Congress of the Communist Party of China, General Secretary Xi Jinping declared that socialism with Chinese characteristics has entered a new era. During this critical period, how to lead development through scientific innovation has become a concern across all sectors. At the 2016 National Science and Technology Innovation Conference, Xi Jinping already emphasized the importance of knowledge and truth in scientific innovation. As organic en-

tities in the national innovation system, enterprises—with their high levels of knowledge innovation and application—can accelerate the construction of an innovative country and enhance innovation capacity and core competitiveness [1]. Existing literature on enterprise knowledge innovation has established a solid foundation, focusing primarily on: (1) constructing enterprise knowledge service and innovation models [2-3]; for instance, Hong Jiangtao et al. applied differential game methods to analyze the knowledge innovation process under value chain collaboration and derived Pareto-optimal knowledge innovation scenarios under collaborative conditions; Zhang Ling et al. employed social network methods to decompose the knowledge innovation process, validating their propositions with Changchun enterprises and proposing that enterprise knowledge innovation is closely associated with social networks, where richer network nodes facilitate industry-university integration and strengthen network relationships; Gu Xinjian et al., based on quantitative research related to knowledge innovation and knowledge management methods, proposed specific mechanisms and pathways for knowledge innovation [4]. (2) Investigating factors influencing knowledge innovation, including human resource characteristics at the individual level [5]; Wang Xiaohong's research demonstrates that individuals' knowledge absorption capacity can generate large-scale impacts through cluster effects [6]. (3) Examining the influence of organizational-level cultural atmosphere, institutional structure, and technical factors on enterprise knowledge innovation, along with empirical testing [7]; scholars M.J. Donate and F. Guadamillas argue that enterprise knowledge-oriented culture and knowledge-based leadership significantly impact knowledge innovation, conducting statistical analysis and verification with 111 Spanish enterprises as examples [8]. (4) Based on the characteristics of different knowledge types and innovation theories, studying the formation mechanisms and models of knowledge innovation [9-10]; Wang Yumei, grounded in technological innovation process theory, divides knowledge innovation into five stages: conceptualization, evaluation, R&D, commercialization, and reflection [4]. These studies examine enterprise knowledge innovation through the processes of knowledge acquisition, absorption, and creation, typically adopting a knowledge-based view to explore the knowledge characteristics of actors and their impacts, mostly confined to investigating internal mechanisms of enterprise knowledge innovation. However, the utilization of external knowledge also significantly influences knowledge innovation; actors must not only rely on their own knowledge renewal but also absorb external knowledge to integrate and reshape existing knowledge.

In the big data era, information has become a new form of knowledge. Research indicates that analyzing data-carried information through advanced technological means can extract new knowledge, making data, information, and knowledge parallel and closely interconnected innovation resources in the big data era [11-12]. Along with the strengthened association among data, information, and knowledge, knowledge innovation approaches are advancing toward digitization, intelligence, and interactivity, simultaneously imposing new requirements on individual competencies in the human-centered knowledge innovation

process. Concurrently, UNESCO integrated information literacy and media literacy and proposed the composite concept of media and information literacy, emphasizing individuals' capacity to acquire, analyze, evaluate, and disseminate various media information, as well as the important role of using media information for self-development and social progress. Therefore, how individuals utilize digital media technologies to recognize, acquire, process, and interpret obtained information, then conduct in-depth processing of information content to integrate it into new knowledge, becomes particularly crucial for enterprise knowledge innovation [13]. In this context, media transforms the processes of information transmission and processing, fundamentally changing the concepts, methods, and pathways of knowledge innovation. In view of this, this paper first defines and analyzes the concepts of data, information, and knowledge and their interrelationships in the big data environment, then employs the concept of individual media and information literacy to analyze its impact on enterprise knowledge innovation, and based on this, explores the supporting paths of enterprise knowledge innovation, thereby providing theoretical and practical guidance for enterprises to rationally utilize digital information resources.

1 Related Concepts

1.1 Data, Information, and Knowledge

With the evolution of new media and Internet environments, the conceptual boundaries among information, data, and knowledge have gradually blurred. They are mutually related and corroborative, demonstrating increasingly strengthened overall relevance [14]. Advances in information technology have expanded the connotation of data, which to some extent becomes a concept interchangeable with information [15]. Through data mining and information analysis via technological means, the value behind big data can be obtained. This value manifests as new patterns formed through analysis, reshaping, and integration—that is, knowledge. Therefore, information carried by data generates knowledge with new patterns through technical mining and analysis [16], coordinating and combining data, information, and knowledge into a tightly interconnected whole. In this holistic system, no element can function independently; they must rely on each other for optimized processing and effective reconstruction to exert functions beyond individual components and enhance system value. Consequently, discussions on knowledge innovation should not be confined to knowledge itself but must incorporate data and information to explore means and methods of innovative knowledge.

1.2 The Proposal and Connotation of Media and Information Literacy

UNESCO [17] first proposed the concept of media and information literacy (MIL), viewing it as a composite concept that merges media literacy and information literacy. Media literacy embodies the freedom of speech dissemination and evaluation, while information literacy emphasizes information utilization. The International Federation of Library Associations and Institutions (IFLA), in

its 2011 *Media and Information Literacy Recommendations*, specifically defined MIL as individuals' ability to use specific tools to acquire, understand, share, and use media information in all carrier forms, mining information value with critical thinking and higher efficiency. Compared with traditional information literacy, media and information literacy places greater emphasis on screening and selecting information to obtain valuable content, and demands higher information processing capabilities for deep utilization [19]. Evidently, the MIL concept better aligns with the demands of information growth and value analysis in the big data context, providing a fresh analytical perspective for enterprises facing massive digital information on how to establish correct information demand consciousness, grasp new media technologies, and enhance data mining capabilities to achieve knowledge innovation in the big data era. Therefore, this study grounds itself in the impact process of individual media and information literacy on enterprise knowledge innovation, attempting to construct an operable enterprise knowledge innovation model with MIL as the pathway.

1.3 The Connotation of Knowledge Innovation from the MIL Perspective

The concept of knowledge innovation was first proposed by American scholar D.M. Amidon, who defined it as the process of applying creative knowledge in enterprise practice to obtain new products and competitive advantage [20]. With deepening research, scholars increasingly view knowledge innovation as a dynamic development process [21] influenced by various factors such as the current social environment, technological development, and feedback outcomes, with the ultimate goal of creating new knowledge [22]. However, in the big data era, massive amounts of structured data information provide diverse sources for knowledge innovation, giving enterprise knowledge innovation a richer resource base that extends beyond mere knowledge integration and reconstruction. Moreover, continuous improvements in data mining and analysis technologies provide technical support for extracting and innovating knowledge from various semi-structured and unstructured data. In this context, relying on high-level media and information literacy enables enterprises to fully utilize new media tools to rapidly search for and identify needed digital information, promptly and effectively screen, analyze, and refine content, and combine it with existing knowledge bases for updating and reconstruction to achieve knowledge innovation. This dynamic knowledge creation process derived from external information enables enterprises to timely grasp changes in the dynamic environment, continuously adjust internal conventions and mechanisms to avoid core inertia, and possess stronger dynamic capabilities and adaptability. Therefore, information carried by 'big data' has become an innovation resource for enterprises, and relying on individual media and information literacy for effective identification and processing of digital information can enhance knowledge innovation efficiency and provide new support for enterprise knowledge innovation.

2 The Impact of Media and Information Literacy on Enterprise Knowledge Innovation

In the big data era, media and information literacy can enhance knowledge innovation capabilities through information mining and analysis. This is because data and information are no longer limited to analysis results but have gradually become pathways and tools for scientific research and business analysis. Consequently, new media characterized by sharing, interaction, and timeliness have become tools for acquiring massive data information while also enabling scientific processing and analysis of this information to generate new knowledge. Enterprise knowledge innovation originates from the content integration and analysis of digital information carried by data, a process inseparable from keen information perception abilities and continuously improving acquisition, mining, and integration technologies and capabilities. In view of this, this study employs the concept of individual media and information literacy, combining the three dimensions proposed by scholars Guo Yu and Zhao Shukuan [13]—information demand consciousness, new media technology application ability, and data-information integration capability—to analyze the impact of media and information literacy on enterprise knowledge innovation.

2.1 The Influence of Information Demand Consciousness on Knowledge Innovation

Information demand consciousness refers to the degree to which actors recognize the importance of information in the knowledge innovation process, representing the prerequisite for media and information literacy [23]. Actors with strong media and information literacy value information acquisition and utilization, accurately assess their own information needs, and thus capture information in rapidly changing events, discovering and mining valuable information from complex phenomena [24]. In the big data context, the continuous development of information technology and new media, coupled with the rapid growth of information resources, leads to information overload. The diverse types and massive scale of information resources, combined with chaotic and disordered dissemination structures, result in inefficient information acquisition due to the lack of effective positioning and selection [25]. Therefore, enterprises' ability to mine needed information from numerous data sources and obtain and analyze valuable information resources is key to achieving knowledge internalization and generating new knowledge. For enterprises, effectively grasping changes in their required information from massive data and acquiring such information in a timely manner constitutes the foundation of knowledge innovation.

2.2 The Influence of New Media Technology Application Ability on Knowledge Innovation Demand

New media technology is developed based on the Web 2.0 network environment through advances in computer, communication, and digital transmission technologies, encompassing media technology forms with electronic devices such as

mobile phones and computers as terminals. Compared with traditional media systems, new media breaks linear information transmission models [26], making original information processing and organization more flexible, no longer constrained by space, and capable of cross-spatiotemporal dissemination, thereby creating conditions for knowledge interaction and fusion across different fields and directions. Possessing new media technology application ability means being able to reasonably apply technological means to effectively collect and process diverse digital information resources including text, images, audio, and video, efficiently establishing connections and communication channels with the external world within self-organized resource networks to obtain corresponding feedback information and achieve knowledge sharing and innovation [27]. This precisely aligns with the resource forms presented in the big data era—information digitization, sharing, and networking—directly affecting the quality of obtained information and the efficiency and depth of information analysis. Therefore, in the big data context, enterprises' new media technology application ability can, on the one hand, cross-spatiotemporally identify and acquire valuable information from network resources in a timely manner, while on the other hand, accelerate the processing and transformation of acquired information, making massive and diverse information orderly and forming enterprise knowledge databases with core advantages, thereby providing technical support for the knowledge innovation process.

2.3 The Influence of Data-Information Integration Capability on Knowledge Innovation Demand

Data-information integration capability refers to the qualities and skills of rapid information acquisition, absorption, integration, and utilization [28]. Having high data-information integration capability means enterprises can rationally use acquired information and conduct induction and synthesis for information reorganization. This process from information absorption to reorganization corresponds to the new knowledge creation process. Scholars Ye Yingping, Lu Yanqiu, and Xiao Yanhong demonstrate that the knowledge innovation process includes new knowledge acquisition, integration, creation, and utilization, during which explicit and tacit knowledge undergo corresponding transformation and integration to obtain innovative knowledge [29]. Knowledge acquisition indicates that the premise of enterprise knowledge innovation is possessing sufficient information and knowledge volume; knowledge integration, creation, and utilization represent the process of fully and effectively fusing acquired external and internal information to achieve knowledge transformation, thereby recombining different information and data sources to enable the transformation and renewal of tacit and explicit knowledge, thus generating new knowledge. Therefore, enterprises' data-information integration capability directly affects the quality and speed of information acquisition and knowledge integration, consequently influencing the efficiency and level of knowledge innovation.

3 The Logical Composition of Enterprise Knowledge Innovation Supporting Paths Under Media and Information Literacy

As discussed above, enterprise knowledge innovation in the big data environment needs to integrate media and information literacy, which helps individuals adapt to the big data context and improves their information processing, organization, and analysis capabilities when facing massive digital information resources. Through big data integration and analysis, enterprises can promote knowledge renewal and reshaping, thereby enhancing knowledge innovation efficiency and levels. This paper employs the concept of individual media and information literacy to explore the sources, means, and processes of enterprise knowledge innovation from the three dimensions of information demand consciousness, new media technology application ability, and data-information integration capability, and based on this, constructs the supporting paths for enterprise knowledge innovation.

3.1 Knowledge Innovation Source Path Based on Information Demand Consciousness

Enterprise knowledge innovation is a dynamic activity built upon knowledge acquisition. This process first forms the necessary knowledge sources for knowledge innovation through the pathway of information demand consciousness. Drawing on Xie Min and Zhong Keding's research on actors' information consciousness states [30], this paper constructs a knowledge innovation source path based on information demand consciousness, as shown in Figure 1 [Figure 1: see original paper]. First, enterprises must input market, talent, and competition information and conduct deep information demand transformation. Compared with shallow information demands, these require internalizing acquired information to ultimately form knowledge. Market information reflects the direction and opportunities for knowledge innovation; only by seizing market dynamics, adapting to the market, and capturing market opportunities can enterprises possess dynamic capabilities. Talent information reflects the knowledge and skills of talents that enterprises highly depend on in production and operation activities, particularly in management, technology, and supply-sales aspects, which constitute the foundation for promoting sustainable enterprise development. Competition information involves the collection, selection, evaluation, and analysis of competitor and competitive environment information in the market, enabling trend prediction and providing basis for enterprise strategic and tactical decision-making. Second, information requiring deep transformation is filtered through three aspects—information behavior awareness, information emotion, and information viewpoint—to form information demand consciousness. That is, information demand consciousness emerges when actors perceive information behavior and believe that information processing activities can impact themselves. Simultaneously, information emotion marks the direction of information demand consciousness, being explicit and easily detectable, reflect-

ing the stable consciousness structure of information subjects. Information viewpoint signifies that past information activities form certain experiences, thereby affecting actors' ability to predict the future and connect with their own development, constituting the foundation of information demand consciousness [31]. Finally, information acquired through information demand consciousness filtering continues to be processed in information activities, forming new information sources through information exchange, deepening, and application, completing the transformation from information to knowledge and becoming the foundation and source of enterprise knowledge innovation.

For example, Entelo extracts various types of company-related information from major social network platforms to identify talent mobility tendencies, such as judging through enterprise stock trends, executive adjustments, and company acquisition information. This digital information-based talent identification model facilitates talent acquisition and improves enterprise performance. American company Chango and Chinese company Uniqlick track Internet users' browsing traces and search content to transform market information analysis into more precise marketing strategies and models, achieving high returns. McKesson conducts precise statistics and analysis on product routes, transportation conditions, and pollutant emissions in logistics distribution, forming a visual cost analysis model for estimating and automatically generating distribution and allocation schemes. This not only reduces operational costs but also enhances user feedback and response capabilities, saving the enterprise $100 million in liquid funds and significantly improving performance.

3.2 Knowledge Innovation Means Path Based on New Media Technology Application Ability

New media technology application ability serves as the means for enterprise knowledge innovation, playing an important role in the process from information to innovative knowledge. The information-to-knowledge transformation path based on new media technology application ability is a systematic process where the output of each step advances the information processing of the next step. Drawing on relevant research findings [2], this paper constructs a knowledge innovation means path based on new media technology application ability, as shown in Figure 2 [Figure 2: see original paper]. The knowledge innovation model based on new media technology application ability specifically manifests as: first, using mobile terminals such as computers, mobile phones, and digital televisions, along with wireless networks, as transmission media to collect data information from these terminals and media according to predefined definitions; second, obtaining rough-processed data after preprocessing such as text extraction, deduplication, and filtering, then conducting secondary processing of the rough data based on specific analysis algorithms, which mainly includes content deep analysis, sentiment analysis, hotspot analysis, and trend analysis; finally, pooling the thematic data information gathered in the previous step and applying various information technologies through knowledge acquisition, storage,

organization, analysis, and sorting to form various knowledge bases, providing fundamental resource support for subsequent enterprise knowledge innovation.

For instance, Zhiwei Company takes data analysis as its core business. By partnering with Microsoft, HP, and other companies to establish a cloud computing application center, it conducts rough processing of information obtained from new media such as WeChat, Weibo, and product apps, followed by secondary processing and analysis, ultimately achieving integration of new media information. This not only provides specific solutions for customer operations, planning, and construction but also offers new implementation plans for the enterprise's own refined and intelligent decision-making and management, thereby realizing value creation based on precise business intelligence services.

3.3 Knowledge Innovation Process Path Based on Data-Information Integration Capability

Data-information integration capability is a crucial ability for achieving knowledge integration, creation, and utilization to generate new knowledge, and its integration process constitutes and supports the knowledge innovation process. Referencing Ye Xin, Dong Lu'an, and Song Yu's research on data and knowledge integration models [32], this study constructs a knowledge innovation process path based on data-information integration capability (see Figure 3 [Figure 3: see original paper]). This model incorporates knowledge elements (knowledge 元) into the knowledge innovation generation process, where knowledge elements represent the smallest unit of knowledge [33]. By establishing connections between data and knowledge through knowledge elements, the important role of data integration capability in knowledge innovation is illustrated. First, the generation from information to knowledge innovation primarily follows the path of "information source →data →knowledge element." Information is manifested in data form, and through data integration and analysis, metadata is formed as a bridge between data and knowledge. The automation and intelligence level of data integration determines the efficiency of knowledge integration, creation, and utilization. On one hand, driven by data-information integration capability, data analysis and mining can be conducted to improve analysis targeting and result accuracy. On the other hand, knowledge discovered through data analysis integrates with network knowledge elements to achieve knowledge innovation.

Alibaba Group has taken "data" processing as its core business since its establishment. Relying on information technology systems and various databases, it tracks and extracts related information to form analyzable real-time data. Through multi-dimensional and refined mining and analysis of this real-time data, the company can develop various products that effectively serve transaction counterparts. For example, Taobao's "Data Cube" and "Golden Strategy" products are data tools that perform effective decision-making functions through data analysis of market-open information, becoming highly sought-after data instruments among enterprises and specific individuals.

The three dimensions of media and information literacy constitute different paths for knowledge innovation, where the information demand consciousness model serves as the source, the new media technology application ability model acts as the means, and the data-information integration capability model represents the process of knowledge innovation. The support from each path for knowledge innovation is overall an interrelated and mutually enhancing process, which logically constitutes the enterprise knowledge innovation supporting path based on media and information literacy, as shown in Figure 4 [Figure 4: see original paper].

4 Implementation Strategies for Enterprise Knowledge Innovation in the Big Data Era

In the big data era, enterprise knowledge innovation is influenced and driven by multiple factors, requiring enterprises to consider these factors when formulating innovation strategies and prospectively analyze the driving factors and significance of knowledge innovation to further enhance competitiveness. Therefore, combining the "data-information-knowledge" relevance characteristics of the big data era and the triple-path framework of enterprise knowledge innovation based on information demand consciousness, new media technology application ability, and data-information integration capability, this paper proposes implementation strategies for enterprise knowledge innovation from three aspects: the thinking attitude of knowledge innovation actors, innovation means, and organizational environment, with specific examples.

4.1 Cultivating the "Data-Information-Knowledge" Holistic Thinking Among Knowledge Innovation Actors

In the big data era, information carried by data is the essential resource for individuals to gain new cognition and create new knowledge. Its massive growth and rapid expansion have brought tremendous changes not only to the information ecology and business ecology but also to internal business models and work content within enterprises. In this context, how individuals adapt to the big data era and apply scientific data analysis paradigms and advanced technological means for knowledge innovation hinges on whether they can form a holistic "data-information-knowledge" innovation mindset. This mindset means that enterprise knowledge innovation actors can break existing knowledge integration paths during knowledge innovation, fully search and explore external digital information, and simultaneously apply scientific data analysis paradigms to analyze collected digital information—a process that depends on new tools and technologies for information analysis and knowledge extraction. As analysis tasks continuously change and technological means correspondingly improve, knowledge innovation actors need to constantly adjust and adapt to changes in the surrounding information ecology, scientifically deploying digital information collection and analysis processes and objectives. They must not only maintain persistent sensitivity to external digital information and its business

value but also enhance corresponding dynamic capabilities. Only by establishing individuals' holistic "data-information-knowledge" thinking can they better undertake knowledge innovation tasks in the big data era. For example, applying holistic "data-information-knowledge" thinking to enterprise knowledge innovation strategic processes can follow this mental route: enterprise development requires specific and feasible digital missions and objectives →building an innovative enterprise with digital media methods →conducting SWOT analysis based on digital resources and considering whether the enterprise knowledge innovation model under holistic "data-information-knowledge" thinking meets stakeholder needs →in practice, strengthening incentives and allocation for technical departments and knowledge workers, and constructing corporate culture to ensure successful knowledge innovation implementation.

4.2 Enhancing Media and Information Literacy of Knowledge Innovation Actors

As time and information technology conditions change, individuals' knowledge innovation methods must also undergo dynamic evolution. To better adapt to the big data era, knowledge innovation actors need to fully utilize new media tools to rapidly search for needed digital information, and conduct reasonable screening, correct evaluation, and utilization of searched content to generate new knowledge. Therefore, sound media and information literacy is an indispensable capability for individuals to conduct knowledge innovation. First, it is necessary to raise the overall requirements and review standards for knowledge innovation actors in terms of information demand consciousness, enabling employees to accurately locate, acquire, and analyze meaningful and valuable digital information, and to correlate scientific decision-making in knowledge innovation with digital information, thereby maintaining constant information sensitivity in dynamic environments and enhancing judgment of information's business value. Tableau Company is committed to improving employees' data literacy, encouraging senior managers to manage and make decisions based on data on one hand, and encouraging employees to mine data information and use data for communication on the other. Second, employees' new media technology application ability must be cultivated so that they can efficiently acquire and process external digital information using new media technologies such as Internet search engines during knowledge innovation. Meanwhile, enterprises should also improve the hardware foundation of information management, updating technical facility systems for digital information including communication facilities, input-output devices, and laboratories, to ensure employees can rapidly enhance and efficiently apply new media technology application ability. Facebook regularly holds Data Camps to cultivate new employees' big data thinking awareness, providing practical data training for every new hire, which helps every employee become talent that understands users based on data.

4.3 Building an Enterprise Knowledge Innovation Environment in the Big Data Era

Enterprise knowledge innovation in the big data era is driven or constrained by multiple factors, and a sound enterprise knowledge innovation environment can avoid the core rigidity trap caused by previous path dependence. First, to transform existing knowledge innovation models, organizations must foster a positive culture of digital information exploration and utilization, encouraging employees to flexibly use new media tools, timely grasp changes in external information and the dynamic environment, and be willing to share and exchange data, information, or knowledge content. This enables organizational members to possess keen intuition, persistent tracking ability, and efficient mining capacity for information that can achieve knowledge innovation. For instance, Alibaba Group established a "data thinking" culture since Taobao's inception, continuously collecting data on click rates, transaction rates, and browsing users across its platforms while also obtaining external data to comprehensively analyze user needs and consumption tendencies. The company constantly performs data "management, maintenance, and precipitation" around its data strategy, thereby enhancing refined management and operations in the big data era and providing users with more differentiated service experiences. Second, enterprises can leverage flexible and adaptable "flat" network organizational structures to implement holistic innovation thinking through more agile decision-making approaches, improving employees' media and information literacy while effectively acquiring diverse digital information to achieve resource acquisition and management of markets, customers, and other stakeholders, thereby enhancing enterprise knowledge innovation efficiency. For example, 360 Company breaks rigid organizational processes by constructing a multi-level virtual committee platform that enables equal exchange and discussion of new ideas among employees at all levels within the committee. This helps organizational members better adapt to the continuously upgrading big data environment, not only reducing core rigidity and improving dynamic capabilities but also shortening effective feedback time and enhancing management efficiency. Finally, enterprises should build distinctive knowledge innovation platforms using new media technologies and other data mining and information analysis tools. Through these platforms, employees can effectively access internal knowledge resources and utilize targeted learning resource libraries, thereby improving technology application and data integration capabilities. Meanwhile, enterprise knowledge innovation platforms should strengthen internal knowledge sharing and external communication and interaction to fully integrate internal and external digital information resources, forming a virtuous cycle of internal knowledge innovation. Taking 360 Company's network organization built on online platforms as an example, besides directly meeting business needs, this network organization includes three systems that enhance internal communication: an internal communication system that can search for everyone within the enterprise; an HR system that fully accommodates employees' personalized needs; and an employee forum that promotes organizational exchange and enhances engagement.

These three primary systems can timely address employee issues and strengthen their sense of belonging.

In the big data era, the increasing correlation among data, information, and knowledge drives enterprises to demand greater precision in information, particularly highlighting the growing importance of individual media and information literacy in the knowledge innovation process. This paper explores the triple-path perspective (information demand consciousness, new media technology application ability, and data-information integration capability) and its logical composition for supporting enterprise knowledge innovation based on individual media and information literacy. These paths are interrelated and mutually reinforcing, providing a fresh perspective for enterprise knowledge innovation in the big data era.

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Ma Haiqun: Participated in the overall structural design of the paper and provided revision suggestions.

Research on the Sustaining Path of Knowledge Innovation for Enterprises Based on the Media and Information Literacy

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Abstract: [Purpose/significance] This paper constructs the sustaining path of knowledge innovation for enterprises from individual media and information literacy, so as to provide a new perspective and specific method for promoting enterprise knowledge innovation. [Method/process] First, it defines and discriminates the notion of data, information and knowledge, meanwhile studies the review of media and information literacy and knowledge innovation from its overall relevance, and then constructs enterprise knowledge innovation sustaining path with three dimensions of media and information literacy as the route through case analysis, and proposes corresponding measures. [Result/conclusion] Results show that support path of knowledge innovation in enterprise are information consciousness, new media technology application ability and information integration, which are namely the source, means and process for knowledge innovation.

Keywords: knowledge innovation; sustaining path; media and information literacy; big data

Note: Figure translations are in progress. See original paper for figures.