

# Integrating the Virtual and the Real, Scholarship Conveying Principles: A Postprint Study of Mr. Jing Jipeng's Academic Thought on Information Economics

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## Abstract

[Purpose/Significance] Mr. Jing Jipeng is one of the representative scholars who earliest engaged in information economics research in China's information science community. Exploring the development trajectory and content system of his information economics academic thought helps inspire future researchers and promote innovation and development of the information economics discipline. [Method/Process] First, we analyze the formation background of his information economics thought by combining his personal experiences and era development factors. Then, we summarize the content system of his information economics academic thought by studying his works in the information economics field. On this basis, we summarize the characteristics and contributions of his information economics academic thought. Finally, we propose research prospects. [Results/Conclusion] He constructed the disciplinary system, refined the theoretical system, and expanded the application fields of information economics. His information economics academic thought features three typical characteristics: forward-looking leadership, systematic holism, and practical applicability. Combining his information economics thought with real-world development, we propose research prospects from three aspects: innovating theoretical foundations, expanding practical applications, and tracking development frontiers.

## Full Text

## Preamble

### Abstract:

[Purpose/Significance] Professor Jing Jipeng is one of the pioneering scholars in information economics within China's information science community. Examining the developmental trajectory and content system of his academic thought

in information economics provides valuable insights for subsequent researchers and promotes innovation and development in the discipline. [Method/Process] This study first analyzes the formative background of Professor Jing's information economics thought by integrating his personal experiences with broader developmental factors, then summarizes the content system of his academic thought through a comprehensive review of his publications in the field. Based on this foundation, the paper identifies the characteristics and contributions of his academic thought, and finally proposes directions for future research. [Result/Conclusion] Professor Jing has constructed the disciplinary system of information economics, refined its theoretical framework, and expanded its application domains. His academic thought is characterized by three distinctive features: forward-looking guidance, systematic comprehensiveness, and practical applicability. Building upon his ideas and contemporary developments, this paper outlines research prospects across three dimensions: innovating theoretical foundations, expanding practical applications, and tracking developmental frontiers.

**Keywords:** information economics; Jing Jipeng; academic thought

As the founder and pioneer of information science at Jilin University, Professor Jing Jipeng has dedicated over four decades to teaching, cultivating numerous talented students. In training and guiding graduate students in information science, he emphasizes the discipline's cutting-edge nature and practical relevance, urging students to keep pace with the times, focus on disciplinary hotspots, and engage in sustained, intensive research. Information economic theory and its applications represent one such research frontier that he pioneered and championed. Indeed, Professor Jing stands as a representative figure among the earliest Chinese scholars to engage in information economics research. Since publishing his first academic paper on information economics, "An Information Theory Study on the Value of Intelligence Commodities" [1], he has devoted more than thirty years to the study of information economic theory and applications. In 1995, he published China's first textbook on *Information Economics* [2], subsequently authoring *Applied Information Economics* [3], *Information Economics* [4], *Information Sociology* [5], *Information Economic Analysis* [6], *Enterprise Informatization Planning and Management* [7], and *Information Economics* (as a national "Eleventh Five-Year Plan" textbook) [8], among other monographs and textbooks. He also led the construction of an information economics 精品课程 (excellent course) project for Jilin Provincial Department of Education. Grounded in social development and teaching practice, Professor Jing has continuously reflected upon, explored, summarized, and refined information economic theory and applications through his long-term educational work, making outstanding contributions to the establishment and enrichment of the information economics system.

Professor Jing has presided over more than thirty national and provincial-level research projects, including National Natural Science Foundation projects such as "Research on Pricing Theory and Management Models in Information Com-

modity Markets” and “Research on Measurement Methods and Development Strategies for Information Industry Structure,” Ministry of Education humanities and social sciences projects like “Research on Enterprise Informatization Construction Models and Countermeasures in China,” former Ministry of Machinery Industry key projects such as “Research on the Impact of Information Technology on the Machinery Industry and Corresponding Strategies,” and Jilin Provincial Science and Technology Department key bidding projects including “Research on Strategies for Using Informatization to Drive Industrialization and Achieve Economic Leapfrog Development.” He has received eight ministerial and provincial-level science and technology progress awards and published over forty relevant academic papers in prestigious domestic and international journals, with more than ten winning national, ministerial, provincial, or association-level excellent paper awards.

The rapid socio-economic development and revolutionary advances in information technology have placed higher demands on the scientific rigor and practical value of information economics. As the *Book of Rites• The Great Learning* states: “If you can one day renew yourself, do so every day. Let there be daily renewal.” Systematically analyzing and summarizing Professor Jing’s academic thought on information economics, which integrates theoretical and practical dimensions, represents a crucial measure for continuously rejuvenating and innovating information economic theory. Current academic research on Professor Jing’s thought primarily focuses on comprehensive analysis, such as the anthology *Complex: Academic Works of Jing Jipeng*, which selected 155 of his research achievements across information science, information science education, information economics, and information ecology to systematically showcase his academic contributions [9]. This paper examines Professor Jing’s information economics thought from four perspectives: formative background, content system, characteristics and contributions, and research prospects, offering preliminary insights to stimulate further discussion.

## 1. The Formative Background of Professor Jing Jipeng’s Information Economics Thought

The formation of Professor Jing’s information economics theories and thought is inseparable from his professional practice and the developmental context of his era. His work experience and teaching practice provided fertile ground for his information economics thought, while the catalytic effect of the times enabled continuous innovation and progress, keeping his thought closely aligned with social development and highly relevant and instructive. This section interprets the formative background of his thought from three dimensions: professional experience, teaching practice, and historical context.

### 1.1 Professional Experience and the Origins of Information Economics Thought

After graduating in tractor design and joining the faculty, Professor Jing successively served as Deputy Secretary of the Youth League Committee, Party Branch Secretary of the teaching and research section, and Party Committee Secretary of the department. Beginning in 1978, he served as Deputy Director of the university's Scientific Research Office, focusing on scientific and technological intelligence documentation. With keen insight, he recognized the importance of intelligence science education in China and actively promoted and established the Department of Intelligence Engineering and the Institute of Intelligence Science at Jilin University of Technology. He also served on editorial boards as Director, Chief Editor, and Editorial Committee member for numerous domestic academic journals including *Intelligence Science*, *Journal of Intelligence*, and *Library and Information Knowledge*. He participated multiple times in major provincial and municipal economic development decision-making consultation activities and led delegations on inspection visits to the United States, Japan, Canada, and other countries. These rich professional experiences cultivated his broad and unique perspective, while his interdisciplinary background laid a solid foundation for establishing and refining his information economics thought. Moreover, Professor Jing consistently drew new ideas and perspectives on information economics from research projects and social work, having presided over more than thirty research projects in information economics over several decades. Through this process, his information economics thought continuously matured and deepened, evolving alongside social development and becoming more practical.

If his fifty-plus years of professional practice fostered his vision and courage to grasp major trends and act accordingly, then his relentless drive and indomitable spirit of “burning the midnight oil and persevering year after year” served as an inexhaustible source of innovation for his theoretical achievements. Professor Jing believes that academic accomplishments represent the condensation and sublimation of scientific thinking, and that only through deep reflection, continuous refinement, and active problem-solving can theoretical research be perfected to meet the needs of the times and society.

### 1.2 Teaching Practice as a Driver of Thought Deepening

Professor Jing often states: “To benefit future scholars and serve the nation” [10], demonstrating his commitment to student cultivation. Having taught information science and information economics for over forty years, he has supervised 26 doctoral students and more than one hundred master's students. He has taught dozens of courses including *Information Economics* and *Frontiers in Information Economic Theory*. In teaching, he generously shares his knowledge, emphasizing the transmission of both knowledge and values, actively guiding students to acquire knowledge and expand their thinking. As the saying goes, teaching benefits teachers as well as students; through the process of teaching

and interacting with students, Professor Jing has gained new inspiration, which has further deepened his information economics thought. Additionally, he understands that learning must serve practical purposes—the goal of information economics education should be to equip students with fundamental theories while emphasizing solutions to realistic information economics problems, integrating theory with practice, and adding practical components to theoretical instruction to ensure knowledge is applied effectively.

Through long-term intensive research and teaching practice, Professor Jing's information economics thought has become more mature and comprehensive. Beyond classroom instruction, he has actively engaged in compiling and authoring information economics monographs and textbooks. Through the processes of compilation, organization, and multiple revisions, his information economics thought has achieved further systematization, emphasizing both theoretical depth and practical value, serving as a guiding model that meets the teaching requirements of the new era and advances the information economics theoretical system.

### **1.3 Era Context Driving the Development of Information Economics Thought**

The year 1978 marked the beginning of China's reform and opening-up, ushering in a new era of rapid economic development. Economic growth shifted from relying primarily on material and energy consumption to leveraging information technology, with information resources and technology becoming powerful drivers of economic development. Compared with traditional material-energy economies, the information economy exhibited differentiated patterns and characteristics, providing a realistic backdrop for the formation and development of information economics. Furthermore, as information economic activities deepened and the information industry took shape, information asymmetry problems became increasingly severe, and incomplete information competition became more prominent—markedly different from the idealized Pareto optimal state in classical economics. Consequently, classical economics could no longer address the development trends of the information economy, necessitating a comprehensive, scientifically systematic, and innovative theoretical framework to reveal and guide information economic practices. Professor Jing began establishing the intelligence science specialty in 1978, coinciding with this developmental period, and his information economics thought emerged within this historical context.

The Party and state also attached great importance to the formation of information economics thought and theoretical system construction during this period, holding nationwide seminars on information economics in 1987 and 1988 that attracted widespread attention from domestic and international scholars and brought information economics research into scholars' purview. In 1989, the China Information Economics Society was established under the direct auspices of the State Information Center, representing another significant measure to

advance the field in China. Seizing this momentum, Professor Jing actively participated in domestic and international information economics conferences, learning broadly from others and making rapid progress. Through this process, his understanding of information economics research content deepened, the systematic framework gradually clarified, and the theoretical foundation was solidified.

Western research on information economics also provided references for Professor Jing's thought formation. Western enlightenment on the information economy can be traced back to the early 19th century, and by the time China vigorously developed information economics, Western research had already matured, offering intellectual inspiration for Professor Jing to create a targeted and widely applicable information economics academic system based on China's actual conditions.

## **2. The Content System of Professor Jing Jipeng's Information Economics Thought**

Professor Jing has devoted decades to information economics research with profound insight. From the disciplinary system to basic theoretical research, and then to practice-oriented research closely integrated with real-world development and practical problems, his information economics thought has evolved into a relatively mature and comprehensive content system. He maintains that information economics can be divided into two major categories: theoretical information economics and applied information economics [3]. Through a comprehensive review of his numerous monographs and dozens of publications, this paper identifies three dimensions of his information economics thought: the disciplinary system of information economics, basic principles of information economics, and research on applied information economics problems. The disciplinary system and basic principles belong to theoretical information economics, while applied problem research falls under applied information economics.

### **2.1 Research on the Information Economics Disciplinary System**

As an emerging discipline catalyzed by rapid socio-economic informatization, information economics plays a vital role in revolutionizing industrial structures and enhancing national informatization-driven economic development. Meanwhile, the state has increasingly emphasized the disciplinary construction and implementation of information economics education. Since the mid-1990s, information economics has become a core undergraduate course in economic management programs at universities. The challenge has been to construct a Chinese-characteristic information economics disciplinary system that meets the developmental needs of China's information economy and the educational requirements of the new era. The current research in China primarily encompasses two major disciplinary systems: one examining economic problems under conditions of incomplete and asymmetric information from an economics perspective, and the

other investigating economic issues in information activities from an information science perspective [5]. The former constitutes the origin and main body of information economics, while the latter addresses economic problems related to information and information-related economic issues. Both systems are valuable for promoting students' comprehensive understanding of information economics and guiding them in applying theories to solve real-world problems. However, the two systems are independent, loosely structured, and contain complex content, posing challenges for efficiently and coherently delivering core content within limited teaching hours.

Drawing on relevant research findings, Professor Jing pioneered an innovative approach, proposing to construct the information economics disciplinary system according to the logical sequence of information elements, information commodities, information resources, information technology, information industry, and information economy [4]. This system encompasses both the economics perspective—including information and non-cooperative game theory, information and uncertainty theory, and information and principal-agent relationships—and the information science perspective, covering supply-demand and consumption of information commodities, value and pricing of information commodities, information commodity markets, information resource allocation and evaluation, information technology and economic growth, economic evaluation of information systems, information industry, information economy measurement theories and methods, and informatization and economic development. This framework ensures both the integrity and logical coherence of the information economics disciplinary system and provides practical value for teaching applications, significantly advancing the development of information economics in higher education.

## 2.2 Research on Basic Principles of Information Economics

For years, the lack of a systematic theoretical foundation has constrained the development and in-depth research of information economics. Professor Jing argues that as an emerging interdisciplinary field between information science and economics, information economics possesses its own paradigm. He distilled five fundamental principles: the principle of incomplete and asymmetric information, the principle of information sharing and regeneration, the principle of information as a public good, the principle of information commodities, and the principle of increasing marginal returns in the information industry. These principles form the theoretical foundation of information economics [8].

**2.2.1 Principle of Incomplete and Asymmetric Information** Since participants in daily economic life possess asymmetric information, with some information known only to certain participants [6], Professor Jing maintains that this principle applies not only to research on adverse selection, mechanism design, contracts, and moral hazard, but also holds significant importance for studies on information commodity value and pricing, information resource allocation, information technology, and the information industry [8].

**2.2.2 Principle of Information Sharing and Regeneration** Professor Jing proposed that information can be shared without diminishing its own value and can also achieve value appreciation on its original basis. This principle applies both to traditional research on information commodity value and pricing and information resource allocation, as well as to analyzing information industry-related issues arising from the vigorous development of information technology, such as network information resource management [11].

**2.2.3 Principle of Information as a Public Good** As information constitutes a public good, government intervention and budgetary support are required for information production and resource construction, making information resource sharing an objective for optimal allocation. Therefore, the principle of information as a public good provides a theoretical basis for research on information commodity production and pricing, optimal information resource allocation, and the development of information technology and the information industry. For instance, under this principle, one can analyze the public good attributes of agricultural information resources to explore their allocation models [12].

**2.2.4 Principle of Information Commodities** Information can be regarded as a special commodity, and its differentiated economic patterns compared to general material commodities constitute the principle of information commodities. This principle provides theoretical foundations for research on supply-demand and consumption of information commodities, their production and pricing, and information commodity market management. In his paper “An Information Theory Study on the Value of Intelligence Commodities,” Professor Jing made specific applied attempts to address issues concerning the determination of value and price of intelligence commodities [1].

**2.2.5 Principle of Increasing Marginal Returns in the Information Industry** This principle states that when information resource input reaches a certain level, information benefits will continue to increase with further input of information resources. This theory provides support for research on knowledge-dependent economic phenomena such as knowledge industries and digital industries.

## **2.3 Research on Applied Information Economics Problems**

Believing that knowledge without application cannot constitute true scholarship, Professor Jing has committed himself to integrating information economics theory into the practical production of information society, striving to organically combine cutting-edge information economic theory with technological progress and era development to solve real-world problems through innovative theories. In *Applied Information Economics*, he creatively proposed that the research objects of information economics can be divided into three aspects:

economic problems of information, problems of the information economy, and problems of the relationship between information and the economy. Based on this framework, he has interpreted and explained concrete problems in China's information economy at multiple levels and from various perspectives.

**2.3.1 Economic Problems of Information** Professor Jing's research on economic problems of information focuses on three areas: value and pricing of information commodities, information commodity markets, and information resource allocation.

**(1) Value and Pricing of Information Commodities.** Professor Jing clarified that information commodities are special products exchanged throughout the entire process of human information production, transmission, and utilization. He constructed pricing models for information commodities based on analysis of their characteristics [13]. Additionally, he emphasizes keeping pace with the times, tracking emerging developments with a developmental perspective, and exploring pricing models for emerging network information commodities in internet environments [14], thereby expanding the applicability of traditional theories.

**(2) Information Commodity Markets.** The commoditization of information has catalyzed the emergence and prosperity of information markets [15]. After clarifying the symbiotic relationship between information commodities and information markets, Professor Jing provided comprehensive interpretations of the external information market environment [16] and the internal operational mechanisms and development strategies of information markets [17] to guide practical market operations and ensure healthy competition.

**(3) Information Resource Allocation.** Professor Jing examines information resource allocation within specific industries or contexts, exploring allocation under particular circumstances. For example, he studied evaluation of enterprise information resource allocation capacity and efficiency based on the Balanced Scorecard concept [18], and investigated information resource transmission, coordination [19], and allocation issues in technology transfer contexts [20].

**2.3.2 Problems of the Information Economy** Professor Jing's research on problems of the information economy primarily focuses on the information industry, measurement of the information economy, and evaluation of information economic benefits.

**(1) Information Industry.** In theoretical analysis, Professor Jing deeply examined the formation mechanisms of the information industry from internal and external factor perspectives [21], and explored evolutionary models [22] and mechanisms [23] of the information industry based on evolutionary economics and complex adaptive systems theory. In practical applications, after comparing several domestic and international measurement methods, he constructed a comprehensive indicator system for measuring the information industry tailored

to China's national conditions [24], and applied grey system theory to analyze reasons for the underdevelopment of Jilin Province's information industry [25], forecast its development status [26], and propose practical countermeasures and suggestions.

**(2) Information Economy Measurement.** Professor Jing conducted comparative analyses of the advantages, disadvantages, and applicable scopes of various domestic and international theoretical models for measuring information levels, constructing a highly practical and generalizable information economy measurement model system based on China's informatization indicator framework [27].

**(3) Evaluation of Information Economic Benefits.** Benefit evaluation helps decision-makers understand the actual returns of the information economy from a quantitative perspective to maximize economic benefits. For instance, taking knowledge portals as research objects, he analyzed their economic benefits, principles, influencing factors, and evaluation methods to promote value-added economic benefits and enhance market competitiveness [28].

**2.3.3 Problems of the Relationship Between Information and the Economy** Professor Jing maintains that problems concerning the relationship between information and the economy can be manifested through three aspects: information technology and modern enterprises, information technology and economic development, and information technology and industrial development [3]. He has focused on exploring the integration of information technology with modern enterprises and how information technology drives industrialization to achieve economic development. For example, using case study methodology, he examined information investment in small and medium-sized enterprises [29]; studied changes in enterprise management concepts and paradigms caused by information technology [30]; analyzed the impact of information technology investment on enterprise competitive advantage based on value chain theory and Porter's Five Forces model [31]; and explored informatization construction models for manufacturing enterprises based on information integration concepts, analyzing the dilemmas faced in enterprise informatization construction [32]. Furthermore, he has tracked China's industrialization development trends, actively exploring how information technology should penetrate the machinery industry [33] and promote the development of China's industrialization process [34], using informatization to drive industrialization and foster coordinated interaction between information technology and industrial economic development.

### 3. Characteristics and Contributions of Professor Jing Jipeng's Information Economics Thought

#### 3.1 Characteristics of Professor Jing's Information Economics Thought

Professor Jing has crystallized his reflections and explorations in information economics into a distinctive intellectual system. A detailed examination of his prolific work reveals the following prominent characteristics:

**3.1.1 Forward-Looking Guidance** Professor Jing's forward-looking guidance is first evident in his judgment of intelligence science development trends. Standing at the forefront of epochal transformation, he demonstrated pioneering courage by grasping the lifeline of symbiotic development between information and the economy, vigorously promoting the development and innovation of information economics. Today, the formation and systematic refinement of his information economics thought align harmoniously with China's information economy development process, and his profound insights have been validated by practice, contributing significantly to China's information economy development and theoretical application. Second, he keenly identified practical problems in information economics education, such as fragmented knowledge points and chaotic logical structures, and undertook bold reforms of the disciplinary education system. He creatively integrated theoretical knowledge to develop a clear, vertically coherent information economics theoretical system from two mainstream ideological frameworks, leading the strengthening of information economics education and the innovation of talent cultivation models in China. Moreover, he improved upon traditional theories and methods to better suit actual development conditions. For instance, while international scholars directly applied Porat's measurement method [35] and Machlup's measurement method [36] to assess their national information economy development, Professor Jing, based on China's actual conditions, creatively proposed the comprehensive information industry dynamics method tailored to national circumstances, significantly enhancing scientific rigor and operability [37]. The proposal of this method has not only promoted the development of domestic information economics theories and methods but also provided inspirational guidance for international scholars exploring information economics applications.

**3.1.2 Systematic Comprehensiveness** Professor Jing has consistently applied systematic thinking and a holistic perspective throughout his information economics research. First, he actively explored integration points between information-related issues and traditional economics, expanding and innovating research fields and perspectives in information economics, and committed himself to interdisciplinary and cross-domain research. This has promoted the formation of a three-dimensional, systematic structural trend in information economics research, extending from points to surfaces and from superficial to deep levels. Second, he fully considered the coordinated interactive relation-

ships among various elements within the information economics system, extending from the core relationship between information flow and the economy to peripheral influencing factors such as information commodity markets [13] and information market environments and operational mechanisms [34], forming an organized, comprehensive, and complete research system. Third, his research encompasses both theoretical exploration of basic theories and disciplinary construction and practical interpretation of concrete information economy problems, adhering to the dialectical unity of goal orientation and problem orientation, and demonstrating the organic integration of theoretical value and practical significance.

**3.1.3 Practical Applicability** Professor Jing closely integrates the latest theoretical achievements in information economics with contemporary economic development problems, validating the rationality and practical value of theoretical research through practice. His innovative practical thinking holds guiding significance for scholars both domestically and internationally. For example, while foreign scholars widely focused on the grafting application of information technology to traditional industries [38], Professor Jing innovatively proposed the concept of integrated development between informatization and industrialization, identifying difficulties enterprises face during integration through practical investigation and proposing targeted recommendations [39]. His forward-thinking has advanced China's industrial informatization process while internationally expanding the application contexts and research horizons of information economics. Furthermore, his information economics thought evolves with the times, continuously examining existing research findings from a dynamic perspective, adapting to trends, and innovating. With the rapid development of the internet and the rise of emerging phenomena bringing new growth points to economic development, Professor Jing has actively expanded the depth and breadth of integration between information and various economic domains under new economic contexts, exploring relevant issues and development trajectories of China's information economy in network environments to guide the healthy interaction between information economics and socio-economic applications.

## **3.2 Contributions of Professor Jing's Information Economics Thought**

Professor Jing's profound academic expertise in information economic theory and applications is reflected in three main aspects:

### **3.2.1 Construction of the Information Economics Disciplinary System**

Professor Jing timely recognized practical problems in information economics teaching, such as diverse disciplinary content, loose teaching structures, and difficulties in textbook selection. He creatively integrated information economics disciplinary systems from both economics and information science perspectives, clarifying the content structure and logical framework. This approach preserved core and frontier content while conforming to students' cognitive patterns. For instructors, this facilitates deeper understanding and mastery of information

economics, effectively overcoming limitations of personal academic backgrounds and improving teaching quality. It also helps them efficiently grasp disciplinary positioning, clarify teaching priorities and difficulties, reduce teaching burdens, and explore diversified teaching models to cultivate talents with solid theoretical foundations and high practical application capabilities, thereby promoting comprehensive disciplinary development.

### **3.2.2 Refinement of the Information Economics Theoretical System**

As an emerging discipline born from the context of era development, information economics exhibits typical comprehensive, interdisciplinary, and marginal characteristics, lacking unified, standardized theoretical foundations. Professor Jing excavated the intrinsic connections among information economics principles, extracted core content, and refined a logically rigorous theoretical system. This not only enriched and perfected information economics theory, providing systematic theoretical guidance for solving information economy-related problems, but also expanded the research space for information economic theory and applications, effectively promoting in-depth development of information economics research.

**3.2.3 Expansion of Information Economics Applications** The continuous impetus of the information revolution has accelerated the informatization industry process, simultaneously exposing increasing information economy problems. Professor Jing maintains that applied research in information economics should be strengthened, using basic theories to analyze information activities and economic phenomena to guide and promote information economy construction practice. Building upon theoretical research, he has focused on practical issues such as the information industry, information markets, and relationships between the information economy and society. This approach has not only effectively expanded the research domain of information economics but also holds significant importance for understanding and mastering the development patterns of information industries (including knowledge and digital industries) and promoting the development of the information economy (including knowledge and digital economies).

## **4. Research Prospects**

Professor Jing has conducted thorough, multi-perspective explorations of information economics, forming a systematic research system that integrates theoretical value and practical significance, making pioneering contributions to disciplinary construction and innovative development in China's information economics field. This paper suggests that future development of information economics should focus on three aspects: (1) Actively innovate theoretical foundations by systematically integrating and comprehensively deepening information economic theory, timely tracking international research trends, improving relevant theoretical models, and promoting theoretical advancement to maintain

adaptive guidance for reality. (2) Continuously expand practical applications, as solving practical problems represents the purpose and destination of theoretical research. Therefore, applied contexts of information economics should be continuously expanded to promote integration and coordinated development across industries, while practice can also test and refine theory. (3) Dynamically track developmental frontiers. In today's society, with new-generation network information technologies such as big data, cloud computing, Internet of Things, artificial intelligence, and blockchain developing rapidly, information economics research should focus on the times, transitioning from traditional information industry studies to research on ICT industries and economic forms shaped by ICT applications. This includes exploring ICT's substitution and penetration effects and their impact on enterprise innovation and competitiveness, the quality and pathways of industrialization-informatization integration and their effects on enterprise scale expansion and economic benefits, as well as economic forms and measurement methods of the sharing economy, digital economy, and smart economy, enabling information economics thought to dynamically lead and innovate new industries and trends.

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**Author Contributions:**

Zhang Xiangxian: Guided the determination of the paper framework and finalized the manuscript;  
Zhang Liman: Conducted data collection and analysis;  
Zhao Bin: Proofread the paper.

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

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