Postprint: A Grounded Theory Study on Factors Influencing the Competitiveness of Listed Companies

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Abstract

[Purpose/Significance] "Competitiveness influencing factors," as a core intelligence issue in competitive intelligence research, has attracted considerable scholarly attention. Addressing the phenomenon in existing studies on listed company competitiveness where analytical objects primarily focus on financial information in annual reports while neglecting non-financial information, this paper attempts to conduct exploratory analysis on all content disclosed in annual reports, aiming to provide theoretical guidance for competitive intelligence research and practice. [Method/Process] Taking listed companies as an example, this study employs grounded theory to conduct in-depth analysis of annual reports from 36 sample companies, extracting concepts and categories related to listed company competitiveness through processes of open coding, axial coding, and selective coding. [Results/Conclusion] This study establishes a PE-TEGP model of influencing factors for listed company competitiveness, centered on production activities, external environment, technological innovation, factor management, corporate governance, and core competitiveness cognition. Each factor exhibits a temporal effect on competitiveness, with external environment, technological innovation, factor management, corporate governance, and core competitiveness cognition jointly influencing listed company competitiveness through their interaction with production activities.

Full Text

Preamble

Research on Influencing Factors of Listed Companies' Competitiveness Based on Grounded Theory

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Abstract

[**Purpose/Significance**] As a core intelligence issue in competitive intelligence research, "factors influencing competitiveness" has attracted considerable scholarly attention. Existing studies on listed company competitiveness primarily focus on financial information in annual reports while neglecting non-financial information. This paper attempts to conduct an exploratory analysis of all content disclosed in annual reports to provide theoretical guidance for competitive intelligence research and practice. [**Method/Process**] Taking listed companies as examples, this study employs grounded theory to conduct an in-depth analysis of 36 sample companies' annual reports. Through open coding, axial coding, and selective coding, concepts and categories related to listed company competitiveness are extracted. [**Result/Conclusion**] The study establishes a PETEGP model of influencing factors for listed company competitiveness, with production activities, external environment, technological innovation, element management, corporate governance, and core competitiveness perception as its core components. Each factor exhibits a time effect on competitiveness. External environment, technological innovation, element management, corporate governance, and core competitiveness perception collectively influence listed company competitiveness through their interaction with production activities.

Keywords: competitiveness; grounded theory; listed company; influencing factors

2. Research Status of Listed Company Competitiveness

2.1 Connotation of Enterprise Competitiveness

Research on enterprise competitiveness originated in the field of economics. The typical representative is Adam Smith's hypothesis that "the enterprise is the result of social division of labor" [**?**]. However, as modern business competition becomes increasingly complex and related research deepens, understanding of the connotation of enterprise competitiveness has become more enriched. Due to different research perspectives and theoretical foundations, there is currently no unified theoretical definition of enterprise competitiveness, but it can be broadly divided into two categories: exogenous theory and endogenous theory.

The exogenous theory of enterprise competitiveness posits that competitiveness is primarily influenced by various external environmental factors, seeking competitive advantages through analysis of a firm's external environment. Typical representatives include Michael Porter's competitive strategy theory. In his book *Competitive Strategy*, Porter proposed the famous "Five Forces Model," arguing that competitive advantages should be analyzed from the perspective of the entire industrial environment, with five main influencing factors: potential entrants, industry competitors, buyer bargaining power, supplier bargaining power, and threat of substitutes [**?**]. The SCP (Structure-Conduct-Performance) paradigm also emphasizes the impact of external market structure on competitive advantage [**?**], arguing that market structure determines firm conduct,

which in turn determines performance.

In contrast, the endogenous theory of enterprise competitiveness argues that competitiveness arises from differences in internal resources, capabilities, and knowledge. Representative theories include the resource-based view, capability theory, and knowledge-based theory. The resource-based view holds that enterprise competitiveness stems from unique and valuable resources owned by the target enterprise compared to its competitors, including tangible and intangible assets [**?**, **?**]. Capability theory suggests that enterprises with similar resources exhibit significant competitive differences due to varying abilities in resource utilization, with the "core competence theory" being a typical representative. This theory views the enterprise as a system of capabilities, focusing on analyzing the dynamic connections between resources—that is, the integration capability of resources—which is crucial for competitiveness [**?**]. The knowledge-based theory posits that knowledge is the essential source of enterprise competitiveness [**?**], and that the processes of creating, sharing, acquiring, transferring, and applying knowledge, as well as supporting and enhancing knowledge, are key success factors for improving enterprise performance [**?**]. This knowledge includes both explicit and tacit knowledge [**?**].

A comprehensive review of relevant research on enterprise competitiveness reveals that both external environment and internal resources, capabilities, and knowledge can influence competitiveness enhancement. Most of these studies are based on specific theoretical foundations or hypotheses. In terms of research approaches, one direction involves comprehensive analysis, such as exploring the relationship between external environment and internal resource utilization [**?**]. The other direction involves in-depth analysis of specific factors, such as dividing enterprise resources into human resources, material resources, and knowledge resources [**?**]; categorizing enterprise capabilities into technological innovation capability, management capability, distribution capability, brand influence, and industrial chain value collaboration capability [**?**]; and classifying enterprise knowledge into four attributes: knowledge stock, knowledge level, knowledge structure, and knowledge distribution [**?**]. From the overall research perspective, enterprise competitiveness is undoubtedly a comprehensive and multi-dimensional concept. Both external environment and internal resources, capabilities, and knowledge can influence competitiveness, but the relationships between these elements and their specific interaction pathways require further analysis.

2.2 Research on Influencing Factors of Listed Company Competitiveness

Given the complexity of enterprise competitiveness research, data availability significantly impacts the study. Consequently, large enterprises and listed companies have become the focus of relevant research, particularly studies on listed company competitiveness. Current research on influencing factors of listed company competitiveness primarily examines special factors of listed companies

(such as board and ownership structure [?], controlling shareholder situation [?]), corporate governance (governance structure and capability [?], technological innovation capability [?]), and industrial policy impacts (market regulations [?], innovation policy [?]). Based on research methods, these studies can be divided into two types: quantitative analysis focusing on quantitative data and qualitative research focusing on qualitative data.

Quantitative analysis primarily analyzes various quantifiable data of listed companies, which can be divided into financial data and quantifiable non-financial data. For financial data, various indicators in financial statements—such as investment amount, sales revenue, and profit margin [?], as well as investment capability, profitability, debt-paying ability, and operational capability reflected in financial statements [?]—have become indispensable factors for measuring competitiveness. Qualitative research primarily analyzes data that are difficult to quantify, particularly non-financial data, using qualitative research methods such as case analysis and questionnaire surveys. For instance, S. Konstantinova et al. analyzed the impact and effects of labor, capital, and total factor productivity on industrial enterprise competitiveness by selecting specific cases [?]. Z.H. Sekkeli et al. established a conceptual model of influencing factors of competitiveness through questionnaire surveys by selecting specific influencing factors. Through these methods, non-financial factors such as company products [?], corporate image [?] (e.g., management team image, service image), corporate resources [?] (e.g., IT facilities, business experience, relationship resources, human resources), and service level [?] have been incorporated into the competitiveness analysis framework.

From the perspective of research content, in addition to financial indicator-based analysis, listed company competitiveness analysis has begun to incorporate increasingly more non-financial factors, such as corporate products, corporate image, and corporate resources. Although some studies have included technological innovation in their research perspective, they have mostly approached it from the innovation chain perspective, such as enterprise technological innovation input, output, and transformation [?, ?]. Systematic research on technological innovation still needs to be strengthened.

From the perspective of research methods, research on influencing factors of enterprise competitiveness exhibits characteristics of diversified theoretical perspectives and combination of quantitative data and qualitative analysis. However, these characteristics also pose challenges to the external validity of relevant research. For example, corporate social responsibility, as an important factor affecting listed company competitiveness, has been incorporated into the competitiveness influencing factor analysis framework by many researchers. L. Marin et al., based on six hypotheses including that innovation and investment have positive effects on competitiveness and that social responsibility has positive effects on innovation and investment, conducted an empirical analysis of 236 companies and found that corporate social responsibility has no direct impact on competitiveness but can indirectly influence enterprise competitive-

ness by affecting innovation and investment [?]. J. Joo et al. proposed four hypotheses including that social responsibility positively contributes to building business ecosystems and increasing social capital, and through interview data from seven companies, established a virtuous cycle structure linking social responsibility and corporate competitiveness by accumulating social capital in business ecosystems [?].

Given the current characteristics of research methods and content, this study aims to draw on existing theoretical research results and conduct exploratory analysis of both financial and non-financial data of listed companies to address external validity issues. Specifically, through exploratory analysis using grounded theory methodology, this paper constructs a competitiveness influencing factor model that integrates existing research findings while discovering correlations and pathways among different factors, particularly the role of technological innovation.

3. Research Design

3.1 Research Method

Current research on listed company annual reports primarily utilizes information reflected in the three financial statements (income statement, balance sheet, cash flow statement) and their attachments, while paying insufficient attention to textual descriptions of company management processes and future development plans. This study adopts the grounded theory research procedure, starting from raw annual report data to conceptualize and categorize annual report information and extract theoretical generalizations consistent with the original data. Grounded theory, proposed by B. Glaser and A. Strauss, is a bottom-up methodology for building substantive theory [?], meaning that there are no pre-existing theoretical hypotheses before the research. It proceeds directly from actual observation, inductively deriving empirical generalizations from raw data and then elevating them to theory [?]. In this paper, the process of collecting and analyzing annual report data establishes a theoretical model of influencing factors of listed company competitiveness. The specific process of grounded theory analysis is shown in Figure 1 [Figure 1: see original paper].

3.2 Sample and Data Description

This study primarily selects samples through stratified random sampling. The specific method is as follows: (1) Stratification: All 3,454 A-share listed companies on the Shanghai and Shenzhen stock exchanges as of November 2017 are selected as the research population. They are classified according to the CSRC industry classification system and the "Three Industries Classification Standard" [?] into three industry categories. Based on the "Statistical Method for Classification of Large, Medium, Small, and Micro Enterprises" [?] and the "Financial Enterprise Classification Standard" [?], indicators including total assets, number of employees, and operating revenue are extracted from the WIND

database to classify the scale categories of listed companies. After excluding observations with missing or abnormal data, 3,395 valid observation samples are obtained, including 10 categories: large primary industry, medium primary industry, large secondary industry, medium secondary industry, small secondary industry, micro secondary industry, large tertiary industry, medium tertiary industry, small tertiary industry, and micro tertiary industry. (2) Sampling: With a total sample size of n=36, samples are selected by approximating upward rounding according to relative proportions for each subcategory, as shown in Figure 2 [Figure 2: see original paper]. The samples include 12 industry categories and 33 major industry classes.

4. Research Results

4.1 Data Analysis

M. Wiesche et al., by analyzing and comparing current applications of grounded theory in information systems research, identified six core procedures that grounded theory should include: theoretical sampling, constant comparison, axial coding, selective coding, theoretical coding and recording, and theory development [**?**]. Chen Xiangming proposed that the operational procedures of grounded theory are divided into three levels: first-level coding (open coding), second-level coding (axial coding), and third-level coding (selective coding) [**?**]. Both scholars define the coding process of procedural grounded theory with coding at its core. To standardize the data analysis process, this study integrates the coding processes of these two scholars, dividing the coding process into three steps: open coding, axial coding, and selective coding. Using NVivo 11 software to code the data from annual reports, this study constructs a theoretical model of influencing factors of listed company competitiveness.

4.1.1 Open Coding Open coding involves line-by-line coding of textual descriptions in annual reports to achieve conceptualization and categorization of raw data through constant comparison. Conceptualization involves recombining relevant statements from sections such as "Management Discussion and Analysis," "Important Notes, Table of Contents, and Definitions," and "Company Business Overview" in the original annual reports and endowing them with new conceptual meanings. In the study, 30 samples are randomly selected (with the remaining 6 samples used as a test set for theoretical saturation testing), resulting in 266 free nodes involving 4,112 reference points. After recombination of concepts, 96 concepts are obtained. Categorization involves connecting these concepts to identify their internal relationships and derive categories for the research question. Through induction of these 96 concepts, the following 20 categories are obtained: Finance (AA01), Industrial Chain (AA02), Cost (AA03), Risk (AA04), Company Size (AA05), Supply Chain (AA06), Core Competitiveness (AA07), Technological Innovation (AA08), Operation (AA09), Internal Control (AA10), Independence (AA11), Corporate Culture Construction (AA12), Corporate Strategy (AA13), Human Resources (AA14), Social

Image (AA15), Production Capacity (AA16), Market (AA17), Macro Environment (AA18), Industry Environment (AA19), and Informatization (AA20).

4.1.2 Axial Coding The axial coding stage involves deriving main categories by sorting out the relationships among categories. During coding, it is necessary to further clarify the relationships among categories, between main categories, and between main categories and categories. By abstracting the categories obtained in the open coding stage, six main categories are derived: Production Activities (P), External Environment (E), Technological Innovation (T), Element Management (E), Corporate Governance (G), and Core Competitiveness Perception (P). The mapping relationships among concepts, categories, and main categories are shown in Table 1 , with a bottom-up progressive abstraction.

4.1.3 Selective Coding The main purpose of selective coding is to extract the core category from the main categories. By refining and comparing the coding results from the previous two stages, the core category of "Influencing Factors of Listed Company Competitiveness" is obtained. Centering on this core category, all evidence chains of listed company competitiveness and the series of storylines of how these influencing factors affect competitiveness are sought. For companies, all activities are centered on "production activities," including supply chains, upstream and downstream industrial chains, markets related to company production, as well as risks and risk management that may affect company production activities. Other main categories intersect complexly with "production activities," forming many complex action pathways. Table 2 presents the typical relationships and pathway connotations among the main categories.

4.1.4 Theoretical Saturation Testing The remaining six listed company annual reports are used for theoretical saturation testing. During the coding process of these six annual reports, no new categories or main categories emerged. Therefore, the theoretical model of influencing factors of listed company competitiveness constructed in this study is considered theoretically saturated.

4.2 Model of Influencing Factors of Listed Company Competitiveness

Based on the concepts, categories, and main categories constructed above, a preliminary model of influencing factors of listed company competitiveness is obtained, as shown in Figure 3 [Figure 3: see original paper].

In the model shown in Figure 3, production activities are the core, with corporate governance, core competitiveness perception, and element management as the foundation. External environment and technological innovation are both inputs to and outputs from production activities. Production activities are the central element in the model and the key factor affecting competitiveness, encompassing supply chains, industrial chains, and markets related to company production. The external environment is divided into macro environment and

industry environment, providing necessary raw materials, labor resources, and capital chain support for company production activities through geographical, social, and economic environments. The uncertainty of the external environment also brings risks and challenges to production activities. On the other hand, the products of production activities are injected into the external environment in the form of products and services, such as bringing about industry technology improvements. Technological innovation includes factors such as R&D investment, achievement transformation, technology development, product development, and R&D output, continuously providing information and knowledge to production activities (e.g., technology introduction, talent introduction, product development) and generating new information and knowledge through interaction with production activities (e.g., technological progress), thereby jointly improving listed company competitiveness. Corporate governance and element management include the management and regulation of internal human, financial, and material resources, providing necessary support for production activities and reflecting the company's resource advantages and management capabilities, which are basic factors affecting competitiveness. Core competitiveness perception reflects the company's understanding of its existing advantages, helping the company make timely strategic adjustments.

Taking "technological innovation" as an example: (1) The technological, political, and industry environments in the external environment are the drivers for companies' R&D investment, such as "Faced with challenges from new financial product forms and new financial technologies, the banking industry made corresponding adjustments and transformations in 2016. In 2016, the China Banking Regulatory Commission issued the 'Guiding Opinions on the 13th Five-Year Development Plan for Information Technology in China's Banking Industry (Draft for Comment),' emphasizing the need to utilize big data, cloud computing, and other technologies to enhance the capabilities and efficiency of financial services. Many banks have begun to attach importance to cloud computing construction, formulating IT strategies based on cloud computing…" (2) The geographical, economic, and social environments of the external environment provide necessary resource endowments and labor resources for technological innovation, such as "With profound cultural foundations and rich cultural education resources… On the one hand, the company's positional advantage provides an important talent guarantee for sustainable development momentum, and on the other hand, Guangdong has also become the largest cultural product consumption market in the country…" (3) Element management and corporate governance provide necessary strategic guidance, financial support, human resources support, and informatization construction for technological innovation. For example, financial activities provide necessary financial support for technological innovation, while talent cultivation, performance evaluation, and incentive mechanisms provide guarantees for the introduction and cultivation of R&D talent in technological innovation. (4) Core competitiveness perception guides technological innovation, and technological innovation strengthens the enhancement of core competitiveness, such as "Technological innovation is the primary driving force

for product intelligence and the fundamental basis for product iteration and upgrading and enhancing product competitiveness…" Throughout this entire process, technological innovation needs to introduce information and knowledge from the external environment and provide it to production activities through the R&D process. New information and knowledge generated through interaction with production activities then flow into the next stage of production activities. To reflect the continuity of this process, a time dimension is added to Figure 3, reflecting the time effects of each link's impact on competitiveness, resulting in the PETEGP model of influencing factors of listed company competitiveness shown in Figure 4 [Figure 4: see original paper].

4.3 Model Testing

To test the validity of the conclusions, this study selects reviewers with backgrounds in intelligence and economics/management. Since this research examines influencing factors of listed company competitiveness from a competitive intelligence perspective, reviewers specializing in intelligence can compare the research results with existing theories to verify accuracy. Since listed company research involves knowledge in microeconomics, financial accounting, and corporate management, reviewers with economics/management backgrounds can identify loopholes in the research results and prevent researcher misunderstandings. Based on reviewer feedback, "core competitiveness perception" is upgraded from a category to a main category in the main category extraction section to better reflect the company's understanding of its competitive advantages. Through feedback and revision based on reviewer comments, the validity of the research results is further enhanced.

5. Conclusion and Implications

This study integrates grounded theory throughout the entire analysis process, conducts in-depth analysis of listed company annual report data, and extracts six main categories: production activities, external environment, technological innovation, element management, corporate governance, and core competitiveness perception, as well as five main action pathways centered on "production activities." To reflect the time effects of various influencing factors on competitiveness, this study introduces a time dimension into the model and establishes the PETEGP model of influencing factors of listed company competitiveness, particularly clarifying the position of technological innovation and its relationship pathways with other elements. Regarding listed company competitiveness, as influencing factors constitute a core intelligence issue in listed company competitiveness research, this study offers certain implications for subsequent evaluation of listed company competitiveness. Furthermore, the ultimate goal of this research is to achieve effective evaluation of listed company competitiveness. Future research directions include quantifying influencing factors, discovering different action pathways among various influencing factors, and determining the intensity of influencing factors' effects on competitiveness.

References

[1] Smith. *The Wealth of Nations* [M]. Translated by Tang Risong. Beijing: Huaxia Publishing House, 2005.
[2] Porter. *Competitive Strategy: Techniques for Analyzing Industries and Competitors* [M]. Translated by Chen Xiaoyue. Beijing: Huaxia Publishing House, 1997.
[3] Bain J S. Relation of profit rate to industry concentration: American manufacturing, 1936-1940 [J]. *Quarterly Journal of Economics*, 1951, 65(3): 293-324.
[4] Prahalad C K, Hamel G. The core competence of the corporation [J]. *Harvard Business Review*, 1990, 68(3): 275-292.
[5] Collis D J, Montgomery C A. Competing on resources [J]. *Harvard Business Review*, 2008, 34(4): 118-128.
[6] Marqués D, Simón F J. The effect of knowledge management practices on firm performance [J]. *Journal of Knowledge Management*, 2006, 10(3): 143-156.
[7] Andreeva T, Kianto A. Does knowledge management really matter? Linking knowledge management practices, competitiveness and economic performance [J]. *Journal of Knowledge Management*, 2012, 16(4): 617-636.
[8] Yu Guangsheng. A new enterprise theory: Enterprise knowledge theory [J]. *Foreign Economics & Management*, 2000, 22(3): 10-13.
[9] Zhang Xuewei. Analysis and countermeasure research on external environment of enterprise competitiveness [D]. Lanzhou: Lanzhou University, 2007.
[10] Dubra I. Human capital impact on the enterprise competitiveness [EB/OL]. [2017-10-20]. http://su.lt/bylos/mokslo_{leidiniai}/jmd/10_{{{01}}*{{26}}}{priedas}/dubra.pdf.
[11] Wang Songtao, Yang Wei. Internal capability, enterprise competitiveness and optimal allocation of enterprise resources—A theoretical model (AMEC model) [J]. *Journal of Zhejiang Gongshang University*, 2011, 1(3): 59-67.
[12] Cao Xing, Luo Huihua. Enterprise knowledge state: A theoretical analysis of enterprise competitive advantage [J]. *China Soft Science*, 2005(11): 124-129.
[13] Charitou A, Louca C, Vafeas N. Boards, ownership structure, and voluntary delisting from the New York Stock Exchange [J]. *Journal of Accounting & Public Policy*, 2007, 26(2): 249-267.
[14] Ma Wenliang. Research on enterprise competitiveness measurement and its influencing factors—An empirical analysis based on Chinese listed companies [D]. Shanghai: Fudan University, 2009.
[15] Su Chunyu. An empirical study on the impact of corporate governance on enterprise competitiveness of listed companies [D]. Changchun: Jilin University, 2009.
[16] Wang Yanwei. Research on the relationship between innovation capability and enterprise competitiveness of listed companies [D]. Xi'an: Shaanxi Normal University, 2016.
[17] Wang Weiwei. Analysis on influencing factors of enterprise competitiveness of seed industry enterprises in Anhui Province [D]. Hefei: Anhui Agricultural University, 2013.
[18] Jaysuriya K. Innovation policy as a contributor to the competitiveness

of information technology firms in Sri Lanka [D]. Moratuwa: University of Moratuwa, 2016.
[19] Jin Q L, Zhang G C, Chen P. Business cycle and accounting behavior [D]. Hong Kong: Hong Kong University of Science and Technology, 2005.
[20] Wang Youzhuan. Competitiveness evaluation of LED listed companies based on principal component analysis [J]. *Information Research*, 2015(2): 52-55.
[21] Konstantinova S, Konarev A. Corporate growth and total factor productivity in industrial companies [J]. *Trakia Journal of Sciences*, 2017, 15(1): 191-194.
[22] Bakani I, Sekkeli Z H. Types of information technology capability and their impacts on competitiveness [J]. *Research Journal of Business and Management*, 2017, 4(2): 201-210.
[23] Tashchiyan O, Suzdalova M A, Grichen S V, et al. A system of evaluation of engineering solutions competitiveness of a company based on its image [J]. *Materials Science and Engineering*, 2016, 142(1): 1-6.
[24] Xiao Huimin, Ren Yadan. Research on core competitiveness of logistics enterprises based on fuzzy comprehensive evaluation method [J]. *Technology Intelligence Engineering*, 2017, 3(6): 54-61.
[25] Marin L, Martínez P J, Rubio A. Doing good and different! The mediation effect of innovation and investment on the influence of CSR on competitiveness [J]. *Corporate Social Responsibility and Environmental Management*, 2017, 24(2): 159-171.
[26] Joo J, Eom M M, Shin M. Finding the missing link between corporate social responsibility and firm competitiveness through social capital: A business ecosystem perspective [J]. *Sustainability*, 2017, 9(5): 1-22.
[27] Li Wenqian, Liu Yi. Technological innovation, corporate social responsibility and enterprise competitiveness—An empirical analysis based on listed company data [J]. *Science of Science and Management of S.& T.*, 2017, 38(1): 154-165.
[28] Lei Lei, Wang Xi. Research on the relationship between technological innovation and enterprise competitiveness of technology-based enterprises [J]. *Academic Forum*, 2014, 37(8): 85-88.
[29] Glaser B, Strauss A. *The Discovery of Grounded Theory: Strategies for Qualitative Inquiry* [M]. New York: Aldine de Gruyter, 1967.
[30] Chen Xiangming. The ideas and methods of grounded theory [J]. *Educational Research and Experiment*, 1999(4): 58-63.
[31] National Bureau of Statistics of China. Three industries classification standard [EB/OL]. [2017-10-20]. http://www.stats.gov.cn/tjsj/tjbz/201301/t20130114_{8675}.html.
[32] National Bureau of Statistics of China. Statistical method for classification of large, medium, small and micro enterprises [EB/OL]. [2017-10-20]. http://www.stats.gov.cn/statsinfo/auto2073/201310/t20131031_{450691}.html.
[33] National Bureau of Statistics of China. Financial enterprise classification standard [EB/OL]. [2017-10-20]. http://www.stats.gov.cn/tjsj/tjbz/201511/t20151111_{1271308}.html.
[34] Wiesche M, Jurisch M C, Yetton P W, et al. Grounded theory methodology in information systems research [J]. *MIS Quarterly*, 2017, 41(3): 685-702.

Author Contributions:
Liu Zhihui: Proposed the research ideas and implementation plan.
Mao Yilei: Data collection and processing, framework design, and paper writing.

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