

Article

The Influence Mechanism of Strategic Partnership on Enterprise Performance: Exploring the Chain Mediating Role of Information Sharing and Supply Chain Flexibility

Yanling Yang¹, Yanling Zheng^{2,*} , Guojie Xie³  and Yu Tian^{4,*}¹ Business School, Shandong Normal University, Jinan 250014, China; 616090@sdu.edu.cn² School of Management, Guilin University of Aerospace Technology, Guilin 541004, China³ School of Management, Guangzhou University, Guangzhou 510006, China; 1111965003@e.gzhu.edu.cn⁴ School of Business, Sun Yat-sen University, Guangzhou 510275, China

* Correspondence: zyl@guat.edu.cn (Y.Z.); mnsty@mail.sysu.edu.cn (Y.T.)

Abstract: In the context of the digital economy, establishing close strategic partnerships to cope with market uncertainties is an important strategic choice for firms seeking to achieve sustainable development in developing countries, particularly in Eastern culture. However, research on how strategic partnerships affect enterprise performance remains controversial. To address this issue, based on the supply chain management practices of Chinese enterprises in the era of the digital economy, and according to resource dependence theory, social network theory, and transaction cost theory, a chain multiple intermediary model was constructed and 243 Chinese enterprises information was collected for an empirical test. The results show that strategic partnership has a significant direct positive impact on information sharing, supply chain flexibility, and enterprise performance. Information sharing has a significant direct positive impact on enterprise performance and plays a partial mediating role between strategic partnership and enterprise performance. Supply chain flexibility was also found to positively impact enterprise performance and plays a partial mediating role between strategic partnership and enterprise performance. The findings also showed that information sharing and supply chain flexibility play a chain mediating role between strategic partnership and enterprise performance. This study explores the effects of strategic partnership on enterprise performance, which provides an important supplement to theoretical studies of supply chain management. The results help provide targeted solutions on how to effectively implement supply chain management for enterprises in emerging and developing nations.

Keywords: strategic partnership; information sharing; supply chain flexibility; enterprise performance; chain mediation



Citation: Yang, Y.; Zheng, Y.; Xie, G.; Tian, Y. The Influence Mechanism of Strategic Partnership on Enterprise Performance: Exploring the Chain Mediating Role of Information Sharing and Supply Chain Flexibility. *Sustainability* **2022**, *14*, 4800. <https://doi.org/10.3390/su14084800>

Academic Editor: Alessio Ishizaka

Received: 3 January 2022

Accepted: 12 April 2022

Published: 16 April 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

With the expansion of the digital economy and the maturity of globalization, the breadth and depth of enterprises' demand for resources have increased considerably. Given the increasing difficulty of meeting development needs, enterprises have pursued more heterogeneous resources through external cooperation [1,2]. Increasingly more companies join the supply chain management, seeking their own long-term development with the overall operation ability of the supply chain. The competition among enterprises has gradually evolved into competition among supply chains. Improving supply chain management has been recognized as a crucial strategy for many businesses seeking to achieve sustainable development [3–5]. However, because of uncertainties in the external environment and the limited rationality of the internal organization, cooperation and competition in the supply chain often occur simultaneously among member enterprises. Constant opportunism, short-term gaming, moral damages, and other problems result in high transaction costs, which erode profits and benefits brought about by supply chain management [6,7]. This

issue has prompted many scholars to ask: What kind and extent of cooperative relationship should be maintained between companies within the supply chain?

Resource dependency theory suggests that an organization requires multiple resources to survive and must interact with other organizations in its environment to obtain much-needed resources [8,9]. Transaction cost theory suggests that good cooperative relationships help reduce transaction costs. However, maintaining relationships costs money, and different relationships have different prices [10–13]. Social network theory posits that resources can be obtained not only through possession but also through network relationships, which can be divided into “strong relationships” and “weak relationships” [14]. Some scholars believe that strong relationships are based on emotion and trust, which make it easier for firms to obtain high-quality information and resources and improve the efficiency of information and resource transfer [15]. In contrast, some scholars suggest that close relationships deliver mostly redundant resources and require high costs for relationship maintenance [16]. Some argue that weak relationships can provide firms with more valuable heterogeneous resources and do not require higher maintenance costs [17], while others believe that the loose structure of weak relationships is not conducive to information dissemination and knowledge sharing among firms, and it is difficult to meet firms’ innovation needs [1]. Thus, existing studies have unanimously recognized that “partnership is an important way for enterprises to obtain external resources” but have different understandings of the question of what kind of relationship between enterprises can achieve higher performance [18]. Is it “distance or intimacy”? This seems to be a dilemma. Thus, when this dilemma encounters Eastern culture, what is the answer?

For Western developed countries, the national economic development level is relatively high, the market mechanism is relatively perfect, and the transactional contract has a strong binding force. However, for Eastern developing countries represented by China, the national economic development level is low, the market mechanism is not perfect, and the transactional contract is weak [19]. In addition, under the profound influence of Eastern culture such as “collectivist values” and “seeking common thinking”, the establishment of close strategic partnership often becomes the priority of enterprises in Eastern developing countries [3,14,20–22]. They hope to bind interests and share risks with upstream and downstream enterprises through the dual constraints of transactional and relationship contracts to fill the “institutional hole” and “market gap” existing in the entrepreneurial environment to a certain extent [23]. However, existing studies on strategic partnership mostly analyze enterprises in Western developed countries, while there is still a lack of sufficient discussion on enterprises in Eastern developing countries [23]. The impact of strategic partnership on enterprise performance in Eastern developing countries requires further study.

While the majority of existing research indicates a positive correlation between strategic partnership and enterprise performance [24], some studies indicate a negative [2] or nonexistent relationship [6]. It can be seen that there may be complex mechanisms between strategic partnership and enterprise performance that need to be further explored. Close strategic partnerships foster mutual trust and commitment, which improves the quality and level of information sharing among firms [25–28]. Sufficient information sharing enhances supply chain flexibility, allowing firms to profit by responding quickly to market changes [14,29,30]. This implies that information sharing and supply chain flexibility may play critical roles in the relationship between strategic partnerships and enterprise performance [31,32]. Clarifying this issue would help reveal the “black box” between strategic partnership and enterprise performance.

The core question in this study is: In the era of the digital economy, how does strategic partnership affect enterprise performance in developing countries with Eastern culture? To answer this question, based on the theory analysis on resource dependence theory, transaction cost theory, and social network theory, this study constructed a chain mediation model analyzing Chinese enterprises’ supply chain management practices. In the model, a strategic partnership was used as the independent variable, information sharing, and

supply chain flexibility as the intermediary variables, and enterprise performance as the dependent variable. Data from 243 Chinese enterprises were used in carrying out the empirical tests. Our research's first objective is to determine whether close strategic relationships increase corporate performance in developing Eastern countries, in order to contribute to the contextual analysis of cooperative relationship research. Second, by examining the chain mediating role of information sharing and supply chain flexibility, we can better understand the effects and pathways of strategic partnership on business performance. Finally, the findings are discussed in order to provide advice and suggestions on how to apply supply chain management, assisting firms in developing countries of Eastern culture in achieving sustainable development in the digital economy era.

2. Literature Review and Research Hypothesis

2.1. Theoretical Foundation

According to resource dependence theory, corporations must exchange resources with the outside world because they require a diverse set of resources to grow that are difficult to develop with their own capabilities. As a result, enterprises with heterogeneous resources gravitate toward one another, creating incentives for collaboration and fostering cooperative dependency. It elucidates the initial motives for supply chain firms to form partnerships [2,33]. Transaction cost theory investigates economic organization systems using comparative institutional analysis and summarizes the various economic costs associated with transaction contracts, which answers the question of why firms need to form partnerships and explains the extent to which partnerships can influence enterprise competitiveness. It displays the supply chain stability rationale [7,11,34]. In partnership research, social network theory, which includes strong relation and weak relation theory, social capital theory, and structural hole theory, is also employed [35]. The theory claims that firms obtain resources through networks, and that through network relationships of different strengths (strong or weak) they obtain resources of different types (homogeneous or heterogeneous resources). It provides detailed guidelines on the types of relationships that supply chain enterprises can form in order to access desired resources [14]. Other studies have been undertaken based on the resource-based view [36], stakeholder theory [23], psychological contract theory [22], and value co-creation theory [37]. These theories shed light on the motivation, mechanism, and impact of partnership formation from a variety of perspectives, laying the theoretical groundwork for the study of partnerships (Table 1).

Table 1. Theories used in research on strategic partnership.

Reference	Theories	Research Question	Research Finding
Xiao et al., 2019 [2]	Resource Dependency Theory Relationship Theory	How buyer dependence, supplier dependence, and buyer–supplier interdependence influence buyer decisions to enter upstream supply networks to cope with technological uncertainty	There is a significantly positive relationship between technology uncertainty and supplier involvement, which is positively moderated by buyer dependence and interdependence, and negatively moderated by supplier dependence.
Alsaad et al., 2019 [33]	Resource Dependency Theory	How resource dependencies among partners drive different models of innovation acceptance among potential adopters	Resource dependence can be either a facilitator or an inhibitor. Predicting the diffusion of innovations in the market requires good understanding of the interdependence structure among supply chain members.
Haaskjold et al., 2020 [7]	Transaction Cost Theory	The major factors affecting transaction costs and how they affect project collaboration	Improving the partnership between contractor and client may reduce the transaction costs of a project.

Table 1. Cont.

Reference	Theories	Research Question	Research Finding
Lee and Choi, 2021 [34]	Transaction Cost Theory	The causal relationship between partnership governance mechanisms and the success of green supply chain management	The governance mechanism between suppliers and manufacturers is positively related to GSCM performance.
Chu et al., 2019 [14]	Resource Dependency Theory Social Network Theory	The effectiveness of relationships as a strategy	Improved relationship management with a company's third-party logistics service providers leads to an increased cooperation among partners, the effectiveness of which is determined by the level of risk in the logistics outsourcing transaction.
Ding and Jie, 2021 [35]	Social Capital Theory	The causal linkages between information sharing, trust and commitment and relationship-specific investment, and logistics and supply chain competencies of logistics service providers	Relationship management factors (i.e., information sharing and trust and commitment) are significantly related to logistics and supply chain competencies while relationship-specific investment has no significant relationship with logistics and supply chain competencies.
MacDonald et al., 2019 [36]	Resource Base View	How to use partnerships to achieve global sustainable development	Different partner strategies result in different types of resources gained.
Liu, 2020 [23]	Stakeholder Theory	How stakeholders influence the development of technology business incubation platforms and entrepreneurial activities in the context of strategic entrepreneurial partnerships	From a temporal perspective, different types of stakeholders play different roles during the developmental trajectory involved in the launch and development of entrepreneurial ventures.
Wei et al., 2021 [22]	Psychological contract theory	The impact of contract-based and trust-based control mechanisms on relationship conflict from the supplier's perspective	The supplier's transactional contract model reduces the impact of trust-based control on relationship conflict, while the supplier's relational contract model enhances the impact of outsourcer's contract-based control on relationship conflict.
Wang et al., 2022 [37]	Value Co-creation Theory Resource Dependence Theory	The impact of value co-creation among service companies, business partners, and customers on organizational performance	Customer value co-creation has a positive effect on ideation performance and development performance, while business partner value co-creation has a positive effect on deployment performance.

2.2. Literature Review

Partnership study has steadily become an important topic in the field of supply chain management research due to the in-depth growth of supply chain management practice and theory. Scholars begin by delving into the concept of strategic cooperation. According to Ashman [38], a strategic partnership is a consensual collaboration between two or more organizations with a clear agenda of shared interests aimed at attaining discrete and quantifiable goals. Li et al. [39] describe strategic partnership as a long-term relationship between an organization and its suppliers. Fontana [40] defines that strategic partnership is a formal cooperation agreement between agents (firms) with the goal of transforming their current market position to hold a strategic position. As can be shown, strategic partnerships differ significantly from generic partnerships in terms of closeness and durability, emphasizing the inherent requirements of goal alignment, benefit sharing, and risk sharing [41].

Strategic partnerships between businesses are motivated by the pursuit of market success [42], promotion of innovation [43], enhancement of legitimacy, enhancement of image, and sharing of risks and benefits [13]. Uncertain environments are a persistent

source of fissures, obstacles, tensions, and challenges in interfirm collaborations. Therefore, how may the ideal intentions be turned into productive performance? Scholars have examined how strategic partnership exert their effect. At the outset, some researchers believed that the partnerships had a positive effect on firm performance [3,39], while some suggested that the effect could be negative [2], and yet others argued that the two are unrelated [6]. To resolve these inconsistencies, scholars conducted in-depth investigations using dimensional analysis [27,44], comparisons of different types of firms [45] or modes of cooperation [46,47], or dynamic analysis of different development stages [6], with a variety of research methodologies [48] to examine the paths and boundaries between strategic partnership and firm performance [14,18,49–51] (Table 2).

Existing research has provided a wealth of references and ideas for determining the relationship between strategic partnership and firm performance. However, as the digital economy grows and multimedia technologies become prevalent, supply chain management places increased demands on organizations' information technology and market response, while also bringing challenges to information exchange and overall resilience [52]. As a result, further research into the impact of strategic partnership on firm performance, particularly the pathways between the two, will provide more accurate theoretical direction and practical reference for organizations implementing supply chain management.

Table 2. Impact of strategic partnership.

Reference	Research Methodology	Sample	Research Finding
Fynes et al., 2005 [44]	Structural equation modeling	200 Irish suppliers to the electronics industry	Supply chain relationships (including the four dimensions of trust, commitment, adaptation, and communication and collaboration) have a positive effect on design quality and no significant effect on conformance quality.
Yang et al., 2007 [48]	Case study	Alliance of 6 Chinese companies from Taiwan	SME business performance is highly dependent on strategic alliance partnerships, and companies should decide whether to adopt an internet-based information system (IBIS) based on the level of support from alliance partners and their technical capabilities possessed.
Cao and Zhang, 2011 [49]	Structural equation modeling	211 U.S. manufacturing companies	Supply chain collaboration improves firm performance, with collaborative advantage completely mediating the relationship between supply chain collaboration and firm performance for small firms while partially mediating the relationship for medium and large firms.
Saci and Jasimuddin, 2018 [6]	Panel data analysis	48 strategic partnership groups built by 250 French companies	In the short term, strategic partnership has a negative impact on performance, while in long run, there is no positive impact of strategic partnerships on financial performance (neutral effect).
Chu et al., 2019 [14]	Regression analysis	149 Chinese third-party logistics companies	The relationship has a significant positive effect on operational performance and is positively moderated by environmental uncertainty and negatively moderated by asset specificity.
Shin et al., 2020 [27]	Structural equation modeling	472 Korean companies	Conceptualization of partnership trust on four dimensions, and investigation into the roles of dedicated investment and information sharing in partnership trust commitment.
Beuren et al., 2020 [50]	Structural equation modeling	Strategic Alliance of Agricultural Cooperatives in Brazil (91 questionnaires)	Information sharing among partners facilitates the exploration of new knowledge/technology.

Table 2. Cont.

Reference	Research Methodology	Sample	Research Finding
Zheng and Luo, 2021 [46]	Game theory	Chinese shipping companies	The formation of alliances is the dominant strategy for shipping companies, and the choice of cooperation strategy depends on the substitutability of transport routes and the economies of scale of shipping companies.
Kollmann et al., 2021 [45]	Fuzzy set qualitative comparative analysis (fsQCA)	690 digital and nondigital startups in Germany	Building partnerships with different companies at different stages of development have different impacts on product/service innovation; therefore, firms should strategically choose the type of partners.
Reklitis et al., 2021 [51]	FCM (fuzzy cognitive mapping) model	Greek agrifood supply chain sector (300 questionnaires)	Good strategic suppliers' partnerships and partners' information quality and sharing contribute to the competitive advantage (quality, process flexibility, and time to market) of the company. quality, process flexibility, and time to market) and positively impact business performance (profitability and market share).
Vanichchinchai, 2021 [47]	Structural equation modeling	516 Thai manufacturing companies	Customer relationship has significant positive direct effects on supply chain performance. Supplier relationship has direct effect on customer relationship but has no significant positive effects on supply chain performance.
Valbuena-Hernandez and Ortiz-De-Mandojana, 2022 [18]	Panel data analysis	Listed companies in Spain from 2016 to 2019	Good partnership facilitates sustainability improvements, which is negatively moderated by duration and diversity.

2.3. Research Hypothesis

2.3.1. Strategic Partnership and Enterprise Performance

Strategic partnership refers to the long-term, stable, and close cooperative relationship established by an enterprise with a few selected enterprises to seek its own long-term development by virtue of the overall operational capacity of the organization, mainly including satisfaction, trust, commitment, dependence, and collaboration [6,53–55]. Previous studies have focused primarily on the impact of the general corporate partnership on operating performance, procurement performance, supply chain performance, and alliance performance. This means that the effects of strategic partnership on overall enterprise performance have largely been overlooked and still require in-depth exploration [56,57]. Since strategic partnership is significantly different from a general partnership in terms of strength and scope, the impact of strategic partnership on enterprise performance has to be clarified. Selecting the right strategic partner and maintaining the relationship can help enterprises avoid high search and bargaining costs caused by frequent changes in cooperation partners, expand common interests through long-term cooperation, and increase the default cost between enterprises. In this way, enterprises are regulated to comply with commercial rules and contracts, reducing opportunism and moral damage [7,58]. More importantly, long-term strategic cooperation could deepen the fusion of organizational culture and business philosophy and promote understanding and trust. It could expand the scope of cooperation and enhance the strategic vision between companies. In-depth cooperation and collaborative innovation between enterprises would give complementary advantages and generate abundant benefits to enterprises [59,60]. Therefore, the following hypothesis is proposed:

Hypothesis 1. *Strategic partnership has a significant direct positive impact on enterprise performance.*

2.3.2. Role of Information Sharing between Strategic Partnership and Enterprise Performance

Information sharing refers to the timely sharing of operation, production, and sales information among enterprises [61–63], which is an important support and guarantee in supply chain management operations. With the in-depth development of the digital economy, the big data environment is gradually formed, and the information types are increasingly diverse, but the life of information is increasingly shortened. Improving the level of information sharing has become an important strategic means for enterprises to cope with the changes of a complex environment and obtain competitive advantages [64,65]. In addition to the development level of information technology, previous studies have found that the “relationship” between enterprises has a non-negligible impact on information sharing [26,66]. This means a good relationship will promote information sharing between enterprises; otherwise, it will cause a series of interference and noise between enterprises [67]. In a strategic partnership, close cooperation forms a high degree of understanding and trust, which can improve the willingness of enterprises to invest in the construction of information systems from the ideological level, encourage efforts to narrow gaps in information management, and improve the ability of information docking, thus providing technical support for information sharing [35,68,69]. Common interests brought by long-term cooperation can “bind” enterprises economically, help the supply chain establish sound “incentive–coordination–constraint” and risk prevention mechanisms, and fairly distribute additional benefits brought by information sharing, thus providing a perfect organizational guarantee for information sharing [61,70,71].

Furthermore, sufficient information sharing can not only effectively reduce missed opportunities and waste of resources caused by information delay and asymmetry [62] but also help enterprises to more objectively understand each other’s weaknesses and advantages to carry out more precise complementary advantages or strong combination, and continuously push cooperation deeper [72,73]. Finally, unique market competitive advantages are formed. In addition, high-level information sharing reduces the costs of acquiring external knowledge and improves the quality of acquired knowledge [74]. It also promotes the spread, transformation, absorption, and utilization of important information, such as heterogeneous knowledge, advanced technology, successful experience, and ideas [75], thereby accelerating enterprise knowledge updating, promoting knowledge spillover [76], and improving innovation ability. All of these factors help enterprises achieve good performance. Based on the discussion, the following hypotheses are proposed:

Hypothesis 2. *Strategic partnership has a significant direct positive impact on information sharing.*

Hypothesis 3. *Information sharing has a significant direct positive impact on enterprise performance.*

Hypothesis 4. *Information sharing plays a mediating role between strategic partnership and enterprise performance.*

2.3.3. Role of Supply Chain Flexibility in Strategic Partnership and Enterprise Performance

Supply chain flexibility refers to the early warning, response, and recovery ability of the supply chain in the face of market changes, reflecting the comprehensive strength of enterprises in the dynamic environment of sustainable development [77–79]. It mainly includes supply network flexibility, logistics flexibility, operation system flexibility, organizational design flexibility, and information system flexibility. With the in-depth development of the digital economy, customer needs are increasingly personalized and diversified. Detecting and responding to market changes and developing new products and services to meet diversified market demands pose considerable challenges to supply chain flexibility [80,81]. Aside from the flexible competitiveness of supply chain nodal enterprises, supply chain flexibility also includes the flexibility of all the nodal enterprises in the supply chain. There-

fore, the level of collaboration between enterprises has an important impact on the supply chain flexibility [19,82,83]. A high degree of trust and close cooperation between enterprises could promote continuous information sharing, knowledge spillover, and collaborative innovation, thereby improving collaboration and supply chain integration [84]. A good strategic partnership would bring the enterprises together to respond to external changes more quickly and efficiently, thus improving the flexibility of the supply chain [85,86].

Furthermore, a highly flexible supply chain can help enterprises perform in multiple paths. For example, flexible supply networks could help firms accurately grasp the market supply and demand information to reduce the risks of being out of stock or overstocking [82]. A flexible production system helps improve the efficiency of new product development and delivery reliability, thus ensuring production continuity and stability [29,87]. Similarly, a flexible information system can help firms quickly respond to market change, thus improving monitoring and mitigating supply chain risks [88,89]. In particular, close strategic partnerships help to include stakeholder organizations in the product and service development process of the firm, thus improving the firm's understanding of customer needs and control of market risks, conducive to improving development efficiency and market promotion of new products and services, resulting in good performance for enterprises [52].

Based on these arguments, the following hypotheses are proposed:

Hypothesis 5. *Strategic partnership has a significant direct positive impact on supply chain flexibility.*

Hypothesis 6. *Supply chain flexibility has a significant direct positive impact on enterprise performance.*

Hypothesis 7. *Supply chain flexibility plays a mediating role between strategic partnership and enterprise performance.*

2.3.4. Information Sharing and Supply Chain Flexibility

The supply chain involves many links related to the development, production, marketing, delivery, and after-sales of products and services. Any change in these links (e.g., technological change, logistics delay, and stock shortage) will have a huge impact on the entire supply chain. This is the original driving force for information sharing and a major reason for improving flexible supply chains [62,90]. In the context of the digital economy, various high-tech applications and social media platforms are widely used. Interactions between enterprises are increasingly frequent, and information flow plays an increasingly prominent role in the supply chain [91]. Establishing strategic partnerships to improve information sharing among enterprises can enhance supply chain flexibility in several ways. First, it can promote the accurate transmission of information among stakeholders, such as suppliers, manufacturers, and retailers, and improve the transparency of supply chain operations [90,92]. These would then help enterprises promptly correct deviations and errors in their processes and strengthen their risk response capabilities [24]. Second, it can help enterprises obtain market information on time, accurately understand customer demand, and quickly carry out manufacturing. These would improve the supply flexibility and production flexibility of the supply chain and enhance the market responsiveness of enterprises [93]. Third, it can accelerate the acquisition and absorption of heterogeneous knowledge and promote the flow of new knowledge and technology, promoting knowledge spillover and improving the efficiency of collaborative innovation [94]. Therefore, the study proposed the following hypothesis:

Hypothesis 8. *Information sharing has a significant direct positive impact on supply chain flexibility.*

Hypothesis 9. *Information sharing and supply chain flexibility play a chain mediating role between strategic partnership and enterprise performance.*

Based on the above assumptions, the hypothesis model of this study is constructed, as shown in Figure 1 below.

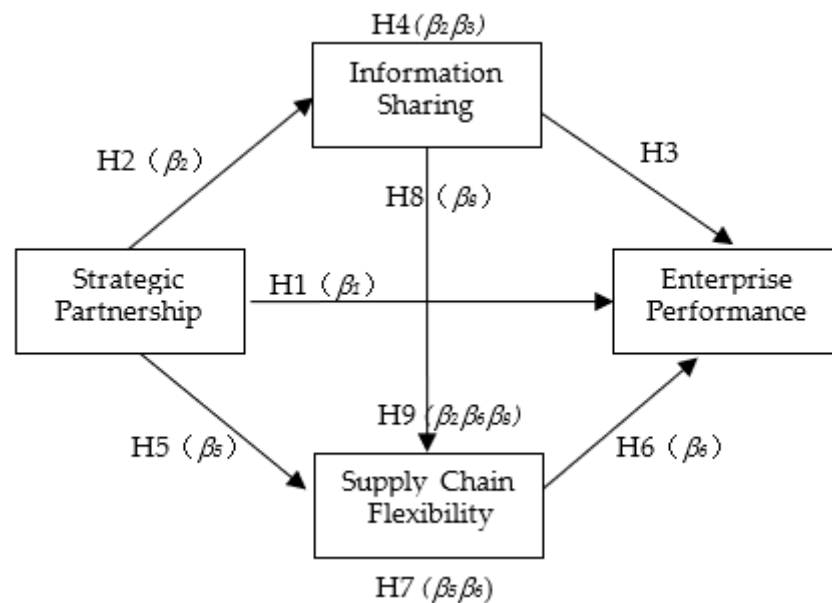


Figure 1. Research model (note: italics indicate mediating effects).

3. Research Method

3.1. Questionnaire Design

The scale design is the core part of the questionnaire design, and the scales used in this study are all maturity scales. The reliability and validity of maturity scales are highly recognized in literature and are constantly improved through repeated use, validation, and refinement [95]. Mature scales have certain limitations, such as cultural and linguistic differences that may lead to understanding bias, and the timeliness of the study may be compromised over time. To mitigate these limitations, the scales used in the study were applied and reported in articles published in recent years in authoritative journals with high citation rates. All scales were empirically validated by a sample of Chinese companies to confirm their reliability and fit. Furthermore, back translation, expert judgment, and pretesting were used to revise and improve the questionnaire.

(1) Back translation. First, two researchers with good English competency translated the scale into Chinese. The translated versions were combined and were discussed with the research team. The combined Chinese scale was then translated into English by an English teacher and compared with the original version to check the accuracy of the translation [96].

(2) Expert evaluation. We invited three recognized experts to evaluate the questionnaire: a professor from Sun Yat-sen University in the field of supply chain management research, a professor from Shandong Normal University in business administration, and a corporate executive with practical experience in supply chain management from China's second largest e-commerce company, jd.com. Based on their professional knowledge and work experience, these experts were asked to comment on the language (i.e., if there were unclear semantics and multiple meanings), privacy issues, logic of the questions, difficulty of the question, overall length of the questionnaire, etc.

(3) Pretest. For research cost and convenience, the research team pretested the questionnaire on two EMBA classes in a Chinese university. A total of 80 questionnaires were distributed in the pretest, and 50 valid questionnaires were finally obtained after questionnaire screening. Using preliminary statistical analysis, the scientificity and rationality of the questionnaires were evaluated to avoid any significant deviation.

The formal questionnaire ("Questionnaire on Supply Chain Management Practices of Chinese Enterprises") was finalized and included the following: The first part is the intro-

duction, which provides the purpose of the questionnaire, the commitment to respondents, contact information of the researchers, and other relevant information. The next part is the text content, which elicits information on the company (i.e., nature of the company, industry type, number of employees, corporate management culture, fixed assets, and turnover) and the supply chain management practices (i.e., strategic partnership, information sharing, supply chain flexibility, and corporate performance).

Strategic partnership (SP) refers to the research of Li et al. [39] and comprises six items, including “solving problems with cooperative enterprises”. Information sharing (IS) refers to the research scale of Li et al. [39], comprising six items, such as “will not inform the cooperative enterprise in advance when the demand changes (reverse item)”. Supply chain flexibility (SCF) refers to the research scale of Chuu [97], with eight items such as “supply network flexibility”. Enterprise performance (EP) refers to the research scale of Liu et al. [98] and is composed of six items, including “the company’s sales profit has increased over the past three years”. Measurements were made using a 7-point Likert scale. See Appendix A for details.

3.2. Data Collection

We conducted the following procedural controls to maximize the recovery rate of the questionnaire, ensure the representativeness of the sample, improve the quality of the collected data, and reduce the common method bias:

(1) The questionnaire was given in three formats (i.e., paper, online, and electronic) to facilitate respondents to choose a convenient way to answer the questions.

(2) The study conducted sample collection by various means, such as checking the yellow pages of enterprises, contacting enterprises cooperating with schools and enterprises, interviewing participants of executive training courses in universities, and distributing questionnaires in the field. Multiple ways were used in parallel to improve the speed of questionnaire collection.

(3) The questionnaire was anonymously answered by respondents who were required to be managers at supervisory level or above and had worked in the company for more than two years to ensure that the respondents have more objective and comprehensive knowledge of the company.

(4) Considering the variety in the economic development levels of different cities, the study used Guangzhou, Jinan, and Jishou as the first-, second-, and third-tier representative cities, respectively. The questionnaire surveys were initially conducted in these areas and radiated to the surrounding cities.

(5) Industry feature was not the focus of the study, so the enterprises selected for the survey came from different industries, such as manufacturing, medical and pharmaceutical, electronic communication, and culture and sports, to improve the representativeness of the sample.

Data collection was conducted from March 2020 to August 2020, with a total of 500 questionnaires distributed and 298 finally recovered.

3.3. Sample Screening

To ensure data correctness and completeness, we screened the recovered 298 questionnaires by applying the following principles:

(1) The questionnaires whose missing values exceeded one-fifth of the total data were rejected. For questionnaires with less than one-fifth missing data, we first tried to supplement missing information by telephone or email follow-up. For questions that could not be remedied but were not critical, we used the mean replacement method to fill in the data. If the questions were critical, the questionnaire was discarded.

(2) The questionnaires that showed significant regularity in the answers were discarded. This included questionnaires with the same response for all questions and those who chose all “neutral” answers.

(3) The questionnaires with blurred handwriting were confirmed by phone/email or re-collected.

(4) The electronic questionnaires with garbled codes were re-collected.

(5) For multiple questionnaires from the same company, the mean value was taken and recorded as one questionnaire. Because the study conducted sample collection through multiple channels, there were 16 questionnaires from 6 companies, and the data from the same company were the mean values and recorded as 6 questionnaires in total.

(6) Questionnaires with outliers, noticeable logical errors, or inconsistent answers were re-collected or discarded.

Through the sample screening, 243 valid questionnaires were finally obtained, with an effective recovery rate of 48.60%. The basic information of the sample enterprises follows: In terms of the ownership, there were 57 state-owned enterprises (23.46%), 89 private enterprises (36.63%), 34 joint-stock enterprises (13.99%), 42 joint-venture enterprises (17.28%), and 21 other enterprises (8.64%). In terms of employee count, 46 had less than 100 employees (18.93%), 79 had 100–499 employees (32.51%), 42 had 500–999 employees (17.28%), 37 had 1000–4999 employees (15.23%), and 39 had more than 5000 employees (16.05%). In terms of the enterprise culture, there were 145 companies from Mainland China (59.67%), 27 from Hong Kong, Macao, and Taiwan (11.11%), 36 from Europe and America (14.81%), 19 from Japan (7.82% of the total sample), and 16 from other cultures (6.58%). In general, the sample distribution conforms to reality and has certain representativeness.

4. Data Analysis

4.1. Homogeneity of Variance Test

In order to control common method bias, the study used multiple routes for data collection. Considering the possible impact on data merging, the study conducted Levene's test for homogeneity of variance for different samples to test whether there is a significant difference between the sample data collected from different routes. The p -values of the test results were all greater than 0.05, indicating no significant differences between the samples and that valid data merging could be performed.

4.2. Confirmatory Factor Analysis

The study used AMOS 23.0 software to conduct the confirmatory factor analysis. As shown in Table 3, the factor loadings were within a reasonable range (0.600–0.950), except for SP1 (0.550) and IS6 (0.588). After careful consideration and consultations with experts, SP1 (0.550) and IS6 (0.588) were retained for the following reasons: the factor loadings were close to the 0.600 threshold and were significant, and the results were meaningful from a theoretical perspective [99].

Table 3. Confirmatory factor analysis.

Item	Factor Loading	p	Item	Factor Loading	p
SP1	0.550	***	IS1	0.789	***
SP2	0.781	***	IS2	0.852	***
SP3	0.789	***	IS3	0.796	***
SP4	0.763	***	IS4	0.765	***
SP5	0.683	***	IS5	0.844	***
SP6	0.661	***	IS6	0.588	***
Item	Factor Loading	p	Item	Factor Loading	p
SCF1	0.840	***	EP1	0.819	***
SCF2	0.782	***	EP2	0.763	***
SCF3	0.794	***	EP3	0.834	***
SCF4	0.866	***	EP4	0.741	***
SCF5	0.830	***	EP5	0.692	***
SCF6	0.793	***	EP6	0.808	***
SCF7	0.775	***			
SCF8	0.801	***			

Note: ***, $p < 0.001$.

4.3. Reliability and Validity Tests

SPSS22.0 was used for the reliability, validity, and correlation analyses. As shown in Table 4, the Cronbach α coefficients were between 0.852 and 0.938, all greater than 0.800, indicating that the scales had good reliability. In addition, the AVE values for all variables were greater than 0.500, and CR values were greater than 0.600, which suggests that the scale had good convergence validity [100]. The square root of the AVE values for all variables were greater than the correlation coefficients between variables, indicating that the discriminant validity of the scale was also good [101]. Overall, the results suggest that all the scales have good reliability and validity for further analysis.

Table 4. Reliability and validity analysis.

Variable	Mean	S.D.	α	CR	AVE	SP	IS	SCF	EP
SP	5.435	1.041	0.852	0.858	0.503	0.710			
IS	5.191	1.059	0.894	0.900	0.604	0.527**	0.777		
SCF	5.228	0.952	0.938	0.939	0.657	0.567**	0.482**	0.811	
EP	5.170	0.818	0.898	0.902	0.605	0.581**	0.556**	0.568**	0.778

Note: **: $p < 0.01$; square root of AVEs in boldface on the diagonal of the matrix.

5. Hypothesis Testing

Previous studies have confirmed that company size (with the number of employees as a proxy variable), enterprise nature, and industry type affect enterprise performance [102]. To exclude the effects of these factors, they were taken as control variables and used as dummy variables for measurement.

The results of the fitting index of the research model show that the model has a good overall fit and that hypothesis testing can be carried out ($\chi^2/df = 3.091$, RMSEA = 0.093, NFI = 0.812, RFI = 0.839, IFI = 0.865, TLI = 0.849, CFI = 0.864). The Bootstrap function in AMOS23.0 software was used, selecting the nonparametric percentile Bootstrap method for deviation correction and extracting 5000 times. The 95% confidence interval (the 2.5th percentile and 97.5th percentile) was then analyzed to determine if zero is included in the range. If zero is not contained, the effect is significant; otherwise, the effect is not significant. The results of hypothesis testing are summarized in Table 5 and the model output in Figure 2.

Table 5. Results of the hypothesis testing.

Influence Path	Direct Effect	95% Confidence Interval	Indirect Effect	95% Confidence Interval	Total Effect
SP→EP	0.334***	[0.092, 0.570]	0.322***	[0.166, 0.482]	0.656
SP→IS	0.579***	[0.430, 0.724]	-	-	0.579
IS→EP	0.262***	[0.067, 0.447]	0.062***	[0.010, 0.143]	0.324
SP→SCF	0.496***	[0.315, 0.650]	0.133***	[0.042, 0.235]	0.630
SCF→EP	0.270***	[0.101, 0.467]	-	-	0.270
IS→SCF	0.230**	[0.067, 0.391]	-	-	0.230

Note: **: $p < 0.01$, ***: $p < 0.001$.

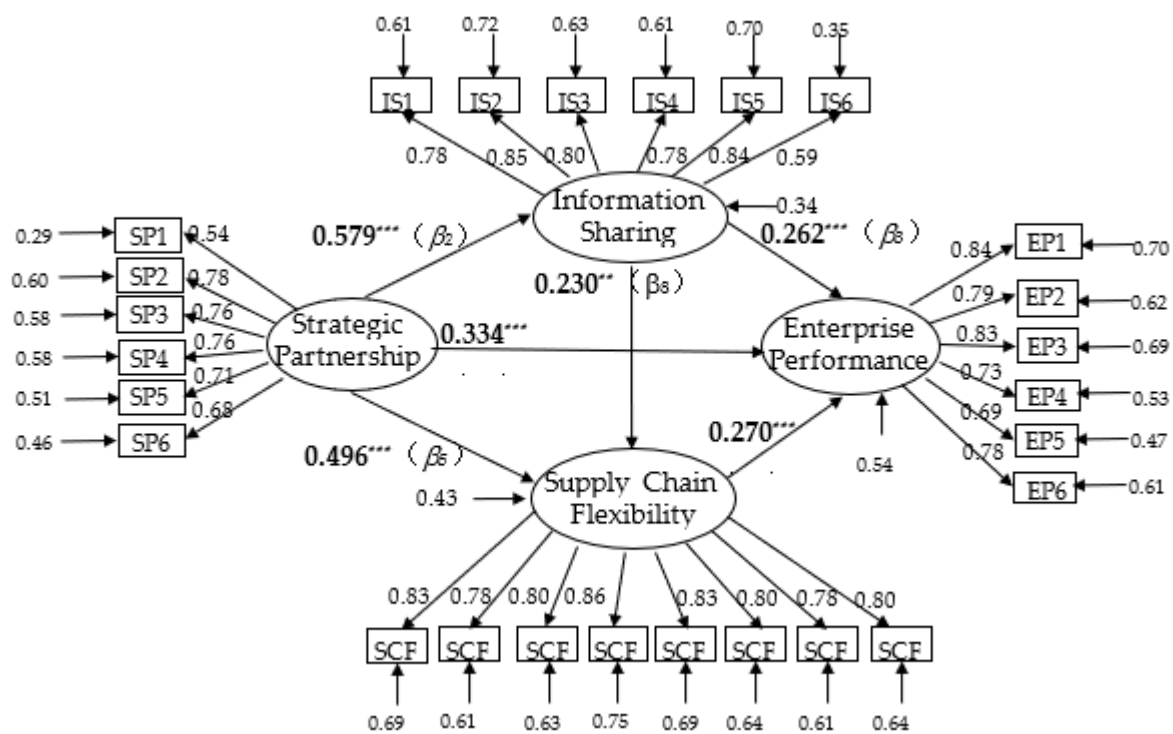


Figure 2. The output of the hypothesis model. Note: **: $p < 0.01$, ***: $p < 0.001$.

5.1. Direct Effect Testing

(1) For the influence path from strategic partnership to enterprise performance, the direct effect 95% confidence interval was [0.092, 0.570] excluding 0, while the standardized path coefficient β_1 was 0.334 ($p < 0.001$). The results indicate that strategic partnership has a significant direct positive effect on enterprise performance and that Hypothesis 1 is verified.

(2) For the influence path from strategic partnership to information sharing, the direct effect 95% confidence interval was [0.430, 0.724] excluding 0, and the standardized path coefficient β_2 was 0.579 ($p < 0.001$). The values suggest that strategic partnership has a significant direct positive effect on information sharing and that Hypothesis 2 is confirmed.

(3) For the influence path from information sharing to enterprise performance, the direct effect 95% confidence interval was [0.067, 0.447] excluding 0, and the standardized path coefficient β_3 was 0.262 ($p < 0.001$). The findings indicate that information sharing has a significant direct positive effect on enterprise performance and that Hypothesis 3 is verified.

(4) For the influence path from strategic partnership to supply chain flexibility, the 95% confidence interval of direct effect was [0.315, 0.650] without 0, and the standardized path coefficient β_5 was 0.496 ($p < 0.001$). This means that strategic partnership has a significant direct positive effect on supply chain flexibility. Hypothesis 5 is also verified.

(5) For the influence path from supply chain flexibility to enterprise performance, the 95% confidence interval of direct effect was [0.101, 0.467] excluding 0, while the standardized path coefficient β_6 was 0.270 ($p < 0.001$). The results suggest that supply chain flexibility has a significant direct positive effect on enterprise performance and that Hypothesis 6 is verified.

(6) For the influence path from information sharing to supply chain flexibility, the direct effect 95% confidence interval was [0.067, 0.391] without 0, and the standardized path coefficient β_8 was 0.230 ($p = 0.002$). The findings indicate that information sharing has a significant direct positive effect on supply chain flexibility. Hypothesis 8 is also verified.

5.2. Indirect Effect Testing

The test results showed that the standardized path coefficients for direct effects β_1 , β_2 , β_3 , β_5 , β_6 and β_8 were all significant. For the influence path from strategic partnership to enterprise performance, the 95% confidence interval of indirect effect was [0.166, 0.482] excluding 0, indicating that the indirect effect between strategic partnership and enterprise performance is significant. For the influence path from strategic partnership to supply chain flexibility, the 95% confidence interval of indirect effect was [0.010, 0.143], not including 0, indicating that the indirect effect between strategic partnership and supply chain flexibility is significant. In the influence path from information sharing to enterprise performance, the 95% confidence interval of indirect effect was [0.042, 0.235], excluding 0. This suggests that the indirect effect between information sharing and enterprise performance is significant.

Overall, the results indicate that information sharing and supply chain flexibility jointly play a chain mediating role between strategic partnership and enterprise performance. The total mediating effect of the two was 0.322 ($\beta_2\beta_3 + \beta_5\beta_6 + \beta_2\beta_6\beta_8$), accounting for 49.09% of the total effect. The mediating effect of information sharing alone was 0.152 ($\beta_2\beta_3$), accounting for 23.12% of the total effect. Hypothesis 4 is verified. The mediating effect of supply chain flexibility alone was 0.134 ($\beta_5\beta_6$), accounting for 20.41% of the total effect. Hypothesis 7 is also verified. The chain mediating effect of information sharing and supply chain flexibility was 0.036 ($\beta_2\beta_6\beta_8$), accounting for 5.48% of the total effect. Hypothesis 9 is verified.

6. Conclusions and Discussion

6.1. Research Finding

We used theoretical analysis and empirical tests to explore how strategic partnership affects enterprise performance. The results show that strategic partnership has a direct positive impact on enterprise performance and has an indirect positive effect through the chain mediation of information sharing and supply chain flexibility. The effect paths are as follows: (i) strategic partnership \rightarrow enterprise performance, (ii) strategic partnership \rightarrow information sharing \rightarrow enterprise performance, (iii) strategic partnership \rightarrow supply chain flexibility \rightarrow enterprise performance, and (iv) strategic partnership \rightarrow information sharing \rightarrow supply chain flexibility \rightarrow enterprise performance.

(1) Strategic partnership can positively affect enterprise performance, which is in line with the conclusion of Reklitis et al. [51]. This study makes a contribution in that we use structural equation modeling to empirically test the findings' applicability to Chinese firms and delve into the mechanisms underlying the relationship between strategic partnerships and firm performance. The findings of this study indicate that, as a result of an imperfect entrepreneurial environment, firms in developing countries with Eastern cultural heritage face both productivity and transaction constraints during value creation and capture processes, respectively. As a result, many firms choose to form strategic partnerships to strengthen interfirm trust, commitment, reciprocity, and rights through close collaboration [27], thereby bridging the value chain gap, lowering transaction costs, and increasing productivity to some extent.

(2) Information sharing has a significant direct positive effect on firm performance and plays a partial mediating role between strategic partnership and enterprise performance. The findings corroborate those of Beuren et al. [50] and Wu et al. [61]. As a result of the digital economy, market competition has become increasingly fierce. Only adequate information sharing can accelerate the information flow and knowledge spillover among the firms, while increasing the communication efficiency and collaboration between firms, thus helping them to allocate limited resources efficiently and respond quickly to market changes [25]. Especially in recent years, the rapid development of cloud computing, radio frequency technology, and blockchain technology has greatly boosted enterprise information construction and facilitated the transfer of information between enterprises. The role of information sharing in supply chain management has become increasingly important [103].

(3) Supply chain flexibility has a direct positive impact on firm performance and plays a partial mediating role between strategic partnership and enterprise performance. The findings offer theoretical and empirical support for the research of Swafford et al. [104]. Most existing studies emphasize the importance of supply chain flexibility at the theoretical level but lack empirical analysis [84,105]. In this study, we empirically prove that both strategic partnership and information sharing have a significant positive impact on supply chain flexibility, providing practical reference for improving supply chain flexibility. Furthermore, we confirm the positive impact of supply chain flexibility on firm performance, indicating that supply chain flexibility enables firms to actively adapt to market changes and even stimulates innovation, which has a positive effect on the external environment and results in unexpected benefits. Thus, in the digital economy, supply chain flexibility has emerged as a critical capability for businesses to manage uncertainty.

(4) Information sharing and supply chain flexibility play a complex chain mediating effect between strategic partnership and enterprise performance, accounting for 49.09 percent of the total effect, explaining nearly half the variance. This is an important contribution of the study, which reveals the “black box” relationship between strategic partnership and enterprise performance. While previous research has examined information sharing and supply chain flexibility, little attention has been given to their relationship and impact on strategic partnerships and enterprise performance. In contrast to Burin, A.R.G. et al. [24], who discovered that information technology acts as a moderator between supply chain ambidexterity and supply chain flexibility, our findings show that strategic partnership help enterprises improve their level of information sharing, and adequate information sharing enhances supply chain flexibility. The result reveals the pathways by which strategic partnership affect enterprise performance, which could guide enterprises’ practice in supply chain management.

6.2. Managerial Implication

(1) Strategic partnership has a significant direct positive impact on information sharing, supply chain flexibility, and enterprise performance. Enterprises should look for well-matched partners in business and management philosophy with which to establish strategic partnerships, via sophisticated screening and evaluation of complementary resources, cultural similarities, and business coordination. The cooperation between enterprises should be continuously expanded. The trust level between enterprises should be improved, and the level of supply chain flexibility should be enhanced by promoting information and knowledge sharing between enterprises. Good enterprise performance can be used as an incentive to continuously strengthen long-term cooperation between enterprises and maintain strategic partnerships. Further, comprehensive efforts should be taken to constantly consolidate the strategic cooperation relationship between enterprises, such as organizational setup, information connection channel selection, and incentive implementation [106,107].

(2) Information sharing has a significant direct positive impact on enterprise performance. The finding suggests that enterprises should attach importance to information construction from several aspects. First, enterprises should continuously improve information construction by increasing construction investment, improving information management systems, enhancing information processing capability, and improving information security. Second, the information interfacing capabilities should be enhanced by promoting information standardization, improving information compatibility, and strengthening horizontal communication and the vertical exchange of information among strategic partners [108,109]. Third, the effective transformation of information should be actively promoted. Information sharing is a means rather than an end, and cooperative enterprises should strengthen the effective transformation of shared information to enhance the motivation of enterprises to share information and stimulate their sharing behavior [110].

(3) Supply chain flexibility has a direct positive impact on enterprise performance. Enterprises should implement flexible thinking and use new information technology to

conduct resource integration and process reconstruction. They should enhance the supply chain's market sensitivity and operational visibility and improve their risk resistance and market resilience. These measures would avoid market risks, restrict potential damage and resource waste at low levels, and turn a crisis into an opportunity [86]. Through supply chain integration and collaborative innovation, enterprises would achieve flexible manufacturing and good performance.

(4) Information sharing has a significant direct positive impact on supply chain flexibility, playing a complex chain mediating role between strategic partnership and enterprise performance. Our finding suggests that improving the level of information sharing is an important prerequisite for improving supply chain flexibility. Enterprises should continuously improve the level and quality of information sharing through good strategic partnerships and enhance the transparency of supply chain operations and market responsiveness. They should strengthen the supply flexibility, manufacturing flexibility, and logistics flexibility of the supply chain to effectively respond to external market changes and build sustainable market competitiveness.

6.3. Research Significance

First, this study expands our understanding of supply chain management in the Eastern cultural context. Researchers still debate on what relationship between firms can achieve higher performance. This could be partly due to the lack of in-depth analysis on the impact of location [14]. Our study was focused on Chinese firms, which are deeply rooted in Eastern culture, where establishing close strategic partnerships is often the preferred option for firms to manage uncertainties. Our results show that strategic partnerships can indeed enhance enterprise performance in multiple ways. This finding may provide a new research perspective on existing controversies by considering the unique cultural contexts in which firms operate.

Second, our findings confirmed the effects and mechanisms of strategic partnerships on enterprise performance. The impact of strategic partnerships on enterprise performance remains controversial [111]. Our results show that strategic partnerships have a direct positive effect on enterprise performance and an indirect positive effect through the chain mediation of information sharing and supply chain flexibility. Our study reveals the influence of strategic partnership and clarifies its specific paths on enterprise performance. The findings further promote our understanding of enterprise partnership and supplement existing supply chain management theory research.

Third, our study offers reference opinions on how to effectively implement supply chain management in the context of the digital economy. Most studies focus on the different effects of different relationships on enterprise performance, often neglecting how relationships are constructed and their effects [112]. In this study, we explore how to establish good strategic partnerships, improve information sharing among enterprises, and enhance supply chain flexibility. Our results give detailed reference suggestions and practical guidance on targeted solutions in supply chain management for enterprises in developing countries of Eastern culture.

6.4. Research Prospect

The study has some limitations that point toward further exploration in the future. First, this study found that information sharing and supply chain flexibility jointly play a partial mediating role between strategic partnership and enterprise performance, explaining nearly half of the variation in the impact of strategic partnership on enterprise performance. Subsequent studies can explore whether other variables such as relationship commitment and supply chain agility also play a mediating role between the two, thus further revealing the path of strategic partnerships on enterprise performance. Second, the boundary between strategic partnership and corporate performance was not analyzed in this study. Future studies can explore the moderating effects of environmental dynamics and other factors to clarify the mechanism between strategic partnership and corporate performance. Third,

this study focused only on Chinese companies. Future research should explore whether the results are similar for other developing countries with different cultures to improve the external validity of the research findings. Finally, the enterprises in this study were from various industries and had varying sizes, which were treated as control variables. The complex relationship of performance and strategic partnerships should be evaluated for particular industries and enterprise sizes.

Author Contributions: Conceptualization, Y.Y. and Y.Z.; methodology, Y.Y.; software, Y.Y.; validation, Y.Y. and Y.Z.; formal analysis, Y.Y.; investigation, Y.Y.; resources, Y.T.; data curation, Y.Y.; writing—original draft preparation, Y.Y.; writing—review and editing, Y.Y., G.X. and Y.Z.; visualization, Y.Y.; supervision, Y.Z. and Y.T.; project administration, Y.T.; funding acquisition, Y.Y. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the Humanities and Social Science Youth Fund Project of the Ministry of Education: “The dynamic impact mechanism of multiple network embeddings on enterprise performance of rural entrepreneurial enterprises”, grant number 20YJCZH209 and China Postdoctoral Science Foundation: “The dynamic impact mechanism of dual network embedding on the performance of returnee start-ups”, grant number 2019M662435.

Data Availability Statement: If interested scholars have data requirements, please contact the first author by email (616090@sdu.edu.cn).

Acknowledgments: The authors thank the editor and anonymous reviewers for their numerous constructive comments and encouragement that have improved our paper greatly.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. Questionnaire

Questionnaire on Supply Chain Management Practices of Chinese Enterprises

Dear Ms./Mr.

The purpose of this survey is to investigate the supply chain management of Chinese enterprises in the context of the digital economy, so as to provide useful guidance for their sustainable development. Please fill out the Questionnaire according to your company’s actual situation, we will keep your answers confidential and guarantee that all data will be used for academic research only and not for any commercial use. Thank you very much for your cooperation and support!

Please read the following instructions carefully before you fill out the form.

1. This questionnaire consists of two parts: the first is a your company’s basic information, and the second is a survey on your company’s supply chain management practices, covering strategic partnership, information sharing, supply chain flexibility and corporate performance.

2. The respondent must be a supervisor or above, and have worked in the company for more than 2 years.

3. This questionnaire is anonymous, without standard answers, so please don’t worry and just fill it out according to the actual situation of your company.

4. If you have any questions or comments about this survey, please contact: Yang Yanling, Shandong Normal University, School of Business, Tel: 18678650837; Email: yangyl70345@163.com.

Appendix A.1. Part 1: Basic Information of Your Company

1. The full name of your company is:
2. Your position in the company is ()
 - A. General Manager or Vice President
 - B. Director level
 - C. Manager level
 - D. Supervisor level
 - E. Other (please specify _____)
3. until 2020 years, your company has established (for joint venture is the time of doing business in China is ()
 - A. Within 3 years
 - B. 3 To 5 years
 - C. 5 to 10 years
 - D. More than 10 years

4. The nature of your company's business is ()
A. State-owned B. Private-owned C. Shareholding D. Foreign invested E. Other (please specify _____)
5. The type of industry your company belongs to is ()
A. Manufacturing (machinery, automobiles, instruments, etc.) B. Services (logistics, finance, restaurants, tourism, consulting, advertising, etc.) C. Emerging industries (biotechnology, pharmaceuticals, new energy, optoelectronics, etc.) D. Social welfare E. Other (please specify _____)
6. The current number of employees in your company is ()
A. 100 people or less B. 100–499 people C. 500–999 people D. 1000–4999 people E. 5000 people or more
7. The total value of your company's fixed assets is () (RMB)
A. 1–4.99 million B. 5–9.99 million C. 10–49.99 million D. 50–100 million E. more than 100 million
8. Your company's turnover is () (RMB)
A. 1–4.99 million B. 5–9.99 million C. 10–49.99 million D. 50–100 million E. more than 100 million
9. The management culture of your company is ()
A. Mainland China B. Hong Kong, Macao and Taiwan C. Europe and America D. Japan E. Others (please specify _____)

Appendix A.2. Part 2: Supply Chain Management Practices of Your Company

Table A1. The following questions are about Strategic Partnership. Please select the answer that best fits your situation.

Strategic Partnership	Strongly Disagree → Strongly Agree
We consider quality as our number one criterion in selecting partners.	1 2 3 4 5 6 7
We regularly solve problems jointly with our partners.	1 2 3 4 5 6 7
We have helped our partners to improve their product/service quality.	1 2 3 4 5 6 7
We actively involve our partners in new product/service development processes.	1 2 3 4 5 6 7
We include our partners' long-term development in our goal-setting activities.	1 2 3 4 5 6 7
We regularly evaluate our partners' satisfaction.	1 2 3 4 5 6 7

Table A2. The following questions are about information sharing. Please select the answer that best fits your situation.

Information Sharing	Strongly Disagree → Strongly Agree
We do not inform trading partners in advance of changing needs (reverse coded item).	1 2 3 4 5 6 7
We share proprietary information with trading partners.	1 2 3 4 5 6 7
Our trading partners are informed about issues that affect business.	1 2 3 4 5 6 7
We share business knowledge of core business with our trading partners.	1 2 3 4 5 6 7
We exchange information with our trading partners for business planning.	1 2 3 4 5 6 7
We keep our trading partners informed about changes that may affect their other partners.	1 2 3 4 5 6 7

Table A3. The following questions are about supply chain flexibility. Please select the answer that best fits your situation.

Supply Chain Flexibility	Strongly Disagree →Strongly Agree
Reduction of manufacturing lead-time	1 2 3 4 5 6 7
Reduction of product/service development cycle time	1 2 3 4 5 6 7
Increase of frequency of new product/service introductions	1 2 3 4 5 6 7
Increase of level of customization of product/service	1 2 3 4 5 6 7
Rapid adjustment of product/service delivery capacity/capability	1 2 3 4 5 6 7
Improvement of the level of customer service	1 2 3 4 5 6 7
Improvement of delivery reliability	1 2 3 4 5 6 7
Improvement of responsiveness to changing market needs	1 2 3 4 5 6 7

Table A4. The following questions are about enterprise Performance. Please select the answer that best fits your situation.

Enterprise Performance	Strongly Disagree →Strongly Agree
The company's return on investment has increased in the recent three years.	1 2 3 4 5 6 7
The company's profits from sales have increased in recent three years.	1 2 3 4 5 6 7
The company's product/service delivery cycle time has decreased in recent three years.	1 2 3 4 5 6 7
The company's response to market demand change has improved in recent three years.	1 2 3 4 5 6 7
The company's rapid confirmation of customer orders has improved in recent three years.	1 2 3 4 5 6 7
The company's customer satisfaction has increased in recent three years.	1 2 3 4 5 6 7

Thank you again for your support! Once again, we promise to keep confidential all the data you provide, please rest assured!

References

1. Kumar, P.; Zaheer, A. Ego-network stability and innovation in alliances. *Acad. Manag. J.* **2019**, *62*, 691–716. [\[CrossRef\]](#)
2. Xiao, C.; Petkova, B.; Molleman, E.; van der Vaart, T. Technology uncertainty in supply chains and supplier involvement: The role of resource dependence. *Supply Chain Manag.* **2019**, *24*, 697–709. [\[CrossRef\]](#)
3. Ghouri, A.M.; Akhtar, P.; Shahbaz, M.; Shabbir, H. Affective organizational commitment in global strategic partnerships: The role of individual-level microfoundations and social change. *Technol. Forecast. Soc. Chang.* **2019**, *146*, 320–330. [\[CrossRef\]](#)
4. Bai, C.; Sarkis, J.; Yin, F.; Dou, Y. Sustainable supply chain flexibility and its relationship to circular economy-target performance. *Int. J. Prod. Res.* **2020**, *58*, 5893–5910. [\[CrossRef\]](#)
5. Chardine-Baumann, E.; Botta-Genoulaz, V. A framework for sustainable performance assessment of supply chain management practices. *Comput. Ind. Eng.* **2014**, *76*, 138–147. [\[CrossRef\]](#)
6. Saci, F.; Jasimuddin, S.M. Does strategic partnership matter to create value of a firm? An empirical study based on SBF 250 French firms. *Res. Int. Bus. Financ.* **2018**, *46*, 65–76. [\[CrossRef\]](#)
7. Haaskjold, H.; Andersen, B.; Lædre, O.; Aarseth, W. Factors affecting transaction costs and collaboration in projects. *Int. J. Manag. Proj. Bus.* **2020**, *13*, 197–230. [\[CrossRef\]](#)
8. Perdana, Y.R.; Ciptono, W.S.; Setiawan, K. Broad span of supply chain integration: Theory development. *Int. J. Retail. Distrib. Manag.* **2019**, *47*, 186–201. [\[CrossRef\]](#)
9. Kalaitzi, D.; Matopoulos, A.; Bourlakis, M.; Tate, W. Supply chains under resource pressure: Strategies for improving resource efficiency and competitive advantage. *Int. J. Oper. Prod. Manag.* **2019**, *39*, 1323–1354. [\[CrossRef\]](#)

10. Dekkers, R.; de Boer, R.; Gelsomino, L.M.; de Goeij, C.; Steeman, M.; Zhou, Q.; Sinclair, S.; Souter, V. Evaluating theoretical conceptualisations for supply chain and finance integration: A Scottish focus group. *Int. J. Prod. Econ.* **2020**, *220*, 107451. [[CrossRef](#)]
11. Ketokivi, M.; Mahoney, J.T. Transaction cost economics as a theory of supply chain efficiency. *Prod. Oper. Manag.* **2020**, *29*, 1011–1031. [[CrossRef](#)]
12. Li, C.; Fang, Y. The more we get together, the more we can save? A transaction cost perspective. *Int. J. Inf. Manag.* **2022**, *62*, 102434. [[CrossRef](#)]
13. Yeung, K.; Lee, P.K.C.; Yeung, A.C.L.; Cheng, T.C.E. Supplier partnership and cost performance: The moderating roles of specific investments and environmental uncertainty. *Int. J. Prod. Econ.* **2013**, *144*, 546–559. [[CrossRef](#)]
14. Chu, Z.; Wang, Q.; Lai, F.; Collins, B.J. Managing interdependence: Using Guanxi to cope with supply chain dependency. *J. Bus. Res.* **2019**, *103*, 620–631. [[CrossRef](#)]
15. Radziwon, A.; Bogers, M. Open innovation in SMEs: Exploring inter-organizational relationships in an ecosystem. *Technol. Forecast. Soc. Chang.* **2019**, *146*, 573–587. [[CrossRef](#)]
16. Rhee, L.; Leonardi, P.M. Which pathway to good ideas? An attention-based view of innovation in social networks. *Manag. J.* **2018**, *39*, 1188–1215. [[CrossRef](#)]
17. Leenders, R.T.A.J.; Dolfsma, W.A. Social networks for innovation and new product development. *J. Prod. Innov. Manag.* **2016**, *33*, 123–131. [[CrossRef](#)]
18. Valbuena-Hernandez, J.P.; Ortiz-De-Mandojana, N. Encouraging corporate sustainability through effective strategic partnerships. *Corp. Soc. Responsib. Environ. Manag.* **2022**, *29*, 124–134. [[CrossRef](#)]
19. Bag, S.; Rahman, M.S. The role of capabilities in shaping sustainable supply chain flexibility and enhancing circular economy-target performance: An empirical study. *Supply Chain Manag.* **2021**; ahead-of-print.
20. Jagtap, M.; Kamble, S. An empirical assessment of relational contracting model for supply chain of construction projects. *Int. J. Manag. Proj. Bus.* **2020**, *13*, 1537–1560. [[CrossRef](#)]
21. Obayi, R.; Ebrahimi, S.N. A neo-institutional view of the transaction cost drivers of construction supply chain risk management. *Supply Chain Manag.* **2021**, *26*, 592–609. [[CrossRef](#)]
22. Wei, Z.; Ulziisukh, S.; Bao, Y.; Zuo, P.; Wang, Y. Outsourcers' control mechanisms, vendors' contract schemas, and project performance in cross-border IT outsourcing: A vendor's perspective. *Ind. Mark. Manag.* **2021**, *92*, 202–214. [[CrossRef](#)]
23. Liu, Y. The micro-foundations of global business incubation: Stakeholder engagement and strategic entrepreneurial partnerships. *Technol. Forecast. Soc. Chang.* **2020**, *161*, 120294. [[CrossRef](#)] [[PubMed](#)]
24. Burin, A.R.G.; Perez-Arostegui, M.N.; Llorens-Montes, J. Ambidexterity and IT competence can improve supply chain flexibility: A resource orchestration approach. *J. Purch. Supply Manag.* **2020**, *26*, 100610. [[CrossRef](#)]
25. Montoya-Torres, J.R.; Ortiz-Vargas, D.A. Collaboration and information sharing in dyadic supply chains: A literature review over the period 2000–2012. *Estud. Gerenc.* **2014**, *30*, 343–354. [[CrossRef](#)]
26. Eksoz, C.; Mansouri, S.A.; Bourlakis, M.; Önköl, D. Judgmental adjustments through supply integration for strategic partnerships in food chains. *Omega* **2019**, *87*, 20–33. [[CrossRef](#)]
27. Shin, N.; Yoo, J.; Kwon, I.G. Fostering Trust and Commitment in Complex Project Networks through Dedicated Investment in Partnership Management. *Sustainability* **2020**, *12*, 10397. [[CrossRef](#)]
28. Wei, J.; Zhao, J.; Hou, X. Bilateral information sharing in two supply chains with complementary products. *Appl. Math. Model.* **2019**, *72*, 28–49. [[CrossRef](#)]
29. Han, J.H.; Wang, Y.; Naim, M. Reconceptualization of information technology flexibility for supply chain management: An empirical study. *Int. J. Prod. Econ.* **2017**, *187*, 196–215. [[CrossRef](#)]
30. Wang, Z.; Zhang, M. Linking product modularity to supply chain integration and flexibility. *Prod. Plan. Control.* **2020**, *31*, 1149–1163. [[CrossRef](#)]
31. Yang, L.; Huo, B.; Gu, M. The impact of information sharing on supply chain adaptability and operational performance. *Int. J. Logist. Manag.* **2021**; ahead-of-print.
32. Bicen, P.; Hunt, S.D.; Madhavaram, S. Coopetitive innovation alliance performance: Alliance competence, alliance's market orientation, and relational governance. *J. Bus. Res.* **2021**, *123*, 23–31. [[CrossRef](#)]
33. Alsaad, A.; Mohamad, R.; Ismail, N.A. The contingent role of dependency in predicting the intention to adopt B2B e-commerce. *Inf. Technol. Dev.* **2019**, *25*, 686–714. [[CrossRef](#)]
34. Lee, S.M.; Choi, D. Supply Chain Governance Mechanisms, Green Supply Chain Management, and Organizational Performance. *Sustainability* **2021**, *13*, 13146. [[CrossRef](#)]
35. Ding, M.J.; Jie, F. The moderating effect of Guanxi on supply chain competencies of logistics firms in China. *Int. J. Logist.* **2021**, *24*, 407–425. [[CrossRef](#)]
36. MacDonald, A.; Clarke, A.; Huang, L.; Seitanidi, M.M. Partner Strategic Capabilities for Capturing Value from Sustainability-Focused Multi-Stakeholder Partnerships. *Sustainability* **2019**, *11*, 557. [[CrossRef](#)]
37. Wang, Q.; Oshri, I.; Zhao, X. Value cocreation in new service development: A process-based view of resource dependency. *Eur. J. Mark.* **2022**, *56*, 184–208. [[CrossRef](#)]
38. Ashman, D. Civil society collaboration with business bringing empowerment back in. *World Dev.* **2001**, *29*, 1097–1113. [[CrossRef](#)]

39. Li, S.; Ragu-Nathan, B.; Ragu-Nathan, T.S.; Rao, S.S. The impact of supply chain management practices on competitive advantage and organizational performance. *Omega* **2006**, *34*, 107–124. [[CrossRef](#)]
40. Fontana, E. Corporate social responsibility as stakeholder engagement: Firm-NGO collaboration in Sweden. *Corporate Social Responsib. Environ. Manag.* **2018**, *25*, 327–338. [[CrossRef](#)]
41. Sukati, I.; Hamid, A.B.; Baharun, R.; Yusoff, R.M. The Study of Supply Chain Management Strategy and Practices on Supply Chain Performance. *Procedia—Soc. Behav. Sci.* **2012**, *40*, 225–233. [[CrossRef](#)]
42. Agus, A. The significant effect of information sharing and strategic supplier partnership on supplier performance. *Int. J. Bus. Manag. Sci.* **2011**, *4*, 75–92.
43. Caiazza, R.; Stanton, J. The effect of strategic partnership on innovation: An empirical analysis. *Trends Food Sci. Technol.* **2016**, *54*, 208–212. [[CrossRef](#)]
44. Fynes, B.; Voss, C.; de Búrca, S. The impact of supply chain relationship quality on quality performance. *Int. J. Prod. Econ.* **2005**, *96*, 339–354. [[CrossRef](#)]
45. Kollmann, T.; Stöckmann, C.; Niemand, T.; Hensellek, S.; de Cruppe, K. A configurational approach to entrepreneurial orientation and cooperation explaining product/service innovation in digital vs. non-digital startups. *J. Bus. Res.* **2021**, *125*, 508–519. [[CrossRef](#)]
46. Zheng, S.; Luo, M. Competition or cooperation? Ports' strategies and welfare analysis facing shipping alliances. *Transp. Res. Part E Logist. Transp. Rev.* **2021**, *153*, 102429. [[CrossRef](#)]
47. Vanichchinchai, A. The linkages among supplier relationship, customer relationship and supply performance. *J. Bus. Ind. Mark.* **2021**, *36*, 1520–1533. [[CrossRef](#)]
48. Yang, M.; Liao, C.; Liu, S. Applying internet-based information systems to facilitate business alliance activities. *Ind. Manag. Data Syst.* **2007**, *107*, 125–140. [[CrossRef](#)]
49. Cao, M.; Zhang, Q. Supply chain collaboration: Impact on collaborative advantage and firm performance. *J. Oper. Manag.* **2011**, *29*, 163–180. [[CrossRef](#)]
50. Beuren, I.M.; Santos, V.; dos Bernd, D.C.; Pazetto, C.F. Reflections of Information Sharing and Collaborative Innovation in the Social Responsibility of Cooperatives. *Rev. Bras. De Gestão De Negócios* **2020**, *22*, 310–330.
51. Reklitis, P.; Sakas, D.P.; Trivellas, P.; Tsoulfas, G.T. Performance Implications of Aligning Supply Chain Practices with Competitive Advantage: Empirical Evidence from the Agri-Food Sector. *Sustainability* **2021**, *13*, 8734. [[CrossRef](#)]
52. Delic, M.; Eyers, D.R. The effect of additive manufacturing adoption on supply chain flexibility and performance: An empirical analysis from the automotive industry. *Int. J. Prod. Econ.* **2020**, *228*, 107689. [[CrossRef](#)]
53. Wong, A. Partnering through cooperative goals in supply chain relationships. *Total Qual. Manag.* **1999**, *10*, 786–792. [[CrossRef](#)]
54. Benton, W.; Maloni, M. The Influence of Power Driven Buyer-Seller Relationships on Supply Chain Satisfaction. *J. Oper. Manag.* **2005**, *23*, 1–22. [[CrossRef](#)]
55. Youn, S.; Yang, M.G.; Hong, P.; Park, K. Strategic supply chain partnership, environmental supply chain management practices, and performance outcomes: An empirical study of Korean firms. *J. Clean. Prod.* **2013**, *56*, 121–130. [[CrossRef](#)]
56. Prajogo, D.; Olhager, J. Supply chain integration and performance: The effects of long-term relationships, information technology and sharing, and logistics integration. *Int. J. Prod. Econ.* **2012**, *135*, 514–522. [[CrossRef](#)]
57. Ogunranti, G.A.; Ceryan, O.; Banerjee, A. Buyer-supplier currency exchange rate flexibility contracts in global supply chains. *Eur. J. Oper. Res.* **2021**, *288*, 420–435. [[CrossRef](#)]
58. Cho, M.; Bonn, M.A.; Giunipero, L.; Jaggi, J.S. Supplier selection and partnerships: Effects upon restaurant operational and strategic benefits and performance. *Int. J. Hosp. Manag.* **2021**, *94*, 102781. [[CrossRef](#)]
59. Argyres, N.; Bercovitz, J.; Zanarone, G. The role of relationship scope in sustaining relational contracts in interfirm networks. *Strateg. Manag. J.* **2020**, *41*, 222–245. [[CrossRef](#)]
60. Ramanathan, U.; Gunasekaran, A. Supply chain collaboration: Impact of success in long-term partnerships. *Int. J. Prod. Econ.* **2014**, *147*, 252–259. [[CrossRef](#)]
61. Wu, I.; Chuang, C.; Hsu, C. Information sharing and collaborative behaviors in enabling supply chain performance: A social exchange perspective. *Int. J. Prod. Econ.* **2014**, *148*, 122–132. [[CrossRef](#)]
62. Pham, H.C.; Nguyen, T.-T.; McDonald, S.; Tran-Kieu, N.Q. Information Sharing in Logistics Firms: An Exploratory Study of the Vietnamese Logistics Sector. *Asian J. Shipp. Logist.* **2019**, *35*, 87–95. [[CrossRef](#)]
63. Lee, H.L.; Whang, S. Information sharing in a supply chain. *Int. J. Manuf. Technol. Manag.* **2000**, *1*, 79–93. [[CrossRef](#)]
64. Pérez-López, R.J.; Olguín Tiznado, J.E.; Mojarro Magaña, M.; Camargo Wilson, C.; López Barreras, J.A.; García-Alcaraz, J.L. Information Sharing with ICT in Production Systems and Operational Performance. *Sustainability* **2019**, *11*, 3640. [[CrossRef](#)]
65. Wang, Y.; Ali, Z. Exploring big data use to predict supply chain effectiveness in Chinese organizations: A moderated mediated model link. *Asia Pac. Bus. Rev.* **2021**, *1–22*. [[CrossRef](#)]
66. Ye, F.; Wang, Z. Effects of information technology alignment and information sharing on supply chain operational performance. *Comput. Ind. Eng.* **2013**, *65*, 370–377. [[CrossRef](#)]
67. Lee, J.Y.H.; Saunders, C.; Panteli, N.; Wang, T. Managing information sharing: Interorganizational communication in collaborations with competitors. *Inf. Organ.* **2021**, *31*, 100354. [[CrossRef](#)]
68. Abdullah, Z.; Musa, R. The Effect of Trust and Information Sharing on Relationship Commitment in Supply Chain Management. *Procedia—Soc. Behav. Sci.* **2014**, *130*, 266–272. [[CrossRef](#)]

69. Matsui, K. Buyer's strategic demand information sharing with an upstream echelon for entry promotion. *Int. J. Prod. Econ.* **2021**, *242*, 108286. [[CrossRef](#)]
70. Can Saglam, Y.; Sezen, B.; Çankaya, S.Y. The inhibitors of risk information sharing in the supply chain: A multiple case study in Turkey. *J. Contingencies Crisis Manag.* **2019**, *28*, 19–29. [[CrossRef](#)]
71. Wang, D.; Li, H.; Lu, Y. Factors affecting transaction costs in megaprojects: A qualitative comparative analysis. *Int. J. Manag. Proj. Bus.* **2021**, *14*, 1245–1269. [[CrossRef](#)]
72. Rashid, Z.; Noor, U.; Altmann, J. Economic model for evaluating the value creation through information sharing within the cybersecurity information sharing ecosystem. *Future Gener. Comput. Syst.* **2021**, *124*, 436–466. [[CrossRef](#)]
73. Koçoğlu, İ.; İmamoğlu, S.Z.; İnce, H.; Keskin, H. The effect of supply chain integration on information sharing: Enhancing the supply chain performance. *Procedia Soc. Behav. Sci.* **2011**, *24*, 1630–1649. [[CrossRef](#)]
74. Zhang, X.; Fang, W.; Pi, Z. Interaction among Information Sharing, Supply Chain Structure and Performance. *J. Coast. Res.* **2019**, *93*, 870–878. [[CrossRef](#)]
75. Demirbag, M.; Apaydin, M.; Sahadev, S. Micro-foundational dimensions of firm internationalisation as determinants of knowledge management strategy: A case for global strategic partnerships. *Technol. Forecast. Soc. Chang.* **2021**, *165*, 120538. [[CrossRef](#)]
76. Luo, S.; Wang, J.; Xiao, Y.; Tong, D.Y.K. Two-path model of information sharing in new product development activities. *Inf. Dev.* **2020**, *36*, 312–326. [[CrossRef](#)]
77. Liu, Y.; Zhang, Y.; Batista, L.; Rong, K. Green operations: What's the role of supply chain flexibility? *Int. J. Prod. Econ.* **2019**, *214*, 30–43. [[CrossRef](#)]
78. Rojo-Gallego-Burin, A.; Llorens-Montes, F.J.; Perez-Arostegui, M.N.; Stevenson, M. Ambidextrous supply chain strategy and supply chain flexibility: The contingent effect of ISO 9001. *Ind. Manag. Data Syst.* **2020**, *120*, 1691–1714. [[CrossRef](#)]
79. Chandra, C.; Grabis, J. Role of flexibility in supply chain design and modeling—Introduction to the special issue. *Omega* **2009**, *37*, 743–745. [[CrossRef](#)]
80. Chan, A.T.L.; Ngai, E.W.T.; Moon, K.K.L. The effects of strategic and manufacturing flexibilities and supply chain agility on firm performance in the fashion industry. *Eur. J. Oper. Res.* **2017**, *259*, 486–499. [[CrossRef](#)]
81. Ramos, E.; Patrucco, A.S.; Chavez, M. Dynamic capabilities in the “new normal”: A study of organizational flexibility, integration and agility in the Peruvian coffee supply chain. *Supply Chain Manag.* **2021**; ahead-of-print.
82. Shekarian, M.; Nooraie, S.V.R.; Parast, M.M. An examination of the impact of flexibility and agility on mitigating supply chain disruptions. *Int. J. Prod. Econ.* **2020**, *220*, 107438. [[CrossRef](#)]
83. Zhou, Q.; Wang, S. Study on the Relations of Supply Chain Digitization, Flexibility and Sustainable Development—A Moderated Multiple Mediation Model. *Sustainability* **2021**, *13*, 10043. [[CrossRef](#)]
84. Mishra, R.; Mishra, O.N. Prioritising dimensions of entrepreneurial orientation for supply chain flexibility development in an uncertain environment. *J. Manuf. Technol. Manag.* **2019**, *30*, 483–505. [[CrossRef](#)]
85. Li, J.; Luo, X.; Wang, Q.; Zhou, W. Supply chain coordination through capacity reservation contract and quantity flexibility contract. *Omega* **2021**, *99*, 102195. [[CrossRef](#)]
86. Siagian, H.; Zeplin, J.H.T.; Jie, F. Supply Chain Integration Enables Resilience, Flexibility, and Innovation to Improve Business Performance in COVID-19 Era. *Sustainability* **2021**, *13*, 4669. [[CrossRef](#)]
87. Maqueira, J.M.; Novais, L.R.; Bruque, S. Total eclipse on business performance and mass personalization: How supply chain flexibility eclipses lean production direct effect. *Supply Chain Manag.* **2021**, *26*, 256–278. [[CrossRef](#)]
88. Sreedevi, R.; Saranga, H. Uncertainty and supply chain risk: The moderating role of supply chain flexibility in risk mitigation. *Int. J. Prod. Econ.* **2017**, *193*, 332–342. [[CrossRef](#)]
89. Merschmann, U.; Thonemann, U.W. Supply chain flexibility, uncertainty and firm performance: An empirical analysis of German manufacturing firms. *Int. J. Prod. Econ.* **2011**, *130*, 43–53. [[CrossRef](#)]
90. Jin, Y.; Vonderembse, M.; Ragu-Nathan, T.S.; Smith, J.T. Exploring relationships among IT-enabled sharing capability, supply chain flexibility, and competitive performance. *Int. J. Prod. Econ.* **2014**, *153*, 24–34. [[CrossRef](#)]
91. Mishra, M.; Banerjee, M. Non-coercive influence: Scale development and validation based on resource and relational paradigms. *J. Purch. Supply Manag.* **2019**, *25*, 100498. [[CrossRef](#)]
92. Li, T.; Zhang, H.T. Information sharing in a supply chain with a make-to-stock manufacturer. *Omega* **2015**, *50*, 115–125. [[CrossRef](#)]
93. Sadovnikova, A.; Pujari, A.; Mikhailitchenko, A. Radical innovation in strategic partnerships: A framework for analysis. *J. Bus. Res.* **2016**, *69*, 1829–1833. [[CrossRef](#)]
94. Huo, B.; Haq, M.Z.U.; Gu, M. The impact of information sharing on supply chain learning and flexibility performance. *Int. J. Prod. Res.* **2021**, *59*, 1411–1434. [[CrossRef](#)]
95. Xiaoping, C.; Shuying, X.; Jingli, F. *Empirical Methods in Organization and Management Research*; Peking University Press: Beijing, China, 2008; pp. 190–195.
96. Brislin, R.W. Translation and content analysis of oral and written material. *Handb. Cross-Cult. Psychol. Methodol.* **1980**, *2*, 389–444.
97. Chuu, S. Interactive group decision-making using a fuzzy linguistic approach for evaluating the flexibility in a supply chain. *Eur. J. Philos. Sci.* **2011**, *213*, 279–289. [[CrossRef](#)]
98. Liu, H.; Ke, W.; Wei, K.K.; Hua, Z. The impact of IT capabilities on firm performance: The mediating roles of absorptive capacity and supply chain agility. *Decis. Support Syst.* **2013**, *54*, 1452–1462. [[CrossRef](#)]

99. Fornell, C.; Larcker, D.F. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *J. Mark. Res.* **1981**, *18*, 39–50. [[CrossRef](#)]
100. Minglong, W. *Structural Equation Model: The Operation and Application of AMOS*; Chongqing University Press: Chongqing, China, 2009; pp. 212–254.
101. Xie, G.; Huang, L.; Apostolidis, C.; Huang, Z.; Cai, W.; Li, G. Assessing Consumer Preference for Overpackaging Solutions in E-Commerce. *Int. J. Environ. Res. Public Health* **2021**, *18*, 7951. [[CrossRef](#)]
102. Hou, B. Crowd-Sourcing a Way to Sustainable Urban Logistics: What Factors Influence Enterprises' Willingness to Implement Crowd Logistics? *IEEE Access* **2020**, *8*, 225064–225075.
103. Xue, X.; Dou, J.; Shang, Y. Blockchain-driven supply chain decentralized operations—Information sharing perspective. *Bus. Process Manag. J.* **2021**, *27*, 184–203. [[CrossRef](#)]
104. Swafford, P.M.; Ghosh, S.; Murthy, N. Achieving supply chain agility through IT integration and flexibility. *Int. J. Prod. Econ.* **2008**, *116*, 288–297. [[CrossRef](#)]
105. Chatzikontidou, A.; Longinidis, P.; Tsiakis, P.; Georgiadis, M.C. Flexible supply chain network design under uncertainty. *Chem. Eng. Res. Des.* **2017**, *128*, 290–305. [[CrossRef](#)]
106. Ordóñez Ponce, E.; Clarke, A. Sustainability cross-sector partnerships: The strategic role of organizational structures. *Corp. Soc. Responsib. Environ. Manag.* **2020**, *27*, 2122–2134. [[CrossRef](#)]
107. Lei, H.; Wang, J.; Shao, L.; Yang, H. Ex post demand information sharing between differentiated suppliers and a common retailer. *Int. J. Prod. Res.* **2020**, *58*, 703–728. [[CrossRef](#)]
108. Zhou, Z.; Zhu, X. The effects of information transparency on suppliers, manufacturers, and consumers in online markets. *Mark. Sci.* **2010**, *29*, 1125–1137. [[CrossRef](#)]
109. Xu, H.; Liu, X.; Huang, H.; Zhou, Y.; Wei, Y. Innovation information sharing between two competitive supply chains. *Int. Trans. Oper. Res.* **2022**, *29*, 471–495. [[CrossRef](#)]
110. Chen, Y.; Chen, W. Incentive contracts of knowledge investment for cooperative innovation in project-based supply chain with double moral hazard. *Soft Comput.* **2019**, *24*, 2693–2702. [[CrossRef](#)]
111. Kaur, S.; Gupta, S.; Singh, S.K.; Perano, M. Organizational ambidexterity through global strategic partnerships: A cognitive computing perspective. *Technol. Forecast. Soc. Chang.* **2019**, *145*, 43–54. [[CrossRef](#)]
112. Hsu, T.; Tang, J. Applying fuzzy LinPreRa cognitive map to evaluate strategic alliance partnerships for outlying island duty-free shop. *Asia Pac. J. Mark. Logist.* **2019**, *31*, 730–758. [[CrossRef](#)]