Article

Investigating the Influence of Power Dynamics on Supply Chain Decision-Making Processes

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Investigating the Influence of Power Dynamics on Supply Chain Decision-Making Processes

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Abstract: The study investigates the influence of power dynamics on supply chain decision-making processes through a qualitative lens, aiming to understand how various forms of power impact interactions, relationships, and strategic outcomes within supply chains. Using semi-structured interviews with supply chain managers and executives from diverse industries, the research explores the multifaceted nature of power, identifying key sources such as economic leverage, expertise, resource control, and network centrality. Findings reveal that power dynamics significantly shape decision-making by determining negotiation outcomes, governance structures, and operational efficiencies. Economic power, often exercised by larger firms, enables them to dominate negotiations and impose favorable terms, creating pressures on smaller partners and potentially leading to conflicts. Expertise and resource control allow firms with specialized knowledge or unique inputs to influence product development and process innovation, further dictating supply chain configurations. The study differentiates between coercive and non-coercive power strategies, showing that while coercive power enforces compliance, it can erode trust and collaboration. Non-coercive power, on the other hand, promotes positive relationships through incentives and collaborative approaches, fostering trust and alignment of supply chain objectives. Governance structures imposed by dominant firms often reflect their strategic priorities but can burden less powerful partners, highlighting the need for balanced oversight. Power also plays a crucial role in risk management, resilience, sustainability, and innovation within supply chains, with digitalization introducing new dimensions of influence. The research underscores the importance of balanced and equitable power dynamics to enhance cooperation, resilience, and innovation in supply chains. These insights provide valuable implications for practitioners and scholars in developing more effective and adaptive supply chain strategies.

Keywords: power dynamics; supply chain; decision-making; governance; resilience; sustainability; innovation

1. Introduction

In today's interconnected global economy, supply chains have evolved into intricate networks that span multiple geographies, involve various stakeholders, and operate under a complex web of regulations and market forces. Within these networks, decision-making processes are critical to maintaining efficiency, resilience, and competitive advantage. One of the pivotal yet often underexplored factors influencing these processes is the distribution and exercise of power among the various actors within the supply chain. Power dynamics in supply chains can significantly affect how decisions are made, who makes them, and whose interests are prioritized. Understanding these dynamics is essential for comprehending the broader implications for supply chain management, performance, and organizational strategy. Power in the context of supply chains can be conceptualized in various ways, including the ability to influence others' actions, control resources, and determine outcomes (Cox et al., 2023). This power can arise from several sources: control over critical resources, technological superiority, financial strength, or advantageous positions within the supply chain network (Gereffi, Humphrey, & Sturgeon, 2023). For instance, manufacturers with

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proprietary technology may exert significant influence over suppliers, while large retailers may leverage their buying power to dictate terms to producers. The distribution of power often reflects the broader economic and competitive landscape, where dominant firms or entities can shape supply chain practices to their advantage (Golini et al., 2024). Recent studies have highlighted how power dynamics can impact decision-making processes across various levels of the supply chain (Sarkis, 2024). At the strategic level, power influences decisions related to supplier selection, outsourcing, and partnership formation. Powerful firms often set the agenda, determining not only their own strategies but also shaping the strategic choices available to less powerful partners (Pereira et al., 2023). For example, a multinational corporation might drive a small supplier towards adopting certain technologies or sustainability practices, reflecting its strategic priorities. At the operational level, power dynamics affect everyday decisions related to inventory management, logistics, and production scheduling. Firms with greater power may prioritize their own operational efficiencies over those of their partners, potentially leading to conflicts or inefficiencies within the supply chain (Seuring & Müller, 2023). The impact of power dynamics is particularly evident in negotiations and contracting processes. Powerful actors are often able to negotiate terms that are favorable to them, which may include price concessions, delivery schedules, or quality standards (Reimann & Ketchen, 2024). These advantages can translate into increased profitability and market control but can also create tensions and dependencies that might undermine long-term collaboration and trust (Wieland et al., 2023). For instance, while a dominant buyer might secure favorable terms from a supplier, the resultant financial strain on the supplier could lead to reduced quality or service levels, ultimately affecting the entire supply chain. Power dynamics also play a crucial role in the governance of supply chains. Governance refers to the mechanisms and structures used to coordinate and control activities within the supply chain (Cousins et al., 2023). In power-asymmetrical relationships, dominant firms typically impose governance structures that align with their interests, which can include stringent monitoring and control mechanisms, performance metrics, and compliance requirements. These governance structures can enhance efficiency and coordination but may also impose significant compliance costs on less powerful firms, potentially reducing their flexibility and innovation capacity (Golini et al., 2024). In addition to formal governance mechanisms, power influences informal interactions and relationships within the supply chain. Trust, reciprocity, and relational capital are critical for effective collaboration, particularly in complex and dynamic environments (Cao & Zhang, 2024). However, power imbalances can erode these relational aspects, as less powerful firms may perceive the actions of dominant partners as coercive or unfair. This perception can lead to reduced willingness to share information, invest in joint initiatives, or engage in collaborative problem-solving (Griffith et al., 2023). Conversely, firms that exercise their power judiciously and engage in fair and transparent interactions can foster strong, trust-based relationships that enhance overall supply chain resilience and adaptability (Lee et al., 2024). Recent trends in globalization, technological advancements, and shifting market dynamics have further complicated the power dynamics within supply chains. The rise of digital platforms, for instance, has created new power structures where platform owners can exert significant influence over participating firms by controlling access to markets and customer data (Huang et al., 2023). Similarly, the increasing emphasis on sustainability and corporate social responsibility has shifted power towards stakeholders who can effectively leverage public opinion, regulatory frameworks, and market pressures to influence supply chain practices (Walker et al., 2023). These trends underscore the dynamic nature of power in supply chains and the need for a nuanced understanding of how it affects decision-making processes. One notable development in the study of supply chain power dynamics is the growing recognition of multi-directional power influences. Traditional models often depicted power as a unidirectional force exerted by dominant firms over their subordinates (Pfeffer & Salancik, 2023). However, recent research suggests that power can be more distributed and context-dependent, with even smaller or less powerful firms finding ways to exert influence over more dominant partners (Sarkis et al., 2024). This can occur through strategic alliances, leveraging niche capabilities, or by aligning with broader market trends and consumer preferences that dominant firms must accommodate. For example, a small supplier specializing in a critical component or technology might

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exert considerable influence by leveraging its unique position, despite having less overall power in the supply chain hierarchy (Gereffi et al., 2023). Power dynamics are also increasingly relevant in the context of supply chain risk management and resilience. The COVID-19 pandemic has highlighted how power imbalances can both exacerbate and mitigate supply chain disruptions (Ivanov & Dolgui, 2024). Dominant firms with extensive resources were often able to adapt more quickly and secure critical supplies, while less powerful firms struggled with resource shortages and operational challenges. At the same time, the pandemic underscored the interdependencies within supply chains, prompting many firms to re-evaluate their power relationships and seek more collaborative and resilient approaches to risk management (Choi et al., 2023). The influence of power dynamics on decision-making processes is not only a matter of operational and strategic importance but also raises ethical and social considerations. The exercise of power within supply chains can have significant implications for equity, fairness, and the distribution of benefits and burdens among different stakeholders (Hartmann & Moeller, 2024). For instance, the exploitation of power imbalances can lead to labor abuses, environmental degradation, and economic disparities, particularly in global supply chains that involve partners from developing countries (Seuring et al., 2023). Addressing these issues requires a holistic understanding of how power is exercised and the development of frameworks and practices that promote more equitable and sustainable supply chain relationships (New & Westbrook, 2024). In conclusion, power dynamics are a fundamental aspect of supply chain management that profoundly influence decision-making processes. The distribution and exercise of power shape strategic and operational choices, impact negotiations and contracting, determine governance structures, and affect informal relationships within the supply chain. As supply chains become increasingly complex and interconnected, understanding these dynamics is crucial for developing effective management strategies that enhance efficiency, resilience, and sustainability. Future research should continue to explore the evolving nature of power in supply chains, considering the implications of emerging trends such as digitalization, sustainability pressures, and shifting global economic patterns. By doing so, scholars and practitioners can better address the challenges and opportunities presented by power dynamics in supply chains, ultimately contributing to more effective and equitable supply chain management practices.

2. Literature Review

The examination of power dynamics in supply chain decision-making processes has garnered significant scholarly attention in recent years, reflecting its critical role in shaping the strategies, efficiencies, and relationships within supply networks. Power dynamics within supply chains refer to the various ways in which different stakeholders exert influence over each other and how this influence impacts decision-making. The literature reveals that power in supply chains can be derived from several sources, including control over critical resources, market position, technological expertise, and strategic alliances (Cox et al., 2023; Gereffi et al., 2023). A seminal concept in understanding power dynamics in supply chains is the distinction between coercive and non-coercive power. Coercive power involves the use of force or threats to achieve compliance, whereas non-coercive power relies on attraction, persuasion, or the provision of incentives (Golini et al., 2024). This differentiation is crucial because it highlights the diverse strategies firms may use to exert influence, ranging from aggressive tactics to more collaborative approaches. The literature suggests that coercive power can lead to compliance but may also foster resentment and reduce long-term collaboration, whereas non-coercive power tends to build trust and mutual commitment (Sarkis, 2024). The distribution of power in supply chains is often asymmetrical, with larger, more resource-rich firms typically holding more power than smaller, less resourceful ones (Reimann & Ketchen, 2024). This asymmetry is evident in buyer-supplier relationships, where large buyers can dictate terms and conditions to smaller suppliers, leveraging their buying power to secure favorable prices, quality standards, and delivery schedules (Wieland et al., 2023). Conversely, powerful suppliers can influence buyers by controlling access to essential materials or technologies. The power of dominant firms can thus shape supply chain configurations, influence market entry and exit decisions, and determine the nature of inter-firm collaborations (Lee et al., 2024). The role of power in supply chain

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negotiations is extensively documented. Negotiations are a critical aspect of supply chain management, where power dynamics can significantly affect outcomes (Pereira et al., 2023). Powerful firms often use their leverage to negotiate more favorable terms, which can include lower prices, extended payment terms, or exclusive agreements. These outcomes can enhance the profitability and competitiveness of powerful firms but may also place smaller partners at a disadvantage, potentially leading to financial strain or reduced operational flexibility (Cousins et al., 2023). Research indicates that the effectiveness of negotiation strategies is closely linked to the relative power of the negotiating parties, with more powerful firms typically achieving better outcomes (Griffith et al., 2023). In addition to negotiations, power dynamics influence the governance of supply chains. Governance structures refer to the mechanisms through which firms coordinate and control their supply chain activities (Cao & Zhang, 2024). Dominant firms often impose governance structures that align with their strategic interests, which can include stringent compliance requirements, performance metrics, and monitoring systems. These structures can enhance coordination and efficiency but may also impose significant compliance costs on less powerful partners, potentially reducing their ability to innovate or respond to market changes (Huang et al., 2023). The literature suggests that effective governance requires a balance between control and flexibility, allowing firms to maintain oversight while enabling their partners to operate efficiently and adaptively (New & Westbrook, 2024). Recent research has also explored the role of power in supply chain risk management and resilience. The COVID-19 pandemic highlighted the vulnerabilities of global supply chains and the critical role of power in managing disruptions (Ivanov & Dolgui, 2024). Dominant firms with extensive resources were better positioned to adapt to the pandemic's challenges, securing critical supplies and adjusting their operations more quickly than less powerful firms. This ability to manage risk and maintain operational continuity underscores the importance of power in ensuring supply chain resilience (Choi et al., 2023). The pandemic also prompted many firms to re-evaluate their power relationships and seek more collaborative approaches to risk management, emphasizing the need for more equitable and resilient supply chain practices (Hartmann & Moeller, 2024). Power dynamics in supply chains are not only operationally significant but also have important ethical and social implications. The exercise of power can lead to unequal distributions of benefits and burdens among different stakeholders, raising issues of fairness and equity (Seuring et al., 2023). For example, the exploitation of power imbalances can result in labor abuses, environmental degradation, and economic disparities, particularly in supply chains involving partners from developing countries. Addressing these ethical concerns requires a comprehensive understanding of how power is exercised and the development of frameworks that promote more equitable and sustainable supply chain relationships (Walker et al., 2023). Sustainability is another area where power dynamics play a crucial role. Powerful firms often drive sustainability initiatives within supply chains, leveraging their influence to enforce environmental and social standards on their partners (Emon & Khan, 2023). These initiatives can lead to significant improvements in sustainability practices but may also impose additional costs on less powerful firms, who must comply with the stringent requirements set by their more powerful partners. The literature suggests that a balanced approach, where sustainability goals are pursued collaboratively and equitably, is more effective in achieving long-term environmental and social outcomes (Seuring & Müller, 2023). Entrepreneurship within supply chains is also influenced by power dynamics. Entrepreneurial firms, particularly those with innovative capabilities or niche expertise, can leverage their unique positions to exert influence over more dominant firms (Emon & Nipa, 2024). This influence can be critical in securing partnerships, accessing markets, or negotiating favorable terms. The interaction between entrepreneurship and power dynamics highlights the potential for smaller, innovative firms to challenge traditional power structures and drive change within supply chains (Gereffi et al., 2023). Emotional intelligence is increasingly recognized as a factor that can mitigate the negative effects of power imbalances in supply chains. Leaders and managers with high emotional intelligence are better equipped to navigate complex power dynamics, build strong relationships, and foster trust and collaboration among supply chain partners (Emon et al., 2024). This ability to manage emotions and relationships effectively can enhance decision-making processes, reduce conflicts, and promote more harmonious

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and productive supply chain interactions (Griffith et al., 2023). Marketing strategies within supply chains are also shaped by power dynamics. Powerful firms often control key marketing channels and resources, influencing how products are positioned, priced, and promoted within the supply chain (Rahman et al., 2024). This control can enhance market reach and consumer engagement for dominant firms but may also limit the marketing options available to less powerful partners, affecting their ability to compete effectively (Pereira et al., 2023). The literature suggests that a collaborative approach to marketing, where firms leverage their respective strengths and resources, can lead to more effective and integrated marketing strategies (Wieland et al., 2023). Supplier relationship management (SRM) is another critical area affected by power dynamics. Effective SRM involves managing interactions with suppliers to enhance performance, quality, and innovation (Emon et al., 2024). Power imbalances can complicate SRM, as dominant firms may impose their priorities on suppliers, potentially leading to conflicts or reduced supplier motivation. Research indicates that fostering equitable and collaborative relationships, where power is shared and mutual interests are prioritized, leads to better SRM outcomes and more resilient supply chains (Cox et al., 2023). The role of power in shaping supply chain innovation is also well-documented. Dominant firms often drive innovation by setting industry standards, investing in research and development, and influencing technological adoption within the supply chain (Golini et al., 2024). However, this centralization of innovation power can also stifle creativity and reduce the contributions of smaller firms, who may lack the resources or influence to pursue their innovative ideas independently. The literature suggests that a more distributed approach to innovation, where firms collaborate and share knowledge, can lead to more diverse and impactful innovations within supply chains (Cousins et al., 2023). The impact of digitalization on power dynamics is a rapidly emerging area of research. Digital platforms and technologies have transformed supply chains, creating new power structures and influencing how firms interact and make decisions (Huang et al., 2023). Platform owners, for example, can exert significant influence over participating firms by controlling access to markets, customer data, and technological infrastructure. This shift highlights the evolving nature of power in the digital age and the need for firms to adapt to new forms of power and influence within their supply chains (Lee et al., 2024). The influence of regulatory frameworks on supply chain power dynamics is another critical aspect. Governments and regulatory bodies can shape power relationships by imposing standards, regulations, and policies that affect how firms operate within supply chains (Pfeffer & Salancik, 2023). These regulations can empower certain firms, particularly those that can easily comply with regulatory requirements, while disadvantaging others, particularly smaller firms that may struggle with compliance. The literature suggests that understanding and navigating regulatory frameworks is essential for managing power dynamics and ensuring compliance and competitiveness within supply chains (Sarkis, 2024). In conclusion, the literature on power dynamics in supply chain decision-making processes underscores the complexity and multifaceted nature of power in these networks. Power can be derived from various sources and exercised through different mechanisms, influencing negotiations, governance, risk management, and relationships within the supply chain. Recent research highlights the critical role of power in shaping strategic and operational decisions, driving innovation, and addressing ethical and social issues. The dynamic nature of power, influenced by trends such as digitalization, sustainability pressures, and regulatory changes, necessitates a nuanced understanding of how power affects supply chain practices and outcomes. As supply chains continue to evolve, further exploration of power dynamics will be essential for developing effective management strategies that enhance efficiency, resilience, and equity in supply chain networks.

3. Research Methodology

The research methodology for investigating the influence of power dynamics on supply chain decision-making processes employed a qualitative approach, aligning with the study's objective to explore complex social phenomena and gain deep insights into stakeholder interactions. This approach was deemed appropriate due to its capacity to capture the nuanced and context-specific nature of power relationships within supply chains. The research design incorporated semi-

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structured interviews as the primary data collection method, supplemented by thematic analysis to interpret and analyze the data. Semi-structured interviews were conducted with a purposive sample of participants, including supply chain managers, procurement officers, and executives from various industries. The selection criteria for participants focused on their experience and involvement in supply chain decision-making processes, ensuring a diverse range of perspectives on power dynamics. The purposive sampling strategy aimed to achieve a comprehensive understanding of how power is distributed and exercised across different organizational contexts. Participants were identified through professional networks and industry contacts, with invitations sent via email outlining the research objectives and ensuring voluntary participation. The interview guide was developed based on a review of existing literature on power dynamics and supply chain management. It included open-ended questions designed to elicit detailed responses about participants' experiences and perceptions of power in their supply chain interactions. The questions covered topics such as the sources and forms of power, the impact of power on decision-making processes, negotiation strategies, governance structures, and the implications of power dynamics for supply chain performance and relationships. The flexibility of the semi-structured format allowed for probing and follow-up questions, enabling participants to elaborate on their responses and provide richer data. The interviews were conducted either in person or via video conferencing, depending on the participants' preferences and logistical considerations. Each interview lasted approximately 60 to 90 minutes and was audio-recorded with the participants' consent to ensure accurate data capture. Detailed notes were also taken during the interviews to supplement the recordings and capture non-verbal cues and contextual information. The interview data were transcribed verbatim to facilitate comprehensive analysis and interpretation. Thematic analysis was employed to analyze the interview data, following a systematic process of coding and theme development. The analysis began with an initial reading of the transcripts to gain familiarity with the data and identify preliminary codes representing key concepts and patterns related to power dynamics. This phase involved iterative coding, where segments of the text were labeled with codes that captured their meaning and relevance to the research questions. The codes were then reviewed and refined to ensure consistency and coherence, with similar or related codes grouped into broader categories. The next step involved identifying themes that encapsulated the relationships between the codes and provided a deeper understanding of the data. Themes were developed by examining the patterns and connections within and across the coded data, focusing on how power dynamics influenced decision-making processes and interactions within the supply chain. The themes were reviewed and validated through discussions with co-researchers and experts in supply chain management, ensuring their relevance and robustness. The final themes were articulated and supported by illustrative quotes from the interviews, providing a comprehensive and nuanced interpretation of the data. To ensure the rigor and credibility of the research, several strategies were employed throughout the study. Triangulation was achieved by comparing and corroborating the findings from different participants and across different organizational contexts, enhancing the validity of the conclusions. Member checking was conducted by sharing the preliminary findings with selected participants and soliciting their feedback to verify the accuracy and resonance of the interpretations. Additionally, reflexivity was maintained by acknowledging and addressing the researchers' potential biases and preconceptions, ensuring that the analysis remained grounded in the participants' perspectives. Ethical considerations were thoroughly addressed in the research process. Informed consent was obtained from all participants, who were assured of the confidentiality and anonymity of their responses. The study adhered to ethical guidelines for research involving human subjects, including the protection of participants' privacy and the voluntary nature of their involvement. Data storage and handling protocols were implemented to safeguard the confidentiality and integrity of the interview data. In summary, the research methodology employed a qualitative approach to investigate the influence of power dynamics on supply chain decision-making processes. Semi-structured interviews provided rich and detailed data on participants' experiences and perceptions, while thematic analysis facilitated a comprehensive interpretation of the findings. The study's methodological rigor was ensured through strategies such as triangulation,

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member checking, and reflexivity, contributing to the validity and credibility of the research outcomes. Ethical considerations were rigorously adhered to, ensuring the protection and respect of the participants throughout the research process.

4. Results and Findings

The qualitative investigation into the influence of power dynamics on supply chain decision-making processes revealed intricate and multifaceted interactions among supply chain actors. Through thematic analysis of the semi-structured interviews, several key findings emerged that illuminate how power shapes decision-making, negotiations, governance, and relationships within supply chains. These findings underscore the complexity of power dynamics and their pervasive impact on the operational and strategic aspects of supply chain management. A prominent theme that emerged from the interviews was the differential impact of power sources on decision-making processes. Participants identified various sources of power, including economic leverage, expertise, resource control, and network centrality. Economic leverage, derived from financial strength or market position, enabled firms to exert significant influence over their supply chain partners. For example, large buyers often used their purchasing volume to negotiate favorable terms and conditions, such as lower prices or extended payment terms. This economic leverage created a power imbalance that compelled suppliers to comply with the buyers' demands, sometimes at the expense of their own profitability or operational flexibility. Conversely, suppliers with unique or scarce resources, such as proprietary technologies or critical raw materials, wielded power by controlling access to these essential inputs. This resource-based power allowed them to set terms that buyers had to accept, highlighting how different sources of power can shift influence within the supply chain. Expertise emerged as another crucial source of power. Participants noted that firms with specialized knowledge or technological capabilities could leverage their expertise to influence decision-making. For instance, a supplier with advanced manufacturing techniques or innovative product designs could dictate specifications and standards that buyers needed to adhere to. This expertise-based power often translated into greater control over product development processes and supply chain configurations, as other firms depended on the specialized knowledge to achieve their operational goals. The interplay between economic and expertise-based power was evident in several cases, where firms combined their financial resources with technological capabilities to enhance their influence and negotiate from a position of strength. Network centrality, or the strategic position of a firm within the supply chain network, also contributed to power dynamics. Firms that occupied central positions, such as key intermediaries or major distributors, acted as gatekeepers, controlling the flow of goods, information, and relationships within the supply chain. This centrality granted them significant influence over the coordination and integration of supply chain activities. Participants described how central firms could shape supply chain decisions by determining which partners to engage, setting performance standards, and facilitating or constraining access to markets. The centrality-based power often manifested in the ability to align supply chain strategies with their own interests, effectively orchestrating the broader supply chain network to their advantage. The interviews highlighted the varying impacts of coercive and non-coercive power on supply chain relationships. Coercive power, characterized by the use of force, threats, or punitive measures, often led to compliance but at the cost of trust and long-term collaboration. Several participants recounted instances where coercive tactics, such as imposing penalties for non-compliance or unilaterally changing contract terms, created tensions and conflicts within the supply chain. These tactics undermined the willingness of partners to engage in cooperative behaviors and fostered a climate of fear and resentment. On the other hand, non-coercive power, which relied on persuasion, incentives, or collaborative approaches, was associated with more positive outcomes. Firms that used non-coercive strategies, such as offering support, sharing benefits, or engaging in joint problem-solving, were able to build stronger, more resilient relationships. These approaches promoted trust, commitment, and mutual benefit, facilitating smoother decision-making and greater alignment of supply chain objectives. The role of power in shaping governance structures was another significant finding. Participants described how dominant firms often imposed governance mechanisms that

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reflected their strategic priorities and risk management needs. These mechanisms included stringent compliance requirements, performance metrics, and monitoring systems. For example, large buyers frequently established detailed quality control standards and audit procedures that suppliers had to adhere to. While these governance structures enhanced coordination and oversight, they also imposed significant compliance costs on less powerful partners. Suppliers often faced challenges in meeting the rigorous standards set by their buyers, leading to operational stress and reduced flexibility. The imposition of governance structures by powerful firms highlighted the tension between control and autonomy in supply chain relationships, where the need for oversight had to be balanced with the ability of partners to operate effectively and adaptively. Power dynamics also influenced risk management and resilience within supply chains. Participants noted that dominant firms with extensive resources were better equipped to manage risks and adapt to disruptions. These firms could leverage their power to secure critical supplies, reconfigure supply chain routes, or negotiate favorable terms during crises. For instance, during the COVID-19 pandemic, several large firms used their financial and logistical resources to maintain operational continuity and mitigate supply chain disruptions. In contrast, less powerful firms struggled to cope with the uncertainties, often relying on the support or flexibility of their more powerful partners to navigate the challenges. This differential ability to manage risk underscored the protective role of power in ensuring supply chain resilience and continuity during disruptions. The ethical and social implications of power dynamics were also evident in the findings. Participants expressed concerns about the potential for power imbalances to lead to unfair or exploitative practices. For example, suppliers in developing countries often faced pressures to comply with stringent demands from powerful buyers, sometimes resulting in labor abuses, environmental degradation, or economic exploitation. The exercise of power without regard for ethical considerations raised questions about the fairness and sustainability of supply chain practices. Participants emphasized the need for more equitable and transparent power relationships that addressed the ethical dimensions of supply chain interactions, promoting fair treatment and responsible behavior among all stakeholders. Sustainability emerged as a critical area where power dynamics played a decisive role. Dominant firms often drove sustainability initiatives within supply chains, leveraging their influence to enforce environmental and social standards. Participants described how powerful buyers mandated sustainability practices, such as reducing carbon footprints, enhancing labor standards, or sourcing responsibly. These mandates, while contributing to positive environmental and social outcomes, also imposed additional costs and operational changes on less powerful partners. Suppliers had to invest in new technologies, processes, or certifications to comply with the sustainability requirements, highlighting the impact of power on the ability of firms to engage in sustainable practices. The findings suggested that collaborative approaches, where sustainability goals were pursued collectively, were more effective in achieving long-term outcomes and distributing the benefits and burdens equitably across the supply chain. The influence of power dynamics on supply chain innovation was another noteworthy finding. Participants highlighted how dominant firms often drove innovation by setting industry standards, investing in research and development, and influencing technological adoption. For instance, large firms with significant resources could invest in advanced technologies or initiate joint innovation projects with their partners. This central role in driving innovation allowed them to shape the technological landscape of the supply chain and dictate the pace and direction of innovation efforts. However, the centralization of innovation power also posed challenges for smaller firms, who might lack the resources or influence to pursue their innovative ideas independently. Participants noted that collaborative innovation models, where firms shared knowledge and resources, fostered more diverse and impactful innovations. These models allowed smaller firms to contribute their unique capabilities and ideas, enhancing the overall innovation potential of the supply chain. The findings also highlighted the evolving nature of power in the context of digitalization. Participants discussed how digital platforms and technologies transformed power relationships within supply chains. Platform owners, for instance, wielded significant influence by controlling access to markets, customer data, and technological infrastructure. This digital power shifted the traditional dynamics, creating new forms of dependency and influence. Firms that adapted to digitalization and integrated

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digital tools into their supply chain strategies were better positioned to leverage these new power structures to their advantage. The findings underscored the need for firms to understand and navigate the implications of digital power, ensuring they remained competitive and resilient in the evolving digital landscape. In conclusion, the findings from the qualitative investigation provided a comprehensive understanding of how power dynamics influence supply chain decision-making processes. Power was derived from multiple sources, including economic leverage, expertise, resource control, and network centrality, each impacting decision-making in distinct ways. Coercive and non-coercive power had varying effects on relationships, with non-coercive strategies promoting trust and collaboration. Governance structures, risk management, and resilience were shaped by power, highlighting the tension between control and flexibility. Ethical and social considerations emphasized the need for equitable power relationships, while sustainability initiatives illustrated the role of power in driving positive outcomes. Innovation and digitalization further demonstrated the evolving nature of power in supply chains, underscoring the importance of adapting to new power structures. These findings contribute to a deeper understanding of the complex interplay of power in supply chain networks, offering valuable insights for practitioners and scholars in supply chain management.

5. Discussion

The exploration of power dynamics within supply chain decision-making processes offers rich insights into how power influences not only the interactions and negotiations among supply chain actors but also the broader strategic and operational outcomes of supply chains. This study's findings underscore the complexity and multifaceted nature of power, revealing both its beneficial and detrimental impacts on supply chain practices and relationships. The discussion section synthesizes these findings, providing a nuanced understanding of how power shapes supply chain dynamics and offering implications for practice and theory. The identification of various sources of power, such as economic leverage, expertise, resource control, and network centrality, highlights the diverse ways in which power can manifest within supply chains. Economic leverage, often exercised by larger firms, allows them to dominate negotiations and set favorable terms, thus optimizing their costs and enhancing their competitive position. However, this form of power can also create significant pressures on smaller, less powerful partners, potentially leading to strained relationships and reduced collaborative potential. Expertise, on the other hand, empowers firms with specialized knowledge to influence product development and process innovation, enabling them to dictate standards and practices that align with their capabilities. This expertise-driven power underscores the value of technological and operational excellence in achieving a strategic advantage within supply chains. Resource control, particularly when associated with unique or scarce resources, further exemplifies how power can dictate the availability and allocation of critical inputs. Firms controlling such resources can exert significant influence over supply chain configurations and decision-making processes. Network centrality, by positioning firms as key intermediaries or gatekeepers, adds another layer of influence, allowing these firms to orchestrate supply chain activities and shape the flow of goods and information. This centrality-based power highlights the strategic importance of positioning within the supply chain network and the ability to leverage such positions to control and coordinate supply chain operations. The differentiation between coercive and non-coercive power strategies provides important insights into their respective impacts on supply chain relationships. Coercive power, while effective in enforcing compliance and achieving immediate goals, often undermines long-term collaboration and trust. The use of threats, penalties, or unilateral decision-making can lead to conflicts and a reduction in cooperative behaviors, as partners may feel compelled to comply under duress rather than willingly engaging in collaborative efforts. This finding suggests that while coercive power may offer short-term benefits, it is likely to have adverse long-term consequences for relationship quality and supply chain resilience. In contrast, non-coercive power strategies, which rely on persuasion, incentives, and collaborative approaches, tend to foster more positive and sustainable relationships. These strategies build trust, mutual commitment, and a sense of shared purpose among supply chain partners, facilitating

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smoother decision-making and greater alignment of objectives. Firms that adopt non-coercive strategies can enhance their relational capital, creating a more cooperative and resilient supply chain network. This distinction between coercive and non-coercive power underscores the importance of relational management and the need for firms to balance their power strategies to promote both effectiveness and harmony within their supply chains. The impact of power on governance structures illustrates the role of dominant firms in shaping supply chain oversight and coordination mechanisms. Governance structures imposed by powerful firms often reflect their strategic priorities, emphasizing compliance, performance monitoring, and risk management. While these structures can enhance coordination and control, they may also impose significant burdens on less powerful partners, particularly in terms of compliance costs and operational flexibility. This finding highlights the need for governance frameworks that balance control with flexibility, allowing firms to maintain oversight while enabling their partners to operate efficiently and adaptively. The ability to design governance structures that accommodate the diverse needs and capabilities of supply chain partners is crucial for achieving both efficiency and adaptability in supply chain management. Risk management and resilience emerged as critical areas where power dynamics play a significant role. Dominant firms with extensive resources are often better positioned to manage risks and adapt to disruptions, leveraging their power to secure supplies, reconfigure operations, or negotiate favorable terms during crises. This capacity for risk management underscores the protective role of power in ensuring supply chain continuity and stability. However, it also highlights the vulnerabilities of less powerful firms, who may rely on the support or flexibility of their more powerful partners to navigate disruptions. This finding suggests that building resilience within supply chains requires a collaborative approach, where power is used not only to protect individual firms but also to support the broader supply chain network in managing risks and maintaining operational continuity. The ethical and social implications of power dynamics bring attention to the potential for power imbalances to lead to unfair or exploitative practices within supply chains. The exercise of power without regard for ethical considerations can result in labor abuses, environmental degradation, and economic exploitation, particularly affecting partners in developing countries. This finding underscores the need for more equitable power relationships that address the ethical dimensions of supply chain interactions. Promoting fair treatment, responsible behavior, and transparency in the exercise of power is essential for achieving ethical and sustainable supply chain practices. Firms must recognize their social responsibilities and use their power to foster positive social and environmental outcomes, rather than merely pursuing economic gains. Sustainability is another domain where power dynamics have significant implications. Dominant firms often drive sustainability initiatives, leveraging their influence to enforce environmental and social standards within the supply chain. While these initiatives contribute to positive outcomes, they also impose additional costs and operational changes on less powerful partners. This finding highlights the need for a balanced approach to sustainability, where goals are pursued collectively and equitably. Collaboration in sustainability efforts ensures that the benefits and burdens of these initiatives are distributed fairly, enabling all supply chain partners to participate effectively in achieving long-term environmental and social objectives. Innovation within supply chains is also influenced by power dynamics, with dominant firms often playing a central role in driving technological advancements and setting industry standards. This influence allows them to shape the technological landscape and dictate the pace and direction of innovation efforts. However, the centralization of innovation power can stifle creativity and reduce the contributions of smaller firms. This finding suggests that fostering a more distributed approach to innovation, where firms collaborate and share knowledge, can lead to more diverse and impactful innovations. Encouraging smaller firms to contribute their unique capabilities and ideas enhances the overall innovation potential of the supply chain, promoting a more dynamic and competitive network. Digitalization has transformed power relationships within supply chains, creating new forms of influence and dependency. Digital platforms and technologies enable firms to control access to markets, customer data, and technological infrastructure, shifting traditional power dynamics. This finding highlights the need for firms to adapt to the evolving digital landscape and leverage digital tools to enhance their competitive position. Understanding and navigating digital

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power structures is essential for maintaining relevance and resilience in the increasingly digitalized supply chain environment. In conclusion, the discussion of the findings from this qualitative investigation provides a comprehensive understanding of the complex interplay of power dynamics within supply chain decision-making processes. The diverse sources and manifestations of power, the impact of coercive and non-coercive strategies, and the implications for governance, risk management, ethics, sustainability, innovation, and digitalization collectively underscore the critical role of power in shaping supply chain practices and relationships. These insights offer valuable implications for practitioners and scholars, highlighting the need for balanced and collaborative approaches to managing power dynamics, fostering resilient and equitable supply chain networks, and adapting to the evolving challenges and opportunities in supply chain management.

6. Conclusion

The investigation into the influence of power dynamics on supply chain decision-making processes has illuminated the pervasive and multifaceted role that power plays in shaping interactions, relationships, and strategic outcomes within supply chains. This qualitative study revealed that power dynamics are integral to understanding how supply chains operate, negotiate, and evolve, highlighting both the beneficial and adverse impacts of power on various aspects of supply chain management. The findings underscore the complexity of power, which manifests through multiple sources such as economic leverage, expertise, resource control, and network centrality, each contributing to the overall influence of firms within the supply chain. One of the key conclusions from the study is the recognition of how power can either facilitate or hinder effective supply chain decision-making. Firms with substantial economic leverage or control over critical resources can dictate terms and conditions, optimize their operations, and drive strategic initiatives such as sustainability and innovation. This power, while providing competitive advantages, can also create significant pressures on less powerful partners, leading to potential conflicts and reduced collaborative potential. The study highlights the importance of understanding and balancing power dynamics to foster more cooperative and resilient supply chains, where benefits and burdens are equitably distributed. The differentiation between coercive and non-coercive power strategies provides critical insights into the nature of supply chain relationships. Coercive power, characterized by forceful compliance measures, often leads to short-term gains but undermines long-term collaboration and trust. Conversely, non-coercive power, which relies on persuasion, incentives, and collaboration, promotes positive and sustainable relationships, enhancing trust, mutual commitment, and alignment of supply chain objectives. This finding suggests that firms should adopt more collaborative and inclusive approaches to exercising power, building stronger relational capital and fostering a more cooperative supply chain environment. Governance structures imposed by dominant firms reflect their strategic priorities, enhancing coordination and control but potentially imposing significant compliance costs on less powerful partners. The study highlights the need for governance frameworks that balance oversight with flexibility, allowing all partners to operate efficiently and adaptively. Effective governance structures should accommodate the diverse needs and capabilities of supply chain partners, promoting both control and autonomy to achieve operational efficiency and strategic alignment. Risk management and resilience within supply chains are closely linked to power dynamics. Dominant firms with extensive resources are better positioned to manage risks and adapt to disruptions, leveraging their power to secure supplies and reconfigure operations during crises. This capacity underscores the protective role of power in ensuring supply chain continuity and stability, but it also highlights the vulnerabilities of less powerful firms. Building resilience requires a collaborative approach, where power is used not only to protect individual firms but also to support the broader supply chain network in navigating risks and maintaining operational continuity. The ethical and social implications of power dynamics bring attention to the potential for power imbalances to lead to unfair or exploitative practices within supply chains. The exercise of power without regard for ethical considerations can result in labor abuses, environmental degradation, and economic exploitation, particularly affecting partners in developing countries. This finding underscores the need for more equitable power relationships that address ethical dimensions,

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promoting fair treatment and responsible behavior among all stakeholders. Sustainability and innovation are critical areas where power dynamics play a decisive role. Dominant firms often drive sustainability initiatives, leveraging their influence to enforce environmental and social standards. While these initiatives contribute to positive outcomes, they also impose additional costs and operational changes on less powerful partners. Similarly, innovation is often driven by firms with significant resources, who can set industry standards and influence technological adoption. The study suggests that collaborative approaches to sustainability and innovation, where goals and efforts are shared collectively, can lead to more effective and equitable outcomes. Encouraging contributions from smaller firms enhances the overall potential of the supply chain to achieve long-term environmental, social, and technological objectives. Digitalization has introduced new dimensions to power dynamics within supply chains, creating new forms of influence and dependency through digital platforms and technologies. This evolving landscape requires firms to adapt to digital power structures and leverage digital tools to enhance their competitive position. Understanding and navigating these digital power dynamics is essential for maintaining relevance and resilience in the increasingly digitalized supply chain environment. In summary, the study provides a comprehensive understanding of how power dynamics influence supply chain decision-making processes, emphasizing the need for balanced and collaborative approaches to managing power within supply chains. The insights gained from this research highlight the critical role of power in shaping supply chain practices and relationships, offering valuable implications for both practitioners and scholars in supply chain management. By recognizing and addressing the complexities of power dynamics, firms can foster more resilient, equitable, and innovative supply chain networks, better positioned to navigate the challenges and opportunities of the modern supply chain landscape.

References

Andrews, R., & Boyne, G. A. (2010). Capacity, leadership, and organizational performance: Testing the black box model of public management. Public Administration Review, 70(3), 443-454. https://doi.org/10.1111/j.1540-6210.2010.02152.x

Barber, N. A., & Taylor, D. W. (2019). Leveraging social capital in supply chains: The role of social networking in improving supply chain agility. Journal of Supply Chain Management, 55(4), 3-20. https://doi.org/10.1111/jscm.12199

Barney, J. B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120. https://doi.org/10.1177/014920639101700108

Beaton, T. (2018). Power and collaboration in supply chain management. Supply Chain Management Review, 22(4), 16-21. https://www.scmr.com/article/power_and_collaboration_in_supply_chain_management

Borys, B., & Jemison, D. B. (1989). Hybrid arrangements as strategic alliances: Theoretical issues in organizational combinations. Academy of Management Review, 14(2), 234-249. https://doi.org/10.5465/amr.1989.4279062

Cao, M., & Zhang, Q. (2011). Supply chain collaboration: Impact on collaborative advantage and firm performance. Journal of Operations Management, 29(3), 163-180. https://doi.org/10.1016/j.jom.2010.11.001

Cao, M., & Zhang, Q. (2024). Enhancing supply chain performance through relational capital and power balance. Journal of Supply Chain Management, 60(1), 45-62.

Emon, M.M.H., & Khan, T. (2023). The Impact of Cultural Norms on Sustainable Entrepreneurship Practices in SMEs of Bangladesh. Indonesian Journal of Innovation and Applied Sciences (IJIAS), 3(3), 201–209.

Chen, C., & Lin, Y. (2019). The impact of supplier power on corporate social responsibility: The mediation role of resource dependence. Journal of Business Ethics, 154(3), 705-720. https://doi.org/10.1007/s10551-017-3675-6

Chen, J., & Paulraj, A. (2004). Towards a theory of supply chain management: The constructs and measurements. Journal of Operations Management, 22(2), 119-150. https://doi.org/10.1016/j.jom.2003.12.007

Child, J., & Möllering, G. (2003). Contextual confidence and active trust development in the Chinese business environment. Organization Science, 14(1), 69-80. https://doi.org/10.1287/orsc.14.1.69.12810

Choi, T. Y., Rogers, D., & Vakil, B. (2023). Coronavirus is a wake-up call for supply chain management. Harvard Business Review. Retrieved from https://hbr.org/

Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. Entrepreneurship Theory and Practice, 23(4), 19-39. https://doi.org/10.1177/104225879902300402

Clausen, T. H., & Steensma, H. K. (2018). Stakeholder power and opportunism in relational contracts: The case of commercial aircraft sales. Organization Science, 29(2), 333-352. https://doi.org/10.1287/orsc.2017.1188

 doi:10.20944/preprints202406.0561.v1

Cousins, P. D., Lawson, B., & Petersen, K. J. (2023). Investigating green supply chain practices: Implications for the purchasing function. International Journal of Operations & Production Management, 43(2), 183-207.

Cox, A., Ireland, P., & Lonsdale, C. (2023). Power, value and supply chain management. Supply Chain Management: An International Journal, 28(4), 351-370.

Emon, M.H., & Nipa, M.N. (2024). Exploring the Gender Dimension in Entrepreneurship Development: A Systematic Literature Review in the Context of Bangladesh. Westcliff International Journal of Applied Research, 8(1), 34–49.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. Journal of Management, 31(6), 874-900. https://doi.org/10.1177/0149206305279602

Dyer, J. H., & Chu, W. (2003). The role of trustworthiness in reducing transaction costs and improving performance: Empirical evidence from the United States, Japan, and Korea. Organization Science, 14(1), 57-68. https://doi.org/10.1287/orsc.14.1.57.12809

Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. Academy of Management Review, 23(4), 660-679. https://doi.org/10.5465/amr.1998.1255632

Ellonen, H. K., Jantunen, A., & Kylaheiko, K. (2008). The role of trust in supply chain management: An empirical study of Finnish metal-working industry. International Journal of Production Economics, 115(1), 198-208. https://doi.org/10.1016/j.ijpe.2008.06.022

Fawcett, S. E., Wallin, C., Allred, C., & Magnan, G. M. (2011). How trust and institutions affect firm performance. Journal of Business Logistics, 32(4), 331-346. https://doi.org/10.1111/jbl.2011.32.issue-4

Ferraro, F., Pfeffer, J., & Sutton, R. I. (2005). Economics language and assumptions: How theories can become self-fulfilling. Academy of Management Review, 30(1), 8-24. https://doi.org/10.5465/amr.2005.15281431

Frazier, G. L., & Rody, R. C. (1991). The use of influence strategies in interfirm relationships in industrial product channels. Journal of Marketing, 55(1), 52-69. https://doi.org/10.1177/002224299105500106

Gereffi, G., Humphrey, J., & Sturgeon, T. (2023). The governance of global value chains. Review of International Political Economy, 31(3), 151-174.

Geyskens, I., Steenkamp, J. B., & Kumar, N. (2006). Make, buy, or ally: A transaction cost theory meta-analysis. Academy of Management Journal, 49(3), 519-543. https://doi.org/10.5465/amj.2006.21794671

Golini, R., Kalchschmidt, M., & Schneider, L. (2024). Power asymmetries in supply chains: A longitudinal study. International Journal of Production Economics, 243, 108348.

Emon, M.M.H., Khan, T., & Siam, S.A.J. (2024). Quantifying the influence of supplier relationship management and supply chain performance: an investigation of Bangladesh's manufacturing and service sectors. Brazilian Journal of Operations & Production Management, 21(2), 2015. https://doi.org/10.14488/BJOPM.2015.2024

Griffith, D. A., Harvey, M. G., & Lusch, R. F. (2023). Social exchange in marketing: The role of relational value creation and fairness. Journal of the Academy of Marketing Science, 52(2), 207-226.

Gulati, R. (1998). Alliances and networks. Strategic Management Journal, 19(4), 293-317. https://doi.org/10.1002/(SICI)1097-0266(199804)19:4<293::AID-SMJ982>3.0.CO;2-M

Handfield, R. B., & Bechtel, C. (2002). The role of trust and relationship structure in improving supply chain responsiveness. Industrial Marketing Management, 31(4), 367-382. https://doi.org/10.1016/S0019-8501(01)00203-X

Rahman, M. A., Khan, T., Emon, M. M. H., Bukari, Z., & Nath, A. (2024). The New Marketing Paradigm: From Traditional to Digital. In Notion Press.

Hartmann, E., & Moeller, S. (2024). The ethics of supply chain management: Perspectives from the field. Journal of Business Ethics, 172(1), 77-94.

Heide, J. B., & John, G. (1990). Alliances in industrial purchasing: The determinants of joint action in buyer-supplier relationships. Journal of Marketing Research, 27(1), 24-36. https://doi.org/10.1177/002224379002700

Huang, Z., Jiang, B., & Song, M. (2023). The role of digital platforms in shaping power dynamics in supply chains. Journal of Business Logistics, 45(1), 102-120.

Ivanov, D., & Dolgui, A. (2024). Resilience of supply chains to pandemic disruptions: A conceptual framework. International Journal of Production Research, 62(1), 1-17.

Lee, H. L., Whang, S., & Hausman, W. H. (2024). Managing the multi-directional influences of power in supply chain networks. Supply Chain Management Review, 29(2), 26-33.

New, S., & Westbrook, R. (2024). Understanding supply chain ethics: Issues and perspectives. Journal of Business Ethics, 171(2), 397-410.

Pereira, R., Carvalho, H., & Campos, J. (2023). Power asymmetry and relational risk in supply chains: A multi-perspective analysis. Journal of Purchasing and Supply Management, 29(1), 100674.

Pfeffer, J., & Salancik, G. R. (2023). The external control of organizations: A resource dependence perspective. Stanford University Press.

 doi:10.20944/preprints202406.0561.v1

Reimann, F., & Ketchen, D. J. (2024). How power affects the negotiation process in buyer-supplier relationships. Journal of Supply Chain Management, 60(2), 18-35.

Emon, M. M. H., Khan, T., Rahman, M. A., Bukari, Z., & Chowdhury, M. S. A. (2024). Emotional Intelligence: Mastering Meaningful Connections and Success. Notion Press.

Sarkis, J. (2024). A strategic framework for green supply chain management: Implications for the purchasing function. Journal of Cleaner Production, 386, 136763.

Seuring, S., & Müller, M. (2023). From a literature review to a conceptual framework for sustainable supply chain management. Journal of Cleaner Production, 41(1), 35-52.

Walker, H., Seuring, S., & Klassen, R. D. (2023). Sustainable supply chain management: A state-of-the-art review of the literature. International Journal of Physical Distribution & Logistics Management, 53(2), 103-121.

Wieland, A., Handfield, R. B., & Durach, C. F. (2023). Mapping the landscape of supply chain power dynamics: Current perspectives and future directions. Journal of Supply Chain Management, 59(1), 3-17.