Leadership Challenges in the Transition from Hierarchical to Network-Based Management Systems: A Qualitative Study of Managerial Experiences in Tehran

Roya Teymouri[1*]

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Abstract

This study aimed to explore the leadership challenges experienced by managers during the transition from hierarchical management systems to network-based management systems in organizations in Tehran. This qualitative study was conducted using an exploratory phenomenological design. Participants included 24 managers, senior specialists, project leaders, and organizational development professionals working in private and semi-private organizations in Tehran that had recently attempted to move from centralized hierarchical structures toward more collaborative, network-based management arrangements. Participants were selected through purposive sampling, and recruitment continued until theoretical saturation was achieved. Data were collected through semi-structured interviews lasting between 45 and 75 minutes. Interviews focused on participants' lived experiences of structural transition, leadership role changes, decision-making practices, resistance, communication patterns, accountability, and coordination challenges. All interviews were audio-recorded with consent, transcribed verbatim, and analyzed using thematic analysis. NVivo software was used to organize transcripts, code data, compare categories, and develop final themes. Analysis of the interviews resulted in four main categories: role ambiguity and identity disruption among leaders, resistance to decentralization and loss of control, coordination difficulties in distributed decision-making, and trust-building challenges in cross-functional networks. Participants described the transition as a complex process in which formal authority weakened before collaborative norms became strong enough to replace it. Leaders struggled to redefine their roles from command-and-control decision-makers to facilitators of connection, sensemaking, and shared accountability. Resistance was particularly visible among middle managers who perceived network-based systems as a threat to status, authority, and performance visibility. Participants also reported that horizontal collaboration increased flexibility but created uncertainty regarding responsibility, conflict resolution, and decision ownership. The transition from hierarchical to network-based management systems is not merely a structural redesign but a deep leadership transformation. Successful transition requires leaders to develop relational, facilitative, and adaptive capabilities while simultaneously redesigning governance mechanisms, communication routines, and accountability systems. Organizations should avoid assuming that decentralization automatically produces collaboration; instead, they must actively support leaders in managing ambiguity, building trust, and balancing autonomy with coordination.

Keywords: Network-based management, hierarchical organizations, leadership challenges, organizational change, qualitative research, distributed leadership

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1. Department of Environmental Engineering, University of Tehran, Tehran, Iran

*Correspondence: e-mail: roya.teymouri.env@gmail.com

1. Introduction

Organizations across the world are increasingly shifting away from rigid hierarchical management systems toward more flexible, network-based forms of organizing. This transition reflects profound changes in the nature of work, competition, knowledge production, digital collaboration, and organizational adaptation. Traditional hierarchical systems are usually built on vertical authority, formal reporting lines, centralized decision-making, and clearly defined managerial roles. Such systems can provide stability, control, accountability, and efficiency, particularly in predictable environments where tasks are standardized and coordination can be achieved through rules and supervision. However, as organizational environments become more uncertain, knowledge-intensive, and interdependent, hierarchical structures often become insufficient for rapid learning, innovation, and cross-functional problem solving. In contrast, network-based management systems emphasize lateral relationships, distributed expertise, collaborative decision-making, flexible team boundaries, and interdependence among units, individuals, and external stakeholders.

The theoretical foundation of network-based organizing can be traced to Powell's influential argument that network forms are neither markets nor hierarchies but distinct forms of coordination based on reciprocal communication, relational embeddedness, mutual adjustment, and trust (Powell, 1990). In this view, networks are not simply informal additions to formal structures; they represent alternative mechanisms for coordinating economic and organizational action. Podolny and Page (1998) similarly argued that network forms of organization can support learning, legitimacy, access to resources, and employee autonomy. These characteristics are particularly relevant for contemporary organizations that depend on knowledge sharing, innovation, and rapid adaptation. Rather than relying only on command chains, network-based organizations attempt to mobilize distributed intelligence across multiple nodes of expertise.

The movement from hierarchy to network is also connected to the broader rise of collaborative, agile, and knowledge-based organizational forms. Miles and Snow (1986) described new organizational forms that rely on flexibility, lateral coordination, and strategic partnerships rather than only on vertical integration. Later research in organizational networks further demonstrated that informal relations often shape how work is actually completed, even when formal charts suggest a different structure. Cross, Borgatti, and Parker (2002) argued that many strategically important activities occur through invisible networks of collaboration, advice, information exchange, and problem solving. This insight is crucial because organizations may formally declare a transition to network-based management while still failing to understand the informal relational patterns that determine whether collaboration actually occurs.

Leadership becomes a central issue in this transition because network-based management changes the meaning of managerial authority. In hierarchical systems, leadership is often associated with formal position, decision rights, supervision, planning, monitoring, and control. In network-based systems, leadership becomes more relational, distributed, and facilitative. Leaders are expected to connect actors, enable collaboration, support sensemaking, remove barriers, manage tensions, and create conditions for collective action. Pearce and Conger (2003) conceptualized shared leadership as a dynamic and interactive influence process among individuals who lead one another toward collective goals. Denis, Langley, and Sergi (2012) similarly emphasized plural forms of leadership in which influence is distributed across multiple actors rather than concentrated in a single formal leader. These perspectives challenge leader-centric models and suggest that network-based management requires a more collective understanding of leadership.

Complexity leadership theory provides another useful lens for understanding this transition. Uhl-Bien, Marion, and McKelvey (2007) argued that leadership in knowledge-era organizations should not be limited to bureaucratic control but should enable adaptive, creative, and learning processes within complex adaptive systems. Their framework distinguishes between administrative leadership, adaptive leadership, and enabling leadership. This distinction is especially relevant for organizations transitioning from hierarchy to network because leaders must simultaneously maintain enough formal structure to ensure coordination while creating enough relational space for emergent collaboration. The central leadership challenge is therefore not the simple replacement of hierarchy with networks, but the dynamic balancing of control and emergence, authority and autonomy, stability and adaptation.

Despite the theoretical appeal of network-based management, transition processes are often difficult and contested. Hierarchies create predictable identities, responsibilities, career paths, and control systems. When organizations move toward network-based structures, these established arrangements may become unstable. Managers who previously derived authority from formal position may experience uncertainty about their role, legitimacy, and influence. Employees may be encouraged to participate in decision-making but remain unsure whether such participation is truly valued. Middle managers may be asked to empower teams while still being held accountable for performance outcomes through traditional metrics. These contradictions can create tension, resistance, and confusion.

Network governance research shows that networks require deliberate governance arrangements rather than purely spontaneous collaboration. Provan and Kenis (2008) identified different modes of network governance, including participant-governed networks, lead-organization governance, and network administrative organization models. Their work indicates that network effectiveness depends on structural conditions, trust, size, goal consensus, and governance mechanisms. This is highly relevant to leadership transition because organizations frequently promote network-based management without clarifying

how decisions will be made, how conflicts will be resolved, and how accountability will be distributed. When governance remains ambiguous, employees may experience network-based management as disorder rather than empowerment.

Another major challenge concerns the persistence of informal hierarchy. Even when formal structures are flattened, hierarchical assumptions may remain embedded in organizational culture. Diefenbach and Sillince (2011) argued that hierarchy is not only a formal structure but also a social and cultural phenomenon reproduced through status, communication, authority, and everyday practices. Therefore, a transition to network-based management cannot be achieved solely by changing organizational charts, creating cross-functional teams, or introducing digital collaboration platforms. Leaders must also address deeper beliefs about power, expertise, obedience, trust, and control. If these assumptions remain unchanged, network-based systems may become symbolic reforms that coexist with hidden vertical control.

The leadership literature also suggests that network-based management requires new relational capabilities. Graen and Uhl-Bien (1995) emphasized the importance of relationship-based leadership, particularly the quality of leader-member exchanges. In networked systems, relational quality extends beyond dyadic leader-subordinate relationships to include multiple lateral and diagonal relationships across organizational boundaries. Leaders must cultivate trust, psychological safety, shared understanding, and mutual accountability across groups that may not share the same department, professional background, or performance incentives. Raelin (2016) argued for leadership-as-practice, in which leadership emerges through collaborative agency rather than being possessed only by individuals in formal roles. This perspective is useful for analyzing transitions where the main problem is not whether leaders have authority, but whether organizational members can collectively enact leadership in practice.

The transition from hierarchy to network is especially significant in contexts where organizational cultures have historically emphasized centralized authority, formal rank, and managerial control. In such settings, network-based reforms may be perceived as ambiguous, risky, or even threatening. Managers may intellectually support collaboration while emotionally remaining attached to the security of vertical authority. Employees may hesitate to use autonomy because previous experiences have taught them to wait for approval. Cross-functional collaboration may be promoted in official discourse, but departmental boundaries and status hierarchies may continue to shape behavior. Therefore, the success of network-based management depends not only on structural redesign but also on the transformation of leadership mindsets, communication norms, decision routines, and accountability practices.

In Tehran-based organizations, these challenges may be particularly visible because many private and semi-private organizations operate in environments characterized by economic uncertainty, rapid technological change, regulatory pressure, and intense competition for

skilled human resources. Organizations increasingly need flexibility, innovation, and knowledge sharing, yet many continue to rely on centralized decision-making traditions. This creates an important empirical context for studying how leaders experience the transition from hierarchical to network-based management systems. Although international research has examined network governance, distributed leadership, and organizational collaboration, there remains a need for qualitative research that captures the lived experiences of managers who must enact these changes in specific organizational contexts.

A qualitative approach is appropriate because the transition from hierarchy to network involves meanings, perceptions, tensions, and lived experiences that cannot be fully captured through quantitative indicators alone. Semi-structured interviews allow participants to describe how they interpret leadership role changes, how they experience resistance, how they manage ambiguity, and how they make sense of new expectations. Thematic analysis is particularly suitable for identifying patterns across participant narratives while preserving the richness of individual accounts (Braun & Clarke, 2006). By focusing on managers and organizational professionals in Tehran, the present study seeks to contribute contextually grounded insight into the leadership challenges associated with network-based transformation.

The aim of this study was to explore the leadership challenges experienced by managers during the transition from hierarchical to network-based management systems in organizations in Tehran.

2. Methods and Materials

Study Design and Participants

This study used a qualitative exploratory design to investigate leadership challenges during the transition from hierarchical to network-based management systems. A qualitative design was selected because the purpose of the study was to understand participants' lived experiences, interpretations, and meaning-making processes rather than to test predetermined hypotheses. The research focused on organizations in Tehran that had recently implemented, or were in the process of implementing, network-based management practices such as cross-functional teams, project-based coordination, decentralized decision-making, agile management routines, matrix collaboration, knowledge-sharing platforms, or reduced vertical reporting layers.

Participants included 24 individuals working in managerial or professional roles in private and semi-private organizations in Tehran. The sample consisted of senior managers, middle managers, project managers, human resource managers, organizational development specialists, and team leaders who had direct experience with structural or managerial transition. Participants were selected through purposive sampling because the study required information-rich cases with relevant experience. Inclusion criteria were at least five years of organizational work experience, at least two years of managerial or leadership responsibility, direct involvement in a transition from hierarchical to more network-based management

practices, and willingness to participate in an audio-recorded interview. Participants who did not have direct experience with organizational transition or who were unable to provide detailed reflective accounts were excluded.

Data collection continued until theoretical saturation was reached. Saturation was considered achieved when additional interviews no longer generated substantially new categories, meanings, or conceptual insights. In this study, saturation was reached after 21 interviews, and three additional interviews were conducted to confirm the stability and adequacy of the emerging categories. The final sample included 24 participants. Of these, 15 participants were male and 9 were female. Participants ranged in age from 31 to 55 years. Regarding organizational position, 6 participants were senior managers, 8 were middle managers, 5 were project or team leaders, 3 were human resource managers, and 2 were organizational development specialists. In terms of work experience, 5 participants had 5–9 years of experience, 11 had 10–15 years of experience, and 8 had more than 15 years of experience. Participants represented organizations active in information technology, finance, consulting, manufacturing, retail services, and knowledge-based business services.

Data Collection

Data were collected through semi-structured interviews. Semi-structured interviews were chosen because they allowed the researcher to guide the conversation around key research topics while also giving participants sufficient freedom to describe unexpected experiences, interpretations, and examples. The interview guide was developed based on the research aim and relevant literature on organizational networks, distributed leadership, complexity leadership, and organizational change. The main interview questions explored participants' experiences of moving from hierarchical to network-based management, perceived changes in leadership roles, difficulties in decentralized decision-making, resistance from managers or employees, communication and coordination challenges, accountability issues, and strategies used to build trust and collaboration.

Examples of interview questions included: "How did leadership roles change during the transition from a hierarchical to a network-based management system?" "What were the most important challenges managers experienced during this transition?" "How did employees respond to increased autonomy and cross-functional collaboration?" "What problems emerged in decision-making and accountability?" "How did leaders try to create trust in the new system?" and "What leadership capabilities were most important for managing the transition?" Probing questions such as "Can you explain this with an example?" "How did this affect your role?" and "What happened after that?" were used to deepen participant responses.

Interviews were conducted in a private and confidential setting either in person or through secure online meeting platforms, depending on participant availability. Each interview lasted between 45 and 75 minutes. Before each interview, the purpose of the study was explained to the participant, and informed consent was obtained. Participants were assured that their

identities, organizations, and statements would remain confidential. With participant permission, interviews were audio-recorded and then transcribed verbatim. Each participant was assigned a code from P1 to P24 to protect anonymity. Field notes were also written after interviews to capture contextual observations, preliminary analytic impressions, and reflexive comments.

Data Analysis

Data were analyzed using thematic analysis based on the general procedures proposed by Braun and Clarke (2006). Thematic analysis was appropriate because it allowed the researcher to identify, analyze, and report repeated patterns of meaning across the interview data. The analysis followed a systematic and iterative process. First, the researcher read the transcripts several times to become familiar with the data and to gain an overall understanding of participants' experiences. Second, initial codes were generated line by line, focusing on meaningful units related to leadership challenges, role changes, resistance, decision-making, coordination, trust, and accountability. Third, codes with conceptual similarity were grouped into preliminary subcategories. Fourth, subcategories were compared and organized into broader categories. Fifth, the categories were reviewed against the original transcripts to ensure that they accurately represented participant narratives. Finally, the categories were named, defined, and written as findings.

NVivo software was used to support data organization and analysis. Interview transcripts were imported into NVivo, and codes were developed through repeated coding cycles. The software was used to manage the coding structure, retrieve coded segments, compare participants' responses, and refine categories. However, analytic interpretation remained the responsibility of the researcher. Coding was conducted inductively, meaning that categories were derived from participant narratives rather than imposed in advance. At the same time, the interpretation was informed by sensitizing concepts from leadership and organizational network literature.

To enhance trustworthiness, several strategies were used. Credibility was supported through prolonged engagement with the data, repeated reading of transcripts, member checking with selected participants, and comparison of emerging categories with participant statements. Dependability was strengthened by maintaining an audit trail that documented interview procedures, coding decisions, category development, and analytic revisions. Confirmability was supported through reflexive memo writing to identify and manage researcher assumptions. Transferability was enhanced by providing detailed descriptions of the participants, organizational context, data collection process, and findings. These procedures were consistent with established criteria for trustworthiness in qualitative research (Lincoln & Guba, 1985).

3. Findings

The demographic characteristics of the participants showed that the study included a diverse group of managers and organizational professionals with direct experience of

transition from hierarchical to network-based management systems. Among the 24 participants, 15 were male and 9 were female. In terms of age, 6 participants were between 31 and 35 years old, 8 were between 36 and 40 years old, 7 were between 41 and 50 years old, and 3 were older than 50 years. Regarding organizational position, 6 participants were senior managers, 8 were middle managers, 5 were project or team leaders, 3 were human resource managers, and 2 were organizational development specialists. In relation to work experience, 5 participants had 5–9 years of experience, 11 had 10–15 years of experience, and 8 had more than 15 years of experience. Participants were employed in organizations from different sectors, including information technology, finance, consulting, manufacturing, retail services, and knowledge-based business services. This diversity helped generate a broad understanding of leadership challenges across different organizational settings in Tehran.

Role Ambiguity and Leadership Identity Disruption

The first main category was role ambiguity and leadership identity disruption. Participants explained that the transition to network-based management created uncertainty about what it meant to be a leader. In hierarchical systems, leadership had been associated with authority, supervision, approval, and control. However, in the new network-based system, leaders were expected to facilitate collaboration, connect people, guide conversations, and support autonomous teams. Many participants stated that this change was conceptually attractive but practically confusing. Some managers felt that their formal authority was weakened without a clear replacement model for influence. Others believed that employees expected empowerment but still looked to managers for final decisions when uncertainty increased. One participant stated, “Before this change, everyone knew who had the final word. After the new structure, I was told to empower the team, but whenever something went wrong, they still came back to me and asked why I had not controlled it” (P7). Another participant explained, “The hardest part was not the new chart; it was losing the old image of myself as a manager. I had to become more like a coordinator, but nobody had trained us for that identity” (P12). This category showed that leadership transition was experienced not only as a technical change but also as a psychological and professional redefinition of managerial identity.

Resistance to Decentralization and Loss of Control

The second main category was resistance to decentralization and loss of control. Participants reported that resistance came from both managers and employees, although for different reasons. Many middle managers perceived network-based management as a threat to their authority, visibility, and career status. They feared that if teams became more autonomous, their managerial role would become less important. Some managers continued to use old approval routines, requested unnecessary reports, or informally blocked cross-functional decisions. Employees, on the other hand, sometimes resisted because they were uncertain whether autonomy was genuine. Several participants mentioned that employees had become accustomed to asking for permission and were reluctant to take initiative because

they feared blame if decisions failed. One participant said, “Managers said they wanted decentralization, but when people made decisions, the same managers questioned every detail. So employees learned that autonomy was only a slogan” (P3). Another participant noted, “Some middle managers felt invisible in the network model. They used to control information, and suddenly information was moving around them. That created anxiety and resistance” (P18). This category indicated that decentralization requires more than structural permission; it requires changes in power relations, trust, performance evaluation, and tolerance for distributed decision-making.

Coordination Difficulties in Distributed Decision-Making

The third main category was coordination difficulties in distributed decision-making. Participants emphasized that network-based management increased collaboration but also created confusion about decision ownership, responsibility, and conflict resolution. In hierarchical systems, decisions were slower but clearer because formal authority determined who approved what. In network-based systems, multiple actors were involved, and decisions often crossed departmental boundaries. Participants described situations in which teams held many meetings but failed to reach final decisions, or where decisions were made collaboratively but no one accepted responsibility for implementation. One participant stated, “The network structure made communication faster, but decisions sometimes became slower because everyone had an opinion and nobody wanted to be the final owner” (P5). Another participant explained, “We created cross-functional teams, but we did not define who could decide, who should be consulted, and who was accountable. After a few months, people were tired of endless coordination” (P21). Participants also reported that digital communication tools sometimes increased message volume without improving clarity. As one participant said, “We had more channels, more groups, and more conversations, but not necessarily more alignment” (P14). This category showed that network-based management requires explicit coordination mechanisms, shared decision protocols, and clear accountability arrangements.

Trust-Building Challenges in Cross-Functional Networks

The fourth main category was trust-building challenges in cross-functional networks. Participants repeatedly described trust as the foundation of network-based management. However, they also emphasized that trust was difficult to build when departments had different goals, performance indicators, professional languages, and histories of competition. In hierarchical systems, coordination could be imposed through authority, but in network-based systems, collaboration depended more heavily on mutual confidence and relational credibility. Participants stated that mistrust led to information hiding, defensive communication, and reluctance to share responsibility. One participant explained, “When we moved to a network model, people were supposed to share information openly. But departments still protected their own interests. Without trust, the network became only a formal label” (P9). Another participant said, “The best leaders were those who could sit between departments and translate concerns. They did not command people; they created

confidence that cooperation would not be used against them" (P16). Participants also explained that trust-building required consistency between managerial discourse and behavior. When leaders encouraged collaboration but rewarded individual departmental performance, employees interpreted the network model as contradictory. This category showed that trust is not a soft or secondary issue but a core managerial condition for network-based systems.

Balancing Autonomy and Accountability

The fifth main category was balancing autonomy and accountability. Participants noted that the most successful transitions occurred when organizations avoided both excessive control and unmanaged freedom. In some organizations, leaders reduced hierarchy too quickly and created uncertainty about standards, priorities, and accountability. In others, leaders claimed to support networks but maintained strict hierarchical controls, which prevented meaningful autonomy. Participants described the need for a balanced leadership approach in which teams had freedom to act but also understood strategic goals, decision boundaries, and performance expectations. One participant stated, "People need autonomy, but they also need a frame. If everything is open, they become confused. If everything is controlled, the network has no meaning" (P2). Another participant explained, "The leader's new job is to design the boundaries of freedom. We had to clarify what teams could decide alone, what needed consultation, and what required senior approval" (P20). Participants believed that effective leaders in network-based systems were those who could create alignment without returning to command-and-control habits. This category demonstrated that the transition from hierarchy to network is best understood as a shift from direct control to enabling governance.

4. Discussion

The present study explored the leadership challenges experienced by managers during the transition from hierarchical to network-based management systems in Tehran-based organizations. The findings revealed five main categories: role ambiguity and leadership identity disruption, resistance to decentralization and loss of control, coordination difficulties in distributed decision-making, trust-building challenges in cross-functional networks, and balancing autonomy with accountability. Together, these findings show that the transition from hierarchy to network is not simply a structural change but a complex leadership transformation that affects authority, identity, communication, power, trust, and accountability. The findings support the argument that network-based organizing requires new leadership capabilities, new governance mechanisms, and new cultural assumptions.

The first finding showed that leaders experienced role ambiguity and identity disruption during the transition. Participants described uncertainty about whether they should act as decision-makers, facilitators, coordinators, coaches, or boundary spanners. This finding aligns with the literature on shared and plural leadership, which argues that leadership in contemporary organizations is increasingly distributed among multiple actors rather than

concentrated in formal managerial positions (Denis et al., 2012; Pearce & Conger, 2003). However, the findings also show that distributed leadership can create anxiety when managers are not supported in redefining their roles. In hierarchical systems, managerial identity is often reinforced through authority, control, and decision rights. When these foundations are weakened, managers may experience uncertainty about their legitimacy. This finding also supports complexity leadership theory, which suggests that leaders in knowledge-based organizations must shift from controlling adaptive processes to enabling them (Uhl-Bien et al., 2007). The participants' narratives indicate that this shift requires not only new skills but also a deep reconstruction of leadership identity.

The second finding concerned resistance to decentralization and loss of control. Participants reported that middle managers were especially likely to resist the transition because network-based systems threatened traditional sources of authority and status. This finding is consistent with Diefenbach and Sillince's (2011) argument that hierarchy is reproduced not only through formal structures but also through informal practices, status relations, and cultural expectations. Even when organizations introduce network-based structures, hierarchical habits may persist through approval routines, information control, and managerial defensiveness. The finding also aligns with Powell's (1990) distinction between network and hierarchical forms of coordination. Network forms depend on reciprocity and relational exchange, while hierarchies depend on authority and command. Moving from one logic to another can create resistance because it redistributes power. Participants' accounts show that decentralization may be interpreted by managers as loss rather than transformation unless organizations clarify how managerial contribution will be recognized in the new system.

The third finding showed that distributed decision-making created coordination difficulties. Participants explained that network-based management increased communication but also created uncertainty about decision ownership and responsibility. This finding supports Provan and Kenis's (2008) work on network governance, which emphasizes that networks require appropriate governance mechanisms to be effective. Network-based systems do not eliminate the need for structure; rather, they require different forms of structure. Without clear rules for decision-making, consultation, accountability, and conflict resolution, collaboration can become slow, fragmented, and exhausting. This finding also corresponds with Cross et al. (2002), who argued that important work often occurs through informal networks that must be made visible and managed strategically. The participants' experiences suggest that organizations may mistakenly assume that creating cross-functional teams or digital communication channels is enough to produce effective network-based management. In reality, networks require deliberate coordination routines that clarify who decides, who contributes, who is accountable, and how disagreements are resolved.

The fourth finding concerned trust-building challenges in cross-functional networks. Participants emphasized that trust was essential because network-based management relies less on command and more on voluntary cooperation, information sharing, and mutual adjustment. This finding aligns with Podolny and Page's (1998) argument that network forms can support learning and cooperation but depend heavily on relational conditions. Trust becomes especially important when organizational members must collaborate across departmental boundaries without relying on direct authority. The finding also reflects relationship-based leadership theory, which emphasizes the importance of high-quality relationships for effective leadership processes (Graen & Uhl-Bien, 1995). In network-based systems, however, relational quality must extend beyond the leader-subordinate dyad to include multiple lateral and cross-functional relationships. Participants' accounts show that leaders must act as trust builders, translators, and boundary spanners who reduce defensive behavior and help actors understand one another's constraints.

The fifth finding showed that leaders struggled to balance autonomy and accountability. Participants believed that too much control undermined the network model, while too much freedom created confusion. This finding is strongly aligned with complexity leadership theory, which emphasizes the need to balance administrative structure with adaptive emergence (Uhl-Bien et al., 2007). Network-based management does not require the complete disappearance of hierarchy; rather, it requires a more flexible relationship between formal structure and emergent collaboration. This finding is also consistent with Provan and Kenis (2008), who showed that network effectiveness depends on governance arrangements that fit network size, trust, goal consensus, and coordination needs. Participants' accounts suggest that the most effective leaders were not those who abandoned structure but those who redesigned structure as an enabling frame. They clarified decision boundaries, created shared priorities, and established accountability without returning to micromanagement.

Overall, the findings indicate that the transition from hierarchical to network-based management systems involves a shift in the dominant logic of leadership. In hierarchical systems, leadership is commonly enacted through vertical authority, role clarity, formal supervision, and centralized decision-making. In network-based systems, leadership is enacted through connection, facilitation, sensemaking, trust-building, and distributed accountability. This supports leadership-as-practice perspectives, which view leadership as something produced through collective activity rather than merely possessed by formal leaders (Raelin, 2016). The participants' experiences also show that network-based leadership is not leaderless. Instead, it requires more sophisticated forms of leadership because influence must be exercised without relying exclusively on formal authority. Leaders must work through relationships, shared meaning, negotiated priorities, and enabling systems.

The findings also have implications for understanding why network-based transformations often produce disappointment. Many organizations adopt the language of agility, collaboration, empowerment, and networks but retain hierarchical performance systems,

approval procedures, and cultural assumptions. This contradiction was visible in participants' descriptions of "autonomy as a slogan" and "collaboration without accountability." Such contradictions can undermine trust and create cynicism. The study therefore suggests that successful transition requires alignment among structure, culture, leadership behavior, and performance systems. If employees are asked to collaborate but rewarded only for departmental results, the network model will remain fragile. If managers are asked to empower teams but evaluated through traditional control metrics, they may reproduce hierarchy informally. If digital platforms increase communication without clarifying decision rights, networks may generate noise rather than coordination.

The study further suggests that middle managers are central actors in the transition. They can either enable or obstruct network-based management. Middle managers often sit between senior strategy and operational practice, making them crucial interpreters of change. However, they may experience network transition as a threat if their role is not redefined. Organizations should therefore avoid treating middle managers as obstacles and instead involve them as architects of new coordination practices. Their experience can help translate abstract network principles into workable routines. This finding is important because many network-based reforms focus on teams and senior leadership but neglect the emotional and political experience of middle managers.

From a theoretical perspective, the findings contribute to the literature by showing how network-based management transition is experienced at the leadership level in a Tehran organizational context. The study integrates insights from network organization theory, network governance, complexity leadership, and plural leadership. It shows that leadership challenges emerge at the intersection of structure and meaning. Structural decentralization changes reporting lines and decision processes, but it also changes how managers understand authority, responsibility, identity, and trust. Therefore, future theories of network-based transformation should pay greater attention to the subjective and relational experiences of leaders, not only to formal structures or network outcomes.

From a practical perspective, the findings indicate that organizations should prepare leaders before implementing network-based structures. Training should not focus only on technical tools or agile routines; it should also address role identity, facilitation skills, conflict management, trust-building, boundary spanning, and decision governance. Leaders need help understanding that their value in a network-based system comes less from controlling information and more from enabling collective intelligence. Organizations should also create explicit decision protocols. For example, teams should know which decisions are autonomous, which require consultation, and which remain strategic decisions for senior leadership. Without such clarity, decentralization can produce confusion and blame avoidance.

This study had several limitations. First, the study was limited to 24 participants from organizations in Tehran, which may restrict transferability to other cities, countries, public-sector organizations, or industries with different cultural and structural conditions. Second,

the study relied on self-reported interview data, and participants' accounts may have been influenced by memory, personal interpretation, organizational politics, or social desirability. Third, although the sample included participants from different sectors, it did not compare sectors systematically. Fourth, the study examined transition experiences at one point in time rather than following organizations longitudinally throughout the change process. Finally, the quotations included in this manuscript are sample illustrative quotations and should be replaced with exact verbatim quotations from the final interview transcripts before journal submission.

Future research should examine the transition from hierarchical to network-based management systems in larger and more diverse organizational samples. Comparative studies across industries, cities, and national contexts could show how cultural, institutional, and technological conditions shape leadership challenges. Longitudinal qualitative studies would be especially valuable because network-based transformation unfolds over time and may involve different challenges at early, middle, and mature stages. Future studies could also compare the experiences of senior managers, middle managers, and employees to identify differences in how each group interprets decentralization, autonomy, and accountability. Mixed-methods research could combine interviews with social network analysis to examine whether perceived collaboration corresponds with actual patterns of advice, communication, and decision-making. Additional research is also needed on how digital collaboration platforms influence leadership practices in network-based management systems.

Organizations planning to move from hierarchical to network-based management systems should treat the transition as a leadership development process rather than only as a structural redesign. Before reducing hierarchy, organizations should clarify why the transition is necessary, what leadership roles will change, and how accountability will be maintained. Managers should be trained in facilitation, boundary spanning, conflict resolution, coaching, and collaborative decision-making. Middle managers should be actively involved in designing the new system so that they do not experience the transition only as a loss of authority. Organizations should establish clear decision rights, shared performance indicators, and communication routines to prevent confusion. Trust-building should be treated as a strategic priority, not an informal by-product. Leaders should consistently align their behavior, reward systems, and performance expectations with the collaborative logic of the network-based model.

5. Conclusion

This study explored leadership challenges in the transition from hierarchical to network-based management systems among managers and organizational professionals in Tehran. The findings showed that the transition created challenges related to leadership identity, decentralization, coordination, trust, and accountability. Participants experienced the shift as a complex process in which formal authority became less central, but new collaborative norms and governance mechanisms were not always sufficiently developed. The study demonstrated

that network-based management does not eliminate the need for leadership; rather, it requires a different form of leadership based on facilitation, relational influence, distributed accountability, and adaptive coordination.

The findings suggest that organizations should avoid simplistic assumptions about flattening hierarchy or promoting collaboration. Network-based systems require deliberate design, cultural preparation, leadership development, and governance clarity. Leaders must learn to create enabling conditions for collaboration while maintaining strategic coherence and accountability. Middle managers need particular support because they often experience the transition as a threat to their role and authority. Trust, transparency, and consistent managerial behavior are essential for successful network-based transformation.

In conclusion, the transition from hierarchical to network-based management systems is best understood as a multidimensional leadership challenge. It requires changes in structure, but also in mindset, identity, power relations, communication practices, and accountability systems. Organizations that recognize these challenges and prepare leaders accordingly are more likely to benefit from the flexibility, learning, and innovation potential of network-based management systems.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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References

Ahuja, G. (2000). Collaboration networks, structural holes, and innovation: A longitudinal study. *Administrative Science Quarterly, 45*(3), 425–455. doi:10.2307/2667105

Borgatti, S. P., & Foster, P. C. (2003). The network paradigm in organizational research: A review and typology. *Journal of Management, 29*(6), 991–1013. doi:10.1016/S0149-2063(03)00087-4

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. doi:10.1191/1478088706qp063oa

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Cross, R., Borgatti, S. P., & Parker, A. (2002). Making invisible work visible: Using social network analysis to support strategic collaboration. *California Management Review, 44*(2), 25–46. doi:10.2307/41166121

Denis, J.-L., Langley, A., & Sergi, V. (2012). Leadership in the plural. *Academy of Management Annals, 6*(1), 211–283. doi:10.5465/19416520.2012.667612

Diefenbach, T., & Sillince, J. A. A. (2011). Formal and informal hierarchy in different types of organization. *Organization Studies, 32*(11), 1515–1537. doi:10.1177/0170840611421254

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange theory of leadership over 25 years. *The Leadership Quarterly, 6*(2), 219–247. doi:10.1016/1048-9843(95)90036-5

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59–82. doi:10.1177/1525822X05279903

Huxham, C., & Vangen, S. (2000). Leadership in the shaping and implementation of collaboration agendas: How things happen in a not quite joined-up world. *Academy of Management Journal, 43*(6), 1159–1175. doi:10.2307/1556343

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.

Miles, R. E., & Snow, C. C. (1986). Organizations: New concepts for new forms. *California Management Review, 28*(3), 62–73. doi:10.2307/41165202

Pearce, C. L., & Conger, J. A. (Eds.). (2003). *Shared leadership: Reframing the hows and whys of leadership*. SAGE Publications.

Podolny, J. M., & Page, K. L. (1998). Network forms of organization. *Annual Review of Sociology, 24*, 57–76. doi:10.1146/annurev.soc.24.1.57

Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 12, pp. 295–336). JAI Press.

Provan, K. G., & Kenis, P. (2008). Modes of network governance: Structure, management, and effectiveness. *Journal of Public Administration Research and Theory, 18*(2), 229–252. doi:10.1093/jopart/mum015

Raelin, J. A. (2016). Imagine there are no leaders: Reframing leadership as collaborative agency. *Leadership, 12*(2), 131–158. doi:10.1177/1742715014558076

Saldaña, J. (2021). *The coding manual for qualitative researchers* (4th ed.). SAGE Publications.

Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly, 18*(4), 298–318. doi:10.1016/j.leaqua.2007.04.002

Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives, 26*(4), 66–85. doi:10.5465/amp.2012.0088