

Research on the Evolution Path of Enterprise Organizational Forms in the Era of Artificial Intelligence

Tianqi Jin

Woosong University, Dong-gu, Daejeon, 34606, Republic of Korea

ABSTRACT

This paper delves into the evolution paths and future trends of enterprise organizational forms in the era of artificial intelligence. Research indicates that traditional hierarchical organizations are rapidly transforming towards flat, decentralized, and intelligent directions, giving rise to new forms such as platform-based organizations, ecosystem organizations, and human-machine collaborative organizations. By reshaping management processes, optimizing decision-making mechanisms, and reconstructing collaboration models, these new organizational forms significantly enhance environmental adaptability, innovation capability, and competitive strength. AI technology drives organizational change through three primary mechanisms: replacing middle-management functions, empowering individual innovation, and reconstructing organizational boundaries. Future organizations will exhibit characteristics of "liquidity," "personalization," and "sustainable development," with human-machine collaboration becoming the core operational model. This research provides theoretical guidance and practical pathways for organizational transformation within enterprise digitalization.

KEYWORDS

Artificial intelligence; Organizational form; Evolution path; Decentralization; Human-machine collaboration

1 Introduction: intelligent integration and organizational restructuring

Artificial intelligence is reshaping the very foundations of enterprise organizations with unprecedented depth and breadth, triggering a systemic restructuring of organizational forms. Research suggests that generative AI could automate up to 70% of business activities by 2030, yet the lag in leadership and organizational change severely constrains its potential. Currently, three-quarters of employees are already using AI to assist their work; they no longer passively await management directives but proactively seek more efficient and valuable ways of working. This trend towards employee autonomy, combined with the powerful force of AI technology, jointly propels profound changes in organizational forms.

Driven by AI, the fundamental limitations of traditional hierarchical organizations are becoming apparent. Processes that once required multiple layers of approval can now be accurately completed by AI in seconds, directly challenging the value proposition of traditional middle management. More critically, AI has transformed from a passive tool into an organizational "collaborative creator" and "core actor," redefining how work is initiated, how teams are composed, and how decision-making authority is structured. Li Haijian and Li Yan point out that enterprise organizational forms are evolving from the entity-based organizations of the industrial economy era towards symbiotic organizations of the intelligent economy era, whose essence is the "intelligent organization." In a context where disruptive change has become the new normal, this evolution has given rise to platform-based enterprises and modular enterprises ^[1]. Against this backdrop, exploring the evolution path of enterprise organizational forms in the AI era holds significant theoretical value and urgent practical significance for enterprise survival and development in the digital age.

2 Theoretical construction and multi-dimensional drivers of organizational evolution

The evolution of organizations in the AI era is built upon the synergistic interaction of four factors: technological, economic, socio-cultural, and managerial drivers. These factors collectively constitute the internal logic and dynamic mechanisms of organizational form transformation.

2.1 Technological drivers

The maturity and proliferation of AI technology are driving fundamental changes in organizational forms. With the development of large language models, enterprises are accelerating the formation of hybrid organizational structures comprising "business experts + AI employees." Here, AI Agents have evolved from auxiliary tools into "AI employees" capable of independently planning, executing, and optimizing business processes, becoming a "new type of labor force" that is flexibly configured and called upon as needed ^[2]. This technological characteristic enables organizations to enhance execution capability at very low marginal cost and optimize human resource allocation. Simultaneously, it shifts decision-making models from relying on managerial experience towards data-driven and algorithmic decision-making. Reports from Info-Tech Research Group indicate that AI is evolving from a single tool into an "autonomous collaborative system," with 69% of enterprises already deploying generative AI, and agent AI showing rapid growth. Multi-agent collaboration has been implemented in various fields; for instance, mortgage lenders have improved approval efficiency by 50% through the AgentFlow platform, and Walmart has optimized inventory management and replenishment

processes through an intelligent agent system, significantly enhancing operational efficiency.

2.2 Economic drivers

Efficiency and cost pressures constitute key economic drivers for organizational change. Facing intensified market competition, enterprises utilize AI technology to achieve process automation and resource optimization, effectively improving efficiency and reducing costs. Taking Germany's Bayer Group as an example, its introduced RenDanHeYi model not only streamlined approval processes and enhanced response speed but also aims to achieve cost savings of 2 billion euros. Concurrently, the acceleration of market changes highlights the slow response of traditional hierarchical structures. Decentralized architectures, empowered by AI, enable business units to reach customers faster, make swift decisions, and take action, significantly boosting organizational competitiveness. Practice shows that the combination of AI and decentralization effectively enhances operational agility and customer responsiveness.

2.3 Socio-cultural drivers

Changes in employee expectations are a socio-cultural driver of organizational change. The new generation of employees places greater emphasis on autonomy, meaning, and personal growth in their work. Research data shows that three-quarters of employees are already using AI to assist their work, and they are no longer waiting for managers to "approve" or "guide" them; instead, they pursue more efficient, freer, and more valuable ways of working. The shift in organizational change paradigms is equally noteworthy. Contemporary research on organizational change is undergoing a fundamental paradigm shift, moving from traditional "heroic leadership" towards "collective agency." The new paradigm emphasizes that change is an emergent, relational process, reconstructing the essence of leadership through Direction-Alignment-Commitment (DAC) and Purpose-Alignment-Commitment (PAC) frameworks. This shift aligns with the broader trend of AI empowering individuals, jointly pushing organizational forms towards greater openness and inclusivity.

2.4 Managerial drivers

Management paradigms are undergoing a fundamental shift from control and prediction to empowerment and adaptation. Li Haijian and Li Yan note that enterprise organizational forms are evolving towards "symbiotic organizations," where ecosystem-based and personalized enterprises become the basic forms of intelligent organizations. This transition prompts employees to shift from passive execution to actively creating user demand ^[1]. Simultaneously, the heightened need for innovation drives changes in organizational form. AI-driven organizations promote the implementation of innovation by granting employees autonomy and resources for innovation. Research published in World Economy indicates that platform-based organizations empower squads with independent goals and decision-making rights through innovative structures like the "Squad model," while AI provides continuous support in user analysis and product recommendation, enabling teams to make more precise, data-driven decisions ^[3].

3 Three-dimensional evolution paths of organizational forms

Driven by AI technology, enterprise organizational forms are exhibiting diverse evolution paths. Analyzing practical cases from domestic and international enterprises, we can summarize three primary, intertwined evolution paths that collectively form the panorama of organizational forms in the AI era.

3.1 From hierarchy to platform-based organization: the path to structural flattening

Traditional hierarchies are evolving into platform-based organizations, characterized primarily by streamlined management layers, devolved decision-making authority, and blurred boundaries. AI facilitates this shift towards flat structures by taking over middle-management functions such as supervision and data analysis. Case studies show that a Dubai ride-hailing company uses AI to optimize route planning and operational dispatch, pushing decision-making forward. Haier's "RenDanHeYi" model eliminates middle-layer structures, using intelligent large models to precisely match users with ecological resources. Research by Li Haijian and Li Yan indicates that such platform-based enterprises are an important manifestation of the intelligent organization, emerging as disruptive change becomes the new normal ^[1]. The advantages of platform-based organizations lie in agility and adaptability: streamlined layers accelerate market response, devolved decision-making enhances frontline adaptability, and blurred boundaries increase resource integration flexibility. It must be emphasized that this transformation does not eliminate management but shifts its focus from control to empowerment.

3.2 From human-only to human-machine collaborative organization: the path to agent pluralism

Organizational forms are shifting from purely human structures to human-machine collaboration, core to which is the integration of AI agents as organizational members, reconstructing division of labor and collaboration models. As a "collaborative creator," AI shifts work methods from static documents to dynamic dialogue; employees discuss conceptual prototypes in real-time with AI, reshaping the starting point of work. In the "business expert + AI employee" model, AI Agents are no longer merely auxiliary tools but "AI employees" capable of independently planning, executing, and

optimizing business processes ^[2]. Intelligent agents enhance execution capability at low cost, pushing human employees towards becoming strategy formulators. Research shows that clear decision rights, transparent mechanisms, and phased implementation can increase team reliance on AI. Successful enterprises have reduced AI anxiety rates to 21% through "transparent algorithms + employee training," achieving the integration of human and machine capabilities.

3.3 From Closed System to Ecosystem Organization: The Path to Boundary Opening

Organizational forms are evolving from closed systems to ecosystems, characterized primarily by blurred boundaries, value co-creation, and ecological synergy. Enterprises no longer exist in isolation but build open, symbiotic value networks. Haier's "Zero-Boundary Ecosystem" strategy activates corporate vitality by practicing "dissipative structure" theory. Its prediction that "products will be replaced by scenarios, industries will be covered by ecosystems" is becoming reality: within the smart living ecosystem, innovative products developed through 80 million interactions received tens of thousands of pre-orders immediately upon launch. Digital economy platforms further demonstrate scale effects, connecting 900,000 enterprises, over 5,000 partners, and covering 20 industries. The advantages of ecosystem organizations lie in network effects and emergent innovation; by opening platforms to attract diverse participants, they form positive feedback loops. Research by Li Haijian and Li Yan confirms that ecosystem-based and personalized enterprises are both the inevitable direction of intelligent organizations and the basic form of symbiotic organizations [1].

4 Challenges in evolution and response paradigms

Enterprises face multiple challenges when evolving towards AI-driven new organizational forms. Identifying these challenges and formulating effective coping strategies is crucial for ensuring successful organizational transformation.

4.1 Cultural inertia challenge and cognitive reset

Organizational cultural inertia is the primary obstacle to change. The traditional control-oriented culture fundamentally conflicts with the trust and empowerment culture required in the AI era. Employee trust in and acceptance of AI is the foundation of organizational change. Research indicates that teams are more likely to rely on AI under three conditions: clear decision rights, transparency and verification mechanisms, and phased adoption strategies. Breaking this impasse requires promoting a cognitive reset, changing the perceptions of organizational members, particularly management, regarding AI and organization. It is necessary to abandon the obsession with the "perfect plan" and embrace "fuzzy goals," continuously optimizing through dynamic adjustment. Through training, seminars, and pilot projects, help members understand the potential and limitations of AI and accept the core principles of new organizational forms. Simultaneously, establishing fault-tolerant mechanisms and encouraging innovative exploration can turn local breakthroughs into seeds for comprehensive change.

4.2 Governance deficit challenge and mechanism reconstruction

The lack of governance mechanisms is a core problem facing decentralized organizations. During the process of delegating decision-making authority, ensuring organizational consistency and coordination becomes key. Departments or teams can easily operate in silos, leading to duplicated resources, strategic deviations, and action conflicts. Resolving this contradiction requires building a new governance system: establish a unified decision-making framework covering the entire organization, clarifying the boundaries between autonomous decisions and matters requiring coordination; utilize AI data platforms to achieve real-time synchronization among teams, and unify goal direction through OKR systems; conduct regular cross-team alignment meetings to promote information sharing and consensus building. Furthermore, optimize team interface design, clarify responsibility boundaries and delivery standards, and foster a collaborative culture through incentive mechanisms that recognize cross-departmental achievements.

4.3 Capability gap challenge and skill reshaping

Employee skill gaps constitute the third major challenge for organizational transformation. The AI era places new demands on employee capabilities, creating a significant talent shortage for enterprises. Research shows that AI engineers command annual salaries exceeding one million, with demand for professionals outstripping supply. Breaking through this bottleneck requires a comprehensive push for skill reshaping: enterprises should establish a "Digital + X" composite competency system, using AI-powered personalized learning systems to dynamically diagnose employee skill gaps and push customized courses to enhance training effectiveness. Concurrently, management education urgently needs to abandon the myth of heroic leadership and instead equip students with complex systems thinking, relational leadership abilities, and digital literacy ^[4]. This educational transformation aligns closely with the philosophy of change "through people, not to people," marking an epistemological revolution underway in the field of organizational development.

5 Prospective trends in future organizational forms

As AI technology continues to develop, the evolution of enterprise organizational forms will persist. Based on current

trends, we can anticipate several development directions that will collectively define the ultimate form of future organizations.

5.1 AI as the organizational core

Future organizations will build their core architecture around AI, forming a new paradigm where AI serves as the organizational core. In the "Frontier Company" model, AI is no longer just an auxiliary tool but becomes an organizational "collaborative creator" and "fundamental team member." From their inception, such organizations integrate AI agents into every function, redesigning workflows, decision-making methods, and team structures to maximize human-machine collaboration. In this model, the way work is initiated changes fundamentally – shifting from static documents to dynamic dialogue. Employees no longer need to create documents from scratch but advance work through continuous dialogue with AI. Content resides within conversations, with AI generating different documents as needed. This shift elevates the human role from executor to coordinator, thereby altering the social contract of work.

5.2 Dynamic reconfiguration and adaptability

Future organizations will increasingly resemble quantum particles, capable of dynamically adjusting their form and structure according to environmental demands, achieving self-adaptation. Such organizations can automatically adjust structures and allocate resources based on task requirements, realizing "form follows function" dynamic adjustment. This quantum organization possesses a complete capability loop of sensing-decision-action-learning-evolution, enabling continuous evolution like a living organism. Related research proposing a "Super Organization" blueprint emphasizes this characteristic, suggesting that through specific models, organizations can possess the capacity for continuous learning and evolution. In such organizations, traditional job boundaries further blur, with employees dynamically forming temporary project teams based on skills and tasks, automatically disbanding after task completion.

5.3 Sustainability and value symbiosis

Future organizations will place greater emphasis on sustainable development. AI technology will help organizations better achieve social and environmental goals while pursuing economic benefits, forming entropy-reducing organizations. Research indicates that ESG capability has become a core competitiveness for enterprises expanding overseas, necessitating the development of skills like supply chain emission reduction and international procurement. The RenDanHeYi model of relevant enterprises demonstrates this possibility. By constructing a "Zero-Boundary Ecosystem," enterprises break traditional organizational boundaries, achieving cross-industry, cross-domain value co-creation. Hundreds of thousands of enterprises across numerous countries and regions are studying this model, with tens of thousands having successfully replicated it, leading to the spontaneous establishment of multiple research centers. This organizational form focuses not only on economic value but also on the unity of social and environmental value, achieving sustainable development through continuous innovation that reduces organizational entropy.

6 Conclusion: towards an integrated human-machine collaborative ecosystem

In the AI era, enterprise organizational forms are undergoing a three-dimensional evolution: from hierarchy to platform-based organization, from human-only to human-machine collaborative organization, and from closed system to ecosystem organization. This systemic restructuring, driven by multiple factors including technology, economy, socio-culture, and management, has become an irreversible trend. Research shows that AI drives organizational change through three main paths: replacing middle-management functions at the decision-making level, reshaping workflows at the collaboration level, and reducing trial-and-error costs at the innovation level. Successful organizational transformation requires following a progressive path from cognitive reset, technological empowerment, structural change, to cultural reshaping, while simultaneously addressing challenges like cultural inertia, governance deficits, capability gaps, and ethical risks. Future organizations will exhibit characteristics of "liquidity," personalization, and sustainable development, with human-machine collaboration as the core model. Ultimately, the most competitive organizations will not be those that simply use AI the most, but those capable of co-evolving with AI – when every individual becomes a spark of innovation, they will inevitably converge into a powerful force driving the upgrade of the global industrial ecosystem.

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