POLIECOM ADMINISTRATION REVIEW

Institutional Reconstruction or Platform Governance? Reviewing Huawei's Path to Digital Transformation through the Lens of Governance Logic and Data Sovereignty

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ABSTRACT

This review examines Huawei's Path to Digital Transformation through the lenses of institutional analysis and development (IAD), dynamic capabilities theory, and platform governance. The book outlines Huawei's attempt to restructure internal governance and production relations by embedding data governance, unified IT architecture, and rule digitization into its transformation process. These practices reflect a highly structured governance logic characterized by technological determinism and centralized institutional design. The review argues that Huawei's transformation is not merely technical but represents a profound shift in institutional structure and power allocation. It offers a compelling case for understanding China's enterprise-based model of digital governance. Future research may extend this analysis through comparative governance, institutional embedding, and enterprise–state isomorphism frameworks.

1. Introduction: Digital Transformation in Theoretical Perspective

Huawei's Path to Digital Transformation, authored by the Enterprise Architecture and Transformation Management Department of Huawei, systematically summarizes the company's digital transformation strategy, methodology, and implementation since 2016. The book serves not only as an operational manual but also as documentation of institutional transformation within a corporate context. Its framework—"One methodology, four types of scenarios, and three core platform capabilities"—illustrates how a large traditional enterprise seeks to reshape production relations through data and technology.

This review does not focus on technical details or anecdotal case narratives. Instead, it employs the Institutional Analysis and Development (IAD) framework and dynamic capabilities theory to examine the underlying governance model presented in the book. Huawei's transformation is not merely a technological upgrade but represents a profound institutional evolution. The book provides a valuable case study illustrating how a leading Chinese enterprise, under the banner of "data-driven" transformation, seeks to reduce organizational transaction costs through highly structured institutional design while redefining internal power boundaries and governance logic.

2. Institutional Design and Data Governance Logic

From the perspective of institutional economics, data governance is not merely a technical issue; it involves a re-coding of "rules." The book reveals a distinctive logic underlying technology-embedded institutional restructuring.

First, Huawei has implemented what can be described as a "data-driven redefinition of institutional boundaries." Chapter 11 details the development of a unified data foundation that emphasizes "source data entry and end-to-end connectivity." This approach aligns with Williamson's theory of institutional layers and the principle of minimizing transaction costs. By establishing a single database, Huawei breaks down organizational silos, transforming what were once departmental "private data" into corporate "public resources." This

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practice effectively restructures internal ownership—data no longer belongs to individual departments but to the enterprise as a whole—reflecting a centralized institutional design aimed at eliminating internal frictions caused by information asymmetries.

Second, Chapter 5's discussions on "IT integration" and the "V-model" illustrate the process of transforming business rules (institutions) into code (technology). The concept of "rule digitization"—extracting rules from documents and translating them into machine-readable logic—parallels Ostrom's notion of "rules-in-use" from the Institutional Analysis and Development (IAD) framework. Huawei aims to digitize objects, processes, and rules to transition from informal governance toward codified technical governance.

However, this approach leans heavily toward structuralism and technological determinism. The shift from "recording systems" to "operational platforms" more strictly embeds employee behavior within digital workflows. Although the book emphasizes business-IT integration, the overall logic tends toward top-down architectural control (e.g., Enterprise Architecture), using design to regulate business processes. While this may enhance efficiency, it risks creating path dependence that suppresses peripheral innovation by over-relying on centralized data standards.

3. Organizational Resilience and Transformation Governance

From the perspective of organizational change theory, Huawei's transformation exemplifies a distinctive model of "controlled evolution," which contrasts with the bottom-up adaptation frequently emphasized in Western literature.

The key issue lies in how the transformation addresses the tension between "people" and "structure." Chapter 4's "ship model" of change management and the concept of "grinding the core while shifting people" reflect a distinctly Chinese managerial style. This approach aligns with Schein's "unfreeze–change–refreeze" process in organizational culture theory; however, Huawei places greater emphasis on top-level leadership. The book explicitly states that transformation is a "top executive project" and employs a "seven-horizontal-eight-vertical" matrix to ensure effective execution. This reflects the mobilization-style logic typical of Chinese enterprise governance: instilling a sense of crisis (e.g., via the Malik Curve) and deploying elite task forces (e.g., Blue Teams) to overcome institutional inertia.

In dialogue with Mintzberg's configuration theory, Huawei appears to be developing a "dual operating system": on one hand, a stable machine bureaucracy that ensures baseline operations through standardized data and processes; on the other, a flexible adhocracy supported by digital platforms to enable agile responses. The metaphor "frontline calls for artillery" signifies an effort to enhance organizational resilience amid structural rigidity.

This resilience arises more from structural design than from cultural empowerment. Although the book emphasizes frontline empowerment, it relies heavily on data and authority transparency. Employee reskilling is presented as a mandatory task rather than a voluntary learning process. While this transformation logic facilitates the rapid elimination of institutional frictions, it may also give rise to a new form of digital bureaucratization, where decision-making is excessively driven by quantitative indicators (e.g., TAM models), potentially marginalizing tacit knowledge that resists digitization.

4. Platform Governance and Data Sovereignty

From the perspective of platform governance, Huawei's digital transformation is not merely an internal optimization but also the development of a quasi-governmental platform governance framework.

Chapters 12 and 13, which focus on the digital platform and the governance system, a highly centralized model. Unlike the user-extractive platforms described by McAfee or Zuboff in Surveillance Capitalism, Huawei's internal platform aims to achieve internal data sovereignty. The slogan platform, one data foundation the creation of a corporate digital Leviathan.

In contrast to Western corporate platform governance models that emphasize ecosystem collaboration or modular innovation, Huawei's model favors centralized and embedded governance. Although the technical design—such as Service-Oriented Architecture (SOA)—supports modularity, the governance framework reinforces central control. By encapsulating capabilities as services, headquarters can allocate enterprise resources similarly to public utilities, thereby pursuing maximum resource efficiency.

This architecture exemplifies the convergence of state and enterprise logics characteristic of China. Huawei adopts a itself as a digitally governable Through architectural legislation and the listing of transformation projects, Huawei exercises managerial sovereignty. Its transformation is not merely technical but also a political process involving the redistribution of decision-making authority—shifting discretion from departmental managers to platform algorithms and encoded rules.

5. Theoretical Implications and Future Research Directions

In summary, Huawei's path to digital transformation offers an analytically rich case demonstrating how a non-digital-native conglomerate achieves transformation through institutional structuring and platform centralization.

Although presented as a practitioner's manual, the book contains profound theoretical tension. It challenges the simplistic narrative of "technology empowerment" and reveals the institutional disciplining and power reallocation underlying digital transformation. While the book itself offers limited theoretical elaboration—primarily relying on management tools—its integrated governance logic, encompassing data, rules, and operations, provides scholars with a Chinese counterpoint to Western platform governance theory.

Suggestions for Future Research

1. Comparative Governance Studies: Contrast Huawei's centralized platform empowerment with the distributed agility of Western digital firms to analyze their respective organizational resilience.
2. Institutional Embedding: Investigate how digitized rules interact with or conflict with legacy systems (e.g., the IPD process), particularly in the context of "bimodal IT."
3. State–Enterprise Coordination: Analyze Huawei's quasi-governmental governance structure as a form of institutional isomorphism adapted to the external complexities of China's environment.

Author Contribution

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Competing Interest declaration

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References

1. Huawei Enterprise Architecture and Transformation Management Dept. 2022. *華為數字化轉型之道 (Huawei's Path to Digital Transformation)*. Beijing: China Machine Press.