

## **BLOCKCHAIN ADOPTION THROUGH CHANGE MANAGEMENT THEORIES: TOWARD A UNIVERSAL ORGANIZATIONAL FRAMEWORK**

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The adoption of blockchain technology is a strategic task that reshapes organizational logic and demands coordinated managerial action. Blockchain operates as a decentralized and immutable ledger that alters the rules of trust and verification inside and between organizations. Implementing this technology is not a technical upgrade only. It is a transformation that touches processes, governance, roles and organizational culture. Success depends on aligning technological choices with human capacity and institutional arrangements so that decentralization is supported by clear responsibility, predictable rules and sustained learning.

Classical theories of change provide a viable route for guiding this transformation. Change conceived as a process of preparing, implementing and consolidating allows managers to sequence actions and reduce uncertainty. A model that balances strategy, structure and operational systems with values, skills and leadership style becomes essential when the architecture of control itself is revised. A stepwise approach that mobilizes leadership, builds commitment and secures early achievements helps to translate pilot experiments into organization wide practice. Combining these perspectives yields a single coherent approach that links technical architecture to organizational adaptation and long term stability.

Practical implementation begins with a clear rationale and assessment of readiness. Management must define expected outcomes, map existing failures and set measurable targets for transparency, throughput and compliance. This stage includes stakeholder engagement and the construction of a shared case for change. When urgency and purpose are established, capacity must be built. Cross functional teams that combine IT, operations, legal and business development are formed. Training priorities are set and competencies in cryptography, security, smart contract design and auditability are developed. Roles are redefined to reflect distributed validation while accountability mechanisms are designed to ensure traceability and dispute resolution [1].

Governance and standards are central to the next stage. Protocols for data integrity, privacy and interoperability are specified. Smart contracts are defined not only as code but as executable rules that embody contractual obligations and compliance requirements. Standard operating procedures are updated to reflect new verification steps and to integrate blockchain logs into audit trails and reporting. Interoperability with existing systems is planned so that blockchain complements rather than fragments enterprise architecture. Ethical guidelines and consent mechanisms are embedded into data practices to maintain stakeholder trust.

Implementation proceeds from small scale pilots to progressive scaling. Pilots test assumptions about performance, cost and user acceptance. They provide the evidence needed to adjust technical parameters and process design. Early successes are documented and communicated to broaden support. Monitoring focuses on concrete metrics such as transaction latency, error rates, reconciliation time and operational cost per transaction. Feedback loops are established so that technical fixes and process improvements occur rapidly. Scaling requires governance maturity, training at scale and the automation of repetitive tasks where appropriate.

Finally, practices must be institutionalized. New routines are formalized in policies and job descriptions. Performance evaluation incorporates blockchain related indicators. Continuous learning mechanisms ensure that lessons from operation feed back into system design and governance. Institutionalization secures the advantages of blockchain by embedding them into organizational routines so they survive leadership change and external shocks. At this stage blockchain becomes part of how the organization creates and protects value. Throughout the entire process attention to social and environmental outcomes strengthens the legitimacy of implementation. Blockchain provides unique capabilities for traceability of supply chains, verification of sustainability claims and transparent recording of transactions that affect social welfare. Aligning blockchain use cases with sustainability objectives increases public acceptance and opens avenues for partnerships with regulators and civil society. When blockchain is used to document responsible sourcing, labor conditions and environmental emissions, it becomes a tool for both compliance and reputational advantage [2].

Resistance and cultural friction remain primary obstacles. Resistance often arises from uncertainty, perceived loss of control or unclear benefits for those who must change their routines. These issues are resolved through clear communication, inclusive decision making and incentives that align individual interests with organizational goals. Leadership style shifts from command and control to facilitation and orchestration. Leaders must act as sponsors who remove barriers, provide resources and demonstrate commitment by participating in pilot activities and by rewarding learning.

The proposed framework treats blockchain adoption as a managed transformation that integrates technical deployment with cultural and structural change. It does not treat blockchain as an IT project but as a reconfiguration of organizational rules of interaction. The framework emphasizes sequencing, capacity building, governance, evidence based scaling and institutionalization. It provides a roadmap for managers to reduce risk, accelerate learning and convert technological potential into measurable organizational value. The implications for practice are straightforward. Decision makers should invest in competence building and in governance design as early priorities. Pilot projects must be designed to test assumptions and to produce demonstrable value quickly. Interdepartmental coordination is required to avoid siloed implementations that create operational complexity. Alignment with sustainability objectives enhances stakeholder support and creates a broader value proposition. Measurement must focus on operational indicators and on indicators of trust and compliance so that the organization can demonstrate both efficiency gains and ethical outcomes [1].

In conclusion, blockchain adoption succeeds when organizations treat it as a socio technical change that requires coordinated action across systems people and values. A universal framework based on established theories of change allows for predictable sequencing and for the integration of technical solutions into everyday practice. The approach balances innovation with governance and converts experimental projects into sustained capabilities that enhance transparency resilience and long term competitiveness.

#### **Список літератури:**

1. *Adıgüzel K.* Re-establishment and Regarding Trust and Transparency, Blockchain's Contribution to the Solution of a Thousand-Year Problem. / *K. Adıgüzel, N. Krasnokutska* // *Duzce University Journal of Science and Technology*, 2021 – №9(4) – P. 1020-1040. URL: <https://doi.org/10.29130/dubited.868598>.

2. Strategic information systems engineering and management: a framework for integrating organizational design and marketing to enhance enterprise economic potential / *Petro Foshchii, Valentin Kovshik, Inga Shapovalova, Maryna Oslopova, Yaroslav Kosenko, Vitalii Matvienko* // *International Journal of Basic and Applied Sciences*. – 2025. – Vol. 14, SI-1. – P. 131-138. URL: <https://doi.org/10.14419/9v96nh23>.