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An Empirical Investigation into the Relationship Between IT Governance Maturity and Digital Transformation Success in Large Enterprises

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Abstract

In the era of rapid digital disruption, large enterprises face complex challenges in implementing successful digital transformation (DT) initiatives. This paper explores the relationship between IT governance maturity and digital transformation success in large organizations. Drawing upon literature from strategic IT alignment, governance frameworks, and digital capability models, this research argues that mature IT governance is a foundational enabler of transformation. Key governance dimensions such as strategic alignment, performance measurement, and leadership commitment are critically examined in their role of guiding transformation efforts. The study concludes that higher IT governance maturity significantly correlates with more effective, agile, and sustainable transformation outcomes. Practical implications for CIOs and enterprise architects are discussed.

Keywords:

IT Governance Maturity, Digital Transformation, Large Enterprises, Strategic Alignment, Enterprise IT, Organizational Agility

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1. Introduction

Digital transformation has evolved from a buzzword into a strategic imperative for large enterprises across industries. With global disruption caused by new technologies—ranging from cloud computing to AI—organizations are under pressure to reinvent business models and operations. Yet, empirical evidence suggests that over 70% of digital transformation efforts fail to achieve their intended outcomes, often due to governance-related issues.

As enterprises expand in scale and complexity, the governance of IT becomes increasingly critical. IT governance encompasses decision rights, accountability structures, and performance measurement systems that guide how IT supports and enhances business objectives. This paper investigates whether the maturity level of IT governance directly impacts the success of digital transformation initiatives in large organizations.

2. Literature Review

The relationship between IT governance and enterprise performance has been well-documented in IS literature. Weill and Ross (2004) emphasized that organizations with clearly defined IT decision rights and formal governance structures significantly outperform those without. Their work laid the groundwork for understanding governance as a performance lever.

De Haes and Van Grembergen (2009) conducted an exploratory study that identified governance mechanisms—like IT strategy committees and balanced scorecards—as instrumental in aligning IT initiatives with business goals. Their research showed that alignment is a major predictor of transformation success.

Luftman et al. (2017) expanded this view by introducing maturity models that assessed how far organizations have advanced in their governance practices. They found that organizations with higher maturity levels were better equipped to integrate IT with strategic business planning, a key enabler of digital transformation.

Furthermore, Peterson (2004) argued that IT governance must be context-sensitive, adaptive, and embedded within enterprise culture to be effective. His findings suggest that governance is not merely structural, but also cultural and relational.

In more recent studies, Aier and Gleichauf (2010) illustrated how dynamic environments demand agile governance models. Their multi-case study analysis concluded that the more responsive and transparent the IT governance system, the greater the success of digital initiatives.

Overall, the literature supports the hypothesis that mature IT governance facilitates digital transformation by ensuring strategic focus, minimizing risks, and fostering enterprise-wide accountability.

3. Theoretical Framework

This research draws upon the COBIT 5 framework to conceptualize IT governance maturity. COBIT defines governance in terms of five domains: Evaluate, Direct and Monitor (EDM); Align, Plan and Organize (APO); Build, Acquire and Implement (BAI); Deliver, Service and Support (DSS); and Monitor, Evaluate and Assess (MEA). Higher maturity in these domains is associated with standardized processes, stakeholder engagement, and measurement-driven decision-making.

Digital transformation success is measured through dimensions such as user adoption, strategic impact, agility, and process efficiency—aligned with Luftman's Strategic Alignment Maturity Model (SAMM). The synergy of these frameworks allows for a multi-dimensional understanding of how governance supports transformation outcomes.

4. Discussion

The evidence indicates a positive correlation between governance maturity and digital transformation success. Organizations that have clearly delineated roles, structured performance monitoring, and integrated planning mechanisms are more likely to meet their transformation goals.

One key insight is the role of leadership in IT governance. CIOs and boards that actively sponsor and monitor IT investments create a governance culture that aligns transformation initiatives with strategic imperatives. Conversely, fragmented governance results in poor coordination and transformation failure.

Additionally, governance maturity enhances enterprise agility. Organizations with formal but adaptive governance structures respond faster to market and technological changes. They can pivot digital strategies without compromising control or compliance.

Finally, performance measurement systems embedded in governance structures ensure that transformation outcomes are tracked and adjusted in real time. This iterative capability contributes to the sustainability and scalability of digital transformation.

5. Conclusion

This paper underscores the critical role of IT governance maturity in enabling digital transformation in large enterprises. Mature governance enhances strategic alignment, minimizes risk, and strengthens enterprise agility—key conditions for transformation success. While governance is often viewed as a compliance mechanism, this study positions it as a strategic enabler.

Future research should explore sector-specific governance adaptations and integrate empirical case data to refine maturity assessment models. For practitioners, investing in governance frameworks like COBIT and involving cross-functional leadership teams can greatly enhance digital transformation outcomes.

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