Discussion ‘Toyota’s Digital Transformation with IT Governance Frameworks’

Unit 10

Introduction

This document focuses on two of Toyota's cases:

- Toyota uses COBIT in its car dealership.
- Toyota's lean manufacturing practices in the United States and Germany.

Both cases are linked to certain old Japanese philosophies, including "kaizen," a term that emphasizes the commitment to continuous improvement in combination with modern technology and frameworks such as COBIT and Lean. Toyota employed its guiding principles of learning, creativity, and responsibility, in addition to continuous improvement and teamwork, in order to integrate with modern frameworks and solve modern challenges. For example, frameworks such as Kaizen, ITIL, and COBIT also center around continuous improvement. A structured framework is comprised of phases and phased development from one level to the next. It aligns with core principles of a similar approach to phased development.

(Teboul, Damier, 2023)

“Continuous improvement is better than delayed perfection” (attributed to Mark Twain, cited in Ad, 2024)

How did Toyota leverage IT governance frameworks like COBIT and ITIL to align IT with its business objectives?

Toyota has used the COBIT 5 framework to enhance IT governance in after-sales service operations. As the automotive industry adopts digital tools, the need for IT governance to align with strategic business goals has increased. The study evaluated COBIT 5 implementation across 87 dealerships using a survey and analysis. An assessment of the maturity of the five COBIT 5 domains was carried out. Strategic domains scored highest and operational domains scored lower. Toyota's adoption of COBIT 5 has helped formalize IT policies and improve project and resource management. A structural model was used to indicate strong relationships between domains, emphasizing the effect of IT governance maturity from strategic to operational levels and indicating challenges in execution, monitoring, and service delivery.

What role did digital transformation play in improving Toyota’s global operations?

Toyota has developed lean manufacturing practices that have been a powerful combination of traditional values and modern innovation. That practice had served as a model for many companies in the US and Germany, driving digital transformation practices significantly enhanced the company’s global operations by integrating practices such as lean manufacturing, combined with automation technologies and state-of-the-art manufacturing solutions like IoT, digital twins and. The integration of smart logistics, real-time data and supplier collaboration allowed Toyota to streamline

operations globally while maintaining competitiveness. Toyota also used lean practices such as JIT (Just-In-Time) methodology aimed at reducing flow times, reducing waste and boosting flexibility. Using a combining of modern supply chain technology, Toyota achieved superior visibility, efficiency and responsiveness. Such innovations enabled the company to adapt to global market and technology shifts and align with modern Industry standards. Toyota's approach was a source of inspiration for other Asian manufacturers and US firms. Digital transformation then became a cornerstone of Toyota's supply chain agility and operational excellence.

What challenges did Toyota face during the implementation of these frameworks, and how were they mitigated?

The challenges Toyota faced when implementing the COBIT 5 framework have been primarily across its extensive dealership network where alignment of global operations and standardization processes possessed a significant challenge. The integration with new digital platforms and the provision of consistent data quality across regions introduced significant technical challenges. Overcoming organizational and cultural differences, as well as addressing varying levels of digital maturity, require strong leadership commitment and effective change management techniques.

To address these challenges. Toyota conducted a case study across its authorized dealerships in Indonesia, incorporating the SPICE-Automative process; Process Assessment Model (PAM). The methodology included data collection, sampling, and analysis methods, in addition, a questionnaire that reflected the COBIT 5 domain principles was produced and implemented across the prioritized Indonesian dealerships. emphasize on training programs was integrated to promote digital

literacy, governance awareness, and utilization of the COBIT 5 framework. The strategic approach domains Align, Plan, and Organize (APO) and Evaluate, Direct, and Monitor have supported the formulation of IT policies and aligned IT initiatives with business objectives, enabling better coordination between IT and other business units. Toyota also leveraged tools to monitor performance, ensure service consistency, and address operational issues quickly, keeping a smoother digital transformation and improved IT governance maturity.

How can strategic IT management contribute to sustainability goals in large enterprises?

Strategic IT management can significantly contribute to large enterprises' sustainability goals by enhancing resource efficiency, digital transparency, and resilience. In the context of COBIT 5 domains; Align, Plan, organize (APO) and Evaluate, Direct, Monitor (EDM) domains are focused on strategy and governance bringing strong capacity for aligning IT strategy with sustainability goals. This maturity enables enterprises to make data-driven decisions that optimise IT resource use, align business processes with company vision, reducing waste and promoting sustainability, reliability and ethical society practices. APO's strategic planning and IT resource management ensures IT projects are designed for efficiency, scalability and adaptability, supporting environmental regulations, reducing footprints and encouraging innovative service models. Mature IT governance facilitates transparency, policy compliance and monitoring, using the Monitor, Evaluate, and

Assess (MEA) domain, critical for achieving Environmental, Social, and Governance (ESG) objectives.

Conclusion

Toyota's adoption of modern digital frameworks like COBIT 5 demonstrates an interplay between traditional values such as the Kaizen philosophy and modern innovation. Toyota has successfully adopted a forward-thinking and modern business strategy, implementing COBIT 5 across dealerships to formalize IT governance, overcome challenges through data driven analysis and align IT strategy with broader organizational goals, including sustainability and operational efficiency. COBIT 5 maturity assessments revealed strong performance in strategic domains, highlighting Toyota's focus on governance and data-driven decision-making. In addition, Toyota has improved global supply chain practices, and environmental stewardship by embracing advanced and modern manufacturing and logistics practices in manufacturing, and the use of SPICE-Automotive process and alignment with the COBIT frameworks in the dealerships, demonstrates Toyota's dedication to effective business innovation, ethical methods, and modern IT management. Toyota's approach to transformation in diverse business areas demonstrates integration of traditional values with modern technology practices to create a resilient, competitive and responsible enterprise.

(Dauda, Duru, Olagoke, and Egbon, 2024)

(Kridiawan, Nugroho, Suroso, Kurniawan and Darmadi, 2024)

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