

2022

Information Technology Governance Mechanisms: Achieving Business-IT Alignment in a Local Government Agency

Ebony Lothery
Bowling Green State University, elother@bgsu.edu

Follow this and additional works at: https://scholarworks.bgsu.edu/graduate_student_pub

How does access to this work benefit you? Let us know!

Repository Citation

Lothery, Ebony, "Information Technology Governance Mechanisms: Achieving Business-IT Alignment in a Local Government Agency" (2022). *Graduate Student Publications*. 5.
https://scholarworks.bgsu.edu/graduate_student_pub/5

This Article is brought to you for free and open access by ScholarWorks@BGSU. It has been accepted for inclusion in Graduate Student Publications by an authorized administrator of ScholarWorks@BGSU.

“... more research is needed for IT and business stakeholders to better understand how to identify and correct Business-IT alignment and further define alignment through practice.”

Information Technology Governance Mechanisms

Achieving Business-IT Alignment in a Local Government Agency

By Ebony Lothery

Abstract

The misalignment between enterprise IT solutions and an organization's business objectives is a concern in most organizations, including local government. Some organizations implement IT governance to align IT and the business and to better manage IT investments and spending. This article uses a case study approach that employs the Capability Maturity Model Integration (CCMI) to explore the initiatives taken by a local government agency with a focus on the alignment of IT projects with strategic business objectives and how it might continue to achieve alignment and optimize IT spending on strategic priorities. This agency is at the beginning stages and is developing structures, processes, and relational mechanisms to ensure IT projects align with strategic business objectives.

Keywords: business-IT alignment, IT governance, strategy alignment

The misalignment between Information Technology (IT) and the organization's business objectives is a growing concern in many organizations and has been a top concern of IT managers for almost 30 years. Aligning information systems to the organizational strategic goals is challenging due to business dynamics and organizational complexities (El-Telbany & Elragal, 2014, p. 250). In some cases, business executives lack a full understanding of IT's role and have minimal visibility into their IT investments (Maizlish & Handler, 2005, p. 1). Business-IT alignment focuses on the strategic direction and alignment of IT and the business for services and projects (Wasiuk & Lim, 2021, p. 2). In many conversations defining key business strategies and initiatives, there is an underdeveloped understanding of the business needs and the value that IT brings.

Business-IT alignment involves the correlation between business objectives

and the IT requirements of an organization. It can be defined as a dynamic state when business effectively uses IT to achieve overall business objectives (Disanayake, 2012, p. 3). Much of the literature on business-IT alignment remains theoretical and does not address how organizations achieve alignment in practice (El-Telbany & Elragal, 2014, p. 251; Jonathan, 2018), and more research is needed for IT and business stakeholders to better understand how to identify and correct business-IT alignment and further define alignment through practice.

This article uses a case study approach that employs the Capability Maturity Model Integration (CCMI) to explore the initiatives taken by a local government agency with a focus on the alignment of IT projects with strategic business objectives. Early results of this initiative have already provided useful insights into a local government agency's experience.

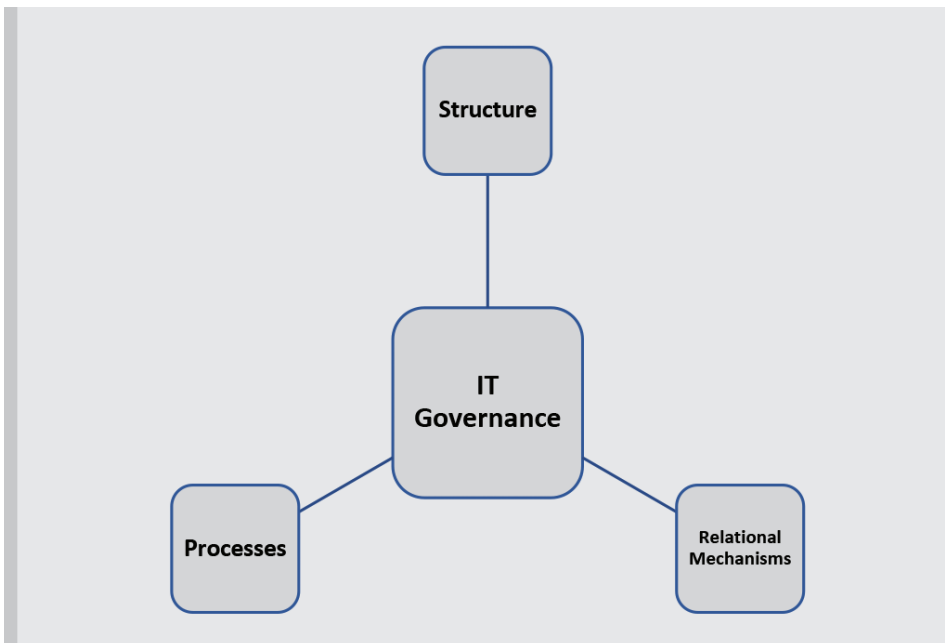


Figure 1. IT Governance Mechanisms: Structure, Processes, and Relational Mechanisms. (From De Haes, Van Grembergen, Joshi, & Huygh, 2020)

What is IT Governance?

IT governance is evolving, leading to various definitions of IT governance in the IT literature. Enterprise Governance of IT (EGIT) is defined as an integral part of corporate governance that involves the definition and implementation of processes, structures, and relational mechanisms, such as communication and announcements, that enable both business and IT stakeholders to execute their responsibilities in support of business-IT alignment and to create and protect IT business value (De Haes, Van Grembergen, Joshi, & Huygh, 2020, p. 24). In promoting the intellectual dimensions of IT strategic alignment, IT governance structures, processes, and communications provide an institutionalized context that enables shared understanding between corporate-level business, IT executives, and the top management team (Wu, Straub, & Liang, 2015, p. 504).

De Haes and Van Grembergen (2004) argued that implementing good IT governance requires designing and implementing a combination of structures, processes, and relational mechanisms that are contingent upon internal and external factors. As depicted in Figure 1, the combination of these mechanisms promotes an effective and efficient IT governance program and

enables a better understanding of IT governance for organizational leaders.

Structures. The structure consists of organizational units and roles that are responsible for making IT decisions, and it serves to engage IT and business leaders in the governance process (Weill & Ross, 2004, p. 86). The organization units that comprise the structure include the Chief Information Officer (CIO), IT Strategy committee, and IT steering committee (De Haes & Van Grembergen, 2004, p. 2). Weill and Ross (2004) considered structure to be the most important predictor of whether an organization will derive value from IT (p. 86).

Processes. The process is fundamental to enabling IT and business leaders to engage with each other and the enterprise-wide IT governance policies. Process alignment is a formal process to ensure that daily behaviors are consistent with IT policies and provide input into decisions (Weill & Ross, 2004, p. 86). This includes practices and routines used to manage people and groups within the organization.

Relational Mechanisms. The relational mechanisms are intended for shared information and enable business-IT participation, strategic dialogue, shared learning, and proper communication (De Haes & Van Grembergen, IT Governance and Its Mechanisms, 2004, p. 6). It is suggested that ongoing knowledge sharing across departments and organizations is paramount for attaining and sustaining business-IT alignment.

Stepping into Alignment

The Capability Maturity Model Integration (CCMI) was used by the IT Director and City Manager's Office to assess the alignment between IT and the business objectives. This model, which is a method of scoring that enables the organization to grade itself from non-existent (0) to optimized (5), was used for optimizing process development and improvement. It offers easily understood ways to determine both the "as-is" and the "to-be" (according to enterprise strategy) state and enables the organization to benchmark itself against best practices and standard guidelines (De Haes, Van Grembergen, Joshi, & Huygh, 2020). Maturity models can be a common language for organizations to use in understanding their implementation of IT and business objectives. They also guide the creation of gap analysis and road maps for improvement (Gorgona, 2021). Figure 2 (next page) depicts the Capability Level for Processes and guides the assessment of process implementation and performance.

The local government agency's current maturity level was rated level 1—an initial/ad hoc state. "Governance is difficult to initiate, and the central IT organization and business units may even have an adversarial relationship. The organization is trying to increase trust between IT and the business, and there are normally periodic joint meetings to review operational issues and new projects. Upper management is involved only when there are major problems or successes" (De Haes & Van Grembergen, IT Governance and Its Mechanisms, 2004, p. 5).

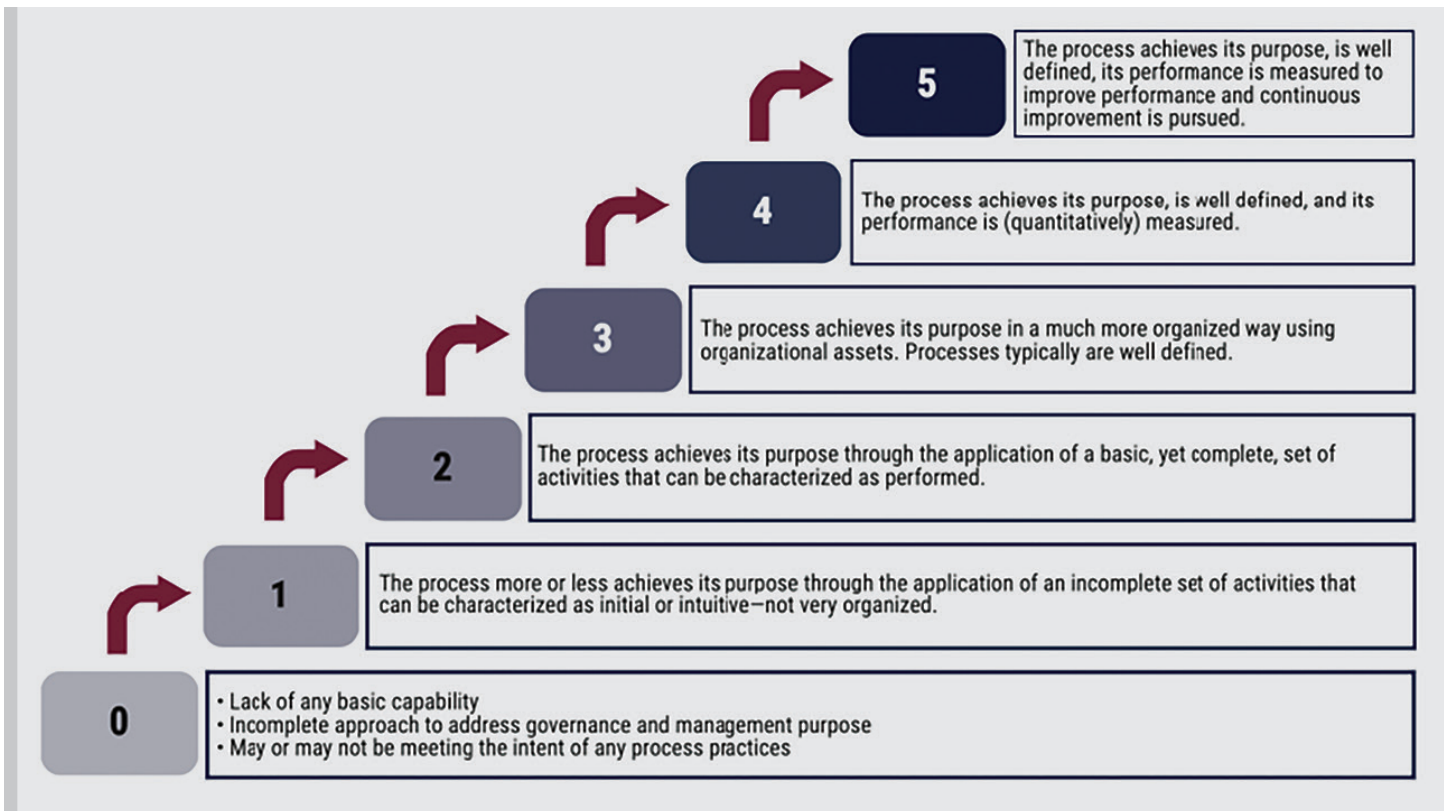


Figure 2. Capability Level for Processes

A lack of oversight of IT activities in the local government agency had led to disparate systems or departments implementing different solutions of the same software platforms. It also caused the procurement department to manage multiple contracts from the same vendor. Some of the newly purchased software did not meet the security requirements as outlined by the governing IT department or was not compatible or interoperable with existing infrastructure.

This situation did not meet the IT governance team’s goals of ensuring that the IT solution portfolio across the local government agency remain manageable, supportable, and cost-efficient and to reduce silos where possible. The recommendation for the future states of structure, process, and relational mechanisms are realistic examples of what can be realized at a maturity level of 3. At that level, the agency would see that “the IT Steering committee is formalized and operational, with defined participation and responsibilities agreed to by all stakeholders. The governance charter and policy are also formalized and documented. The governance organization beyond the IT steering committee is established and staffed” (De Haes & Van

Grembergen, *IT Governance and Its Mechanisms*, 2004, p. 7). Most organizations never reach level 5.

Renewed IT Governance Initiative in a Local Government Agency

As a member of that agency’s IT governance team, I became involved in a renewed IT governance initiative that was being led by the agency’s governing IT Department. The desired results of this renewed initiative would be for the team to make informed decisions as quickly as possible that align with goals and objectives to meet the agency’s growing needs. The IT Department’s goals include the value, alignment, effectiveness, security, and support of technology solutions.

The immediate next step following a maturity assessment of the structures, processes, and relational mechanisms is to identify specific actions that would move to a higher level. A qualitative study that includes structured interviews or surveys with the IT Director, Assistant City Manager, Purchasing Director, and other members of city leadership can help identify factors that could contribute to the misalignment between IT and the business.

The result would provide more information on where the agency should focus its effort in the alignment process.

Structure

Structure Current State

The current structure consists of a newly comprised executive board, the Executive IT Leadership (EITL) committee, chaired by the IT Director of the local government agency. Voting members of the committee include an Assistant City Manager, Director of Procurement, Director of Performance and Data Analytics, Budget Director, the Graphical Information Systems Officer, and a Law Department designee. This committee is the decision-making authority and provides oversight for all agency IT activities, legislates technology-related policies used throughout the agency, and reviews and evaluates IT capital requests and city-wide IT expenditures. The committee meets monthly, and its mission is to enable the organization to better achieve its IT goals aligned with the administration’s vision.

The Enterprise Technical Review Team, led by the IT Director, consists of individuals from the IT department and

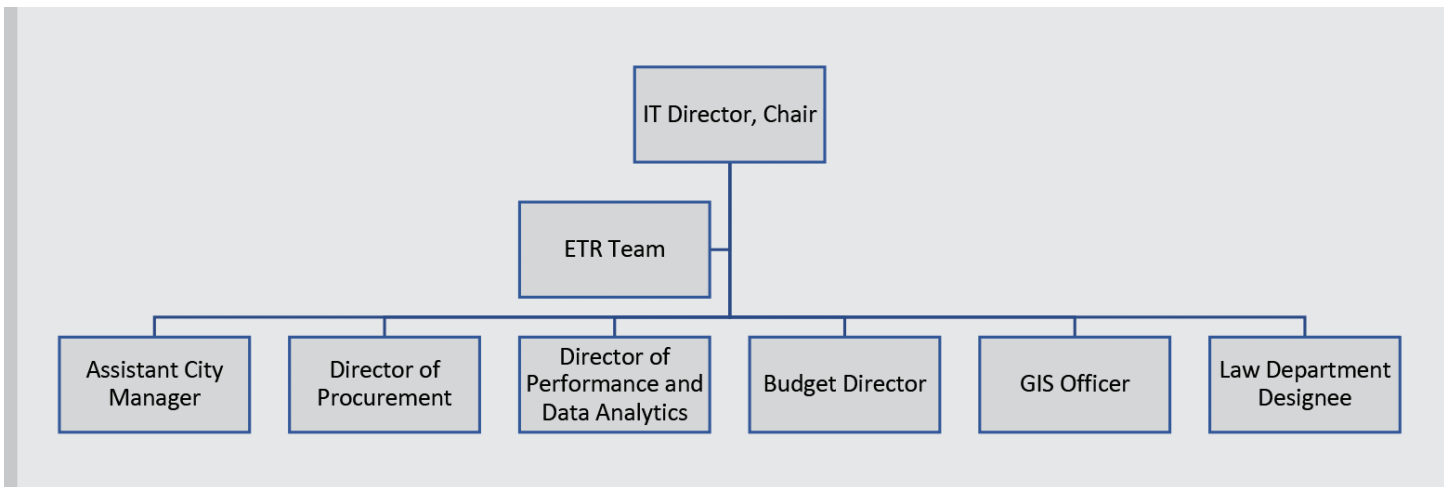


Figure 3. Current Executive IT Leadership (EITL) Committee Structure at a Local Government Agency

serves as a resource to the EITL to review all submitted IT-related purchase requests or proposed projects. This team meets weekly to do a preliminary assessment to determine if an existing system can be leveraged, can be developed in-house, or if an RFP needs to be generated. Figure 3 illustrates the EITL committee structure.

Structure Future State

In this case, the local government agency had formalized the EITL as the decision-making authority, however, work remained for roles and responsibilities to be clearly defined and for the documentation and adoption of IT policies across the organization.

While the Executive IT Leadership (EITL) committee as the decision-making authority remained in place, a new IT decision-making group, the IT Steering committee, would be formed to help vet new IT initiatives. This committee would consist of IT Managers attached to other departments within the agency and not in the central IT Department. These managers would be integrated into the governance structure to assist with IT strategy, help manage the IT portfolio, and aid in the preliminary assessment of requests before EITL approval.

Leaders on the EITL would identify and analyze factors that contribute to misalignments that can be viewed as symptoms that inhibit organizations from optimizing and achieving their full potential (El-Telbany, Elragal, 2014). And the agency would need to focus on understanding the symptoms and work

towards managing them in order to achieve alignment.

Process

Process Current State

The local government agency had recently developed a process for vetting IT purchases and services that required all departments to submit a formal IT purchase request or project proposal form. The request is then evaluated by the Enterprise Technical Review (ETR) Team. If it is deemed to be suitable for review by the EITL, the ETR Team will submit the request to the Budget office to determine if funds are available for the request. If the funds are available, the ETR Team prepares the request to make a formal recommendation to the EITL for approval or rejection, depending on whether the request aligns with the strategic business objective of the local government agency.

A complication for this process is the IT Department's lack of formal policies and procedures. In addition, the administrative regulations, which are intended to communicate administrative policies affecting all local government agency departments for IT, were outdated or not being followed. In the absence of updated IT governance guidance and support, business units have handled their own purchases resulting in costly and unmanageable redundancies.

The administrative regulations for IT service delivery, standardization, and optimization are being revised as IT governance policy surrounding IT purchases.

Process Future State

In a desired future state, IT governance would advise IT purchasers by not only taking their specific needs into account but also from a perspective of developing integrated solutions.

IT governance would be involved in the process of deciding new IT initiatives to ensure that the business need can be met while maintaining an IT portfolio that is manageable and supportable. IT governance would also assure that one system is used across the enterprise. For example, there would be only one asset management system instead of four. There would be one time-reporting system instead of five. There would be one learning management system instead of five. This would save the agency a considerable amount of money.

Relational Mechanism

Relational Mechanism Current State

Judging from the perspective of Group Dynamics, the EITL committee is in the storming phase, meaning there might be some conflict or struggle in figuring out how to work together to achieve business-IT alignment (Tuckman, 2001, p. 66). IT and the business need to understand the practices and goals of the other function. An exchange based on familiarity with the other ideas, knowledge, and information between IT and business organizations enables both to understand the strategies and plans clearly and is needed to achieve alignment (Luftman, Dorociak, Kempaiah, & Rigoni, 2008, p. 3).

Relational Mechanism Future State

With improved communications between IT and business, IT governance would be integrated into the initial phases of planning, with involvement in departmental strategies to coordinate IT projects and participate in project idea generation, instead of coming in at the implementation phase. IT subject matter experts would be consulted on new IT project initiatives and all IT purchases would be reviewed by the governing IT department and approved before entering the enterprise financial system to be purchased.

A new dedicated role combining technical, organizational, and people skills would be responsible for developing portfolio, program, and project management governance practices, including associated methodologies, tools, and reports. This person would also be responsible for coaching and collaborating with department directors to boost awareness and adherence to newly developed governance.

Conclusion

This article illustrated how a local government agency might initiate IT governance using structures, processes, and relational mechanisms. With this contribution, this article aims to guide practitioners on how IT governance initiatives can be applied in practice. As a result of using organization development and IT governance frameworks, city leaders and IT will be able to collaborate and execute the goals and objectives of the city and understand the importance that IT plays while driving alignment.

References

- De Haes, S., & Van Grembergen, W. (2004). IT governance and its mechanisms. *Information Systems Control Journal*, 1, 7.
- De Haes, S., Van Grembergen, W., Joshi, A., & Huygh, T. (2020). *Enterprise governance of information technology: achieving alignment and value in digital organization*. Springer.
- Dissanayake, A. (2012, October). What is IT-business alignment? Retrieved from Pink Elephant: www.pinkelephant.com
- El-Telbany, O., & Elragal, A. (2014). Business-Information system strategies: A focus on misalignment. *Procedia Technology*, 250–262.
- Gorgona, L. (2021, December 28). *Building a maturity model for COBIT 2019 based on CMMI*. Retrieved from isaca.org: <https://www.isaca.org/resources/isaca-journal/issues/2021/volume-6/building-a-maturity-model-for-cobit-2019-based-on-cmmi>
- Jonathan, G. M. (2018). Influence of organizational structure on business-IT alignment: What we do (not) know. *17th International Conference Perspective in Business Informatics Research (BIR 2018)*, 375–386.
- Luftman, J., Dorociak, J., Kempaiah, R., & Rigoni, E. H. (2008). Strategic alignment maturity: As structural equation model validation. *AMCIS 2008 Proceedings*, 53.
- Maizlish, B., & Handler, R. (2005). *IT portfolio management step-by-step: Unlocking the business value of technology*. John Wiley & Sons, Inc.
- Tuckman, B. W. (2001). Developmental sequence in small groups. *Group Facilitation*(3), 66.
- Wasiuk, T., & Lim, F. P. (2021). Factors influencing business IT alignment. *International Journal of Smart Business and Technology*, 9(1), 1–12.
- Weill, P., & Ross, J. W. (2004). *IT governance: How top performers manage IT decision rights for superior results*. Harvard Business School Press.
- Wu, S. P.-K., Straub, D. W., & Liang, T.-P. (2015). How Information Technology Governance Mechanisms and Strategic Alignment Influence Organizational Performance; Insights From a Matched Survey of Business and IT Managers. *MIS Quarterly*, 497–518.

Ebony Lothery's background is in information technology, and she has over 15 years of experience in an IT capacity, including IT Governance, System Administration, and Process Improvement. Ebony is a Doctoral Student at Bowling Green State University in the Organization Development and Change program. She has a passion for excellence and likes stepping outside her comfort zone and taking on more significant challenges and responsibilities. She holds two MS degrees from Northern Kentucky University in Business Information and Executive Leadership and Organizational Change. She graduated from Xavier University in Cincinnati, Ohio, with a BS in Business Administration focusing on Information Systems. She is employed at a city government agency, taking on an IT governance role. She is also a part-time lecturer at Northern Kentucky University. In her non-work time, she likes to travel. She can be reached at elother@bgsu.edu.

Copyright of Organization Development Review is the property of Organization Development Network and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.