

**Development of a Reference Model for an IT Governance
Implementation Using COBIT and Val IT**

Bachelorarbeit

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1. Introduction -Research Question and Motivation of the Thesis

The improvement of Corporate Governance is the result of requests by enterprise's stakeholders and public expectations.¹ In addition, the legislator in Germany commits the organizations to deliver a statement of the Corporate Governance Codex.² An enterprise has to achieve the rules of the codex, for instance, an internal control framework has to be implemented. Because of the extensive integration of IT in an internal control framework, it is necessary to implement a Corporate Governance of IT.³ New regulatory requirements like the Sarbanes-Oxley Act are also drivers for the implementation of an IT governance approach.⁴ Furthermore, the alignment of the IT goals to the business goals is very important for the management to reach strategic objectives. Consequently, an effective and efficient IT governance approach has to be implemented. Another origin of the IT governance implementation is the reuniting of IT processes in international corporations. In this connection a corporation has to find a way between centralization and a decentralized IT organization.⁵ A possible solution for this problem is a joint IT Governance implementation. Altogether the development in the information technology is very rapid and out of this there is a constant change in possible IT resources and an organization has to decide continuously which resources are effective and efficient to achieve the business objectives. Hence, there have to be processes in place, to manage the strategic and operational IT decisions. Moreover, the question of the "IT productivity paradox" is a supporting point for an IT governance approach. This paradox describes the problem that, in general, it is very difficult to measure the business value of IT investments.⁶ This is a fundamental problem, because the expected value of an investment is critical for the investment decision. On the basis of limited financial resources it is very important to estimate the benefit of an IT investment. In appreciation of this background knowledge, the implementation of an IT governance approach becomes essential because it helps to ensure the business value of IT investments. Overall, several frameworks and models for an IT governance implementation exist and describe the main processes which have to be implemented. In this thesis especially the

CobiT and the Val IT Framework will be examined and used for the development of a reference model for an IT governance implementation. CobiT is an extensive Framework, providing best practices of IT processes, based on business objectives. Whereas, the Val IT Framework presents processes for the value management of IT investments, integrated in business processes.⁷ Both frameworks complement each other and supply a structural approach for IT governance. The **research question** for this thesis is: What are the necessary steps to implement an effective and efficient IT-Governance? And how important are the development of a reference model and the integration of a value governance model to achieve a business value improvement in practice?

5. Conclusion and Outlook

The reply to the research questions is represented by the developed model for an IT governance implementation. This reference model includes the main steps for an IT governance implementation discovered in the literature review and by conducting interviews with experts. It offers an integral approach including the elements of the exterior and interior circle, which tangent each IT governance implementation step (See figure 9). The exterior circle contains “Business Objectives”, “IT Objectives”, “Management” and “Governance Program” as the foundation for the full implementation process. Furthermore, the interior circle presenting “Value Governance” replenishes the model with the business value view. Then, the implementation steps “Analyze actual Processes”, “Identify Improvements and Needs”, “Select CobiT/ Val IT Processes for Improvement”, “Adjustment to Organization Requirements”, “Implementation of IT Governance Processes” and “Operating” are identified by the literature review and the experience of experts. Thus, the reference model presents an open approach for an IT governance implementation which has to be broken down and adjusted for an individual organization. The “Value Governance” component reflects the discussion in science and in practice. The experts and the research seem to be disputed whether a sustainable business value and comparative advantage is able to be generated, deduced by more than the reduction of costs. Hence, this model presents the “Value Governance” as an extensive and open component, which can be designed individually. Altogether, the developed reference model is not evaluated by a validation; it, rather, should be a contribution to the scientific discussion. The CobiT framework, being the foundation of the reference model of this thesis, has its origin within the IT audit sector. Initially, the first versions of CobiT define control objectives which are essential for the IT assurance. Then, new versions are replenished with the integration of IT Management methods. Especially, addition publications of the ITGI and the ISACA support the capability of CobiT to be a framework for an IT governance implementation.⁹⁶ In this context, Val IT (analyzed in this thesis) and Risk IT are further frameworks developed by the ITGI, supporting the IT governance approach. With this background the ITGI will publish a new version of CobiT in 2012, named “CobiT 5”, which exposure draft is presented in 2011. A main objective of this new version is the integration of the three existing frameworks into one single framework.⁹⁷

⁹⁶ Cf. Johannsen, Goeken 2011, p. 42 ⁹⁷ Cf. Gaulke, Goeken 2011, p. 15

The reference model developed in this thesis supports this approach. Another point of “CobiT 5” is the more strict distinction between Governance and Management. Furthermore, the capability to adopt CobiT should be improved for organizations. As the center part of “CobiT 5”, the ITGI describes the generation of a business value with the assistance of a Value and a Resource Model.⁹⁸ Thus, “CobiT 5” also focuses the business value view, which is still the challenge for the future. The research has to be concentrated on the measurement of business value as a part of IT governance. The development of an IT governance model with an efficient performance measurement and a quantification of a business value should be the main contract for further researchs, because a convincing model for a business value would be a strong trigger for IT Governance optimization in organizations.

⁹⁸ Cf. Gaulke, Goeken 2011, p. 17