Business Strategy and Applications in Enterprise IT Governance

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Enterprise governance of IT is a relatively new concept in literature, and is gaining more interest in the academic and practitioner’s world. Enterprise governance of IT addresses the definition and implementation of processes, structures and relational mechanisms that enable both business and IT people to execute their responsibilities in support of business/IT alignment and the creation of value from IT-enabled business investments. This article introduces important theories and practices around Enterprise Governance of IT based on joint research and practical experience of the authors (and editors-in-chief of this journal) within the Information Technology Alignment and Governance (ITAG) Research Institute (University of Antwerp Management School). The article is based on the authors’ 8-year journey into Enterprise Governance of IT and aims to outline the core themes of interest of this new International Journal on IT/Business Alignment and Governance. In this way, this introductory article paves the way for many more research initiatives within this challenging research domain.

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Enterprise governance of IT (EGIT) is about the definition and implementation of processes, structures and relational mechanisms that enable both business and IT people to execute their responsibilities in support of business/IT alignment and the creation of business value from IT-enabled business investments. In this field, practice-oriented guidance like COBIT and Val IT are often promoted as broad frameworks to implement enterprise governance of IT, but very little academic research is available that empirically supports the assumption that implementing EGIT practices, as defined by COBIT and Val IT, improve business performance. This article explores the relationship between Enterprise Governance of IT practices and business performance, and finds little support to identify a direct link between EGIT practices and business performance. However, clear empirical evidence is revealed demonstrating that the implementation of EGIT practices impacts the achievement of specific IT goals, which in turn impacts the achievement of specific business goals. A three-layered cascade is proposed to demonstrate the impact of EGIT practices, through IT goals, on business performance.
Chapter 3
Linking the Strategic Importance of ICT with Investment in Business-ICT Alignment:
An Explorative Framework

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In this article, we introduce a framework that can be used by organizations as a positioning instrument to think of business-ICT alignment decisions in light of the strategic importance of ICT (Information and Communication Technology) in their organization. We make a distinction between organizations where ICT is of high strategic importance and those where ICT is of low strategic importance. Based on this difference we argue that heavily investing in business-ICT alignment processes, structures and roles (PSRs) will not necessarily always be beneficial when ICT is of low strategic importance to the business. Furthermore, organizations that have a minimalist approach to the use of ICT do not necessarily need to invest in business-ICT alignment PSRs. We explain the dynamics and possible migration scenarios of our proposed framework after testing the statistical significance of the relationship between the strategic importance of ICT and the investment in business-ICT alignment. We end this article with a short empirical study which combines survey and case study results. Both the framework and framework dynamics still need further empirical validation, preferably with longitudinal data. Therefore, we stress and acknowledge that many of the discussions in this article are still explorative in nature. However, this article illustrates the possibilities and the need for a more fine-grained approach to business-ICT alignment.

Chapter 4
Structuring SOA Governance

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Companies’ IT Systems are confronted with constantly changing market conditions, new competitive threats and a growing number of legal regulations. The service-oriented architecture (SOA) paradigm provides a promising way to address these challenges at the level of a company’s IT infrastructure. These challenges, as well as the management of the newly introduced complexity and heterogeneity, are targeted by SOA Governance approaches. In recent years, a number of concrete frameworks for SOA Governance addressing these issues have been proposed. There is no holistic approach considering all proposed elements, consolidating them in order to form a universally applicable model. In this contribution, we motivate SOA Governance, investigate and compare different approaches, identify common concepts, and derive a generic model for governance of Service-oriented Architectures.

Chapter 5
Professional Analysts and the Ongoing Construction of IT Governance

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This article addresses the role of the professional analysts as actors within the field of IT Governance. Through a content analysis of over 400 reports from the largest commercial research firm, instances of normative statements are identified and analyzed. With the intended target group of the reports being
Chief Information Officers, the findings show that the content of IT Governance has changed during the last three years. This is discussed in relation to the role that professional analysts play in an ongoing construction of IT Governance. The article concludes by identifying possible risks and benefits involved in using professional analysts as sources for best-practice, as well as calling for a more practice-based definition of IT Governance.

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Aligning Information Technology (IT) and business has been a persistent and pervasive problem for over three decades. Studies show that one of the essential components for organizations seeking to improve their alignment maturity is IT Governance. This paper demonstrates the relationship between IT Governance and business performance. The Strategic Alignment Maturity Assessment (SAM) framework is applied as the foundation for relating IT Governance to company performance and to overall alignment maturity. Based on this research model, IT strategic planning, IT budgeting, and IT reaction capacity demonstrate strong contribution to the overall IT Governance maturity score. Furthermore, IT Governance has a significant impact on company performance. Although these results underscore the importance of IT Governance in alignment maturity, there is no silver bullet and the other five SAM components (Communications, Value, Partnership, Technology Scope, and Skills) must also be addressed.

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A key success factor for a successful company in a dynamic environment is effective and efficient information technology (IT) supporting business strategies and processes. Organizations that successfully align their business strategy and their IT strategy outperform their non-aligned peers (Chan et al., 1997). In recent surveys IT executives consistently name IT to Business alignment their top-concern. The alignment between business needs and IT capabilities is therefore still a prominent area of concern. This paper aims to contribute to the understanding of the alignment challenge by exploring the impact of (national) cultures on the maturity of Business / IT alignment (BIA). The paper relies on Hofstede's framework of cultural dimensions (Hofstede, 1980) to understand the concept of national culture. After a brief introduction on BIA and Luftman's framework for measuring BIA maturity (Luftman, 2000), the authors analyze the influence of Hofstede's cultural dimensions on the variables of BIA maturity. This conceptual exercise is then tested in a small-scale empirical exploration by comparing BIA maturity scores of Belgium and Dutch financial institutions. The results support a potential effect of national cultures on BIA maturity, especially in 'governance maturity' and 'skills maturity', but not all expected results are confirmed.

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In today’s complex and constantly changing business world, business/IT alignment is high on the agenda of executive management. To achieve such alignment, it is important that an organization should have a clearly established corporate mission and a well-defined support strategy and business goals. Furthermore, the translation into and linkage with the company’s IT strategy and goals must be carefully planned. However, these requirements appear to be rather difficult to meet in reality, so that companies must often look for additional practical guidance in identifying their principal business and IT goals, as well as in determining how these should be geared to one another. Therefore, a series of research steps has been designed for the purpose of providing pragmatic assistance in defining a cascade of business goals and supporting IT goals. This paper presents the results of a Delphi study conducted in the financial sector. It offers qualitative information on how to establish a firm set of business objectives, IT goals and their interrelationships. In addition, it provides some recommendations on how to adapt and fine-tune the proposed procedure with a view to either complementing the results or replicating them for other sectors of industry.

Chapter 9
Aligning IT/IS with Business Strategy Re-Visited: A View from Complex Adaptive Systems
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This paper explores the co-relational process activities of information technology and systems (IT/IS) and business strategy alignment. The notion of “process” as being strategy and strategic alignment has been observed but not examined. Organizations are both complex and adaptive, and these attributes create significant challenges for managers when assessing strategic requirements. A need exists to further understand alignment as a process and embrace this concept when aligning business IT/IS with the strategic goals of the organisation. This highlights an important distinction of “process” that recasts the nature of congruence and reassesses the appropriateness and usefulness of current practice. The authors propose the use of principles underpinning complex adaptive systems as a way to re-orientate IT/IS alignment in a meaningful and more appropriate manner. The context for the study is the UK Health Service, and informed by a case analysis of 26 senior members from a Scottish Health Board.

Chapter 10
The Viable Governance Model: A Theoretical Model for the Corporate Governance of IT
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Empirical studies into the governance of Information Technology (IT) have advanced our understanding of the mechanisms used to control the management of IT. However, there has been relatively little research into the formulation of a theoretical model of IT governance that explains and organises the growing collection of mechanisms into a coherent whole. To further advance the concept of the corporate governance of IT, the Viable Governance Model (VGM) is proposed. The VGM is a theoretical model of governance based on the laws and principles of cybernetics as embodied in Stafford Beer’s Viable System Model (VSM). The VGM is used to formulate a series of design propositions or principles that may be used to guide the design and implementation of specific IT governance arrangements. The study draws on empirical studies or professional standards to establish how these theoretical design propositions may be satisfied in practice.

Chapter 11
A Conceptual Model for Aligning IT Valuation Methods
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The relationship between IT and value is complex and often disputed. Researchers and practitioners have created numerous models and valuation methods to capture this value. Although payoffs from IT investment are a function of strategic alignment, most of these models do not address the alignment of business and IT as a factor that influences or creates value. This paper explores the role of business and IT alignment in the valuation methods of IT assets and investments. It focuses on the impacts resulting from the use of IT assets, considering the function and nature of the impacts. It also explores the alignment of IT valuation and business strategy. The paper is concluded with the construction of a comprehensive selection model that provides guidance for aligning the IT valuation method with the specific characteristics, impacts and organizational context of an IT asset or investment.

Chapter 12
Improving the Organizational Integration of IT Governance Tools: An Explorative Study

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Why are many information technology (IT) governance software implementations challenged and what are the critical success factors (CSFs) for the rollouts? This question has recently gained importance, as IT governance is high on the corporate agenda and software tools have become available that promise to enforce and streamline IT governance mechanisms. However, early research has shown some of the difficulties surrounding the implementations of these applications. This article presents and discusses several implementation case studies based on a comprehensive research framework, and concludes with a discussion of implementation practices. Three major factors can overcome most common failure points: careful project planning, top management support, and tight organizational integration.

Chapter 13
The Adoption of Open Source Desktop Software: A Qualitative Study of Belgian Organizations

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More organizations are currently migrating toward open source desktop software (OSDS). However, such migration is complex. More insight into the process will assist decision makers in making a well-informed decision on whether or not to migrate to OSDS and in building a strong business case to support this decision. In this paper, the authors present the results of a qualitative study in seven Belgian organizations and report on why these organizations have adopted OSDS and how the migration was undertaken. These cases represent challenging adoptions of OSDS. Results indicate that providing added value for users can positively influence user perceptions. In addition, the authors found strong empirical support for the guidelines with respect to the migration to OSDS that have been proposed in academic literature.

Chapter 14
A Research Journey into Maturing the Business Information Security of Mid Market Organizations

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Most information security methodologies are aimed at large enterprise organizations with a top-down structure, while relatively smaller organizations have insufficient knowledge to adopt this methodology. Most of the frameworks used by enterprises focus on high-level policy-making and the overwhelming amount of controls might suffocate practitioners in smaller organizations. This article examines
the results of an exploratory study, performed in the Netherlands in Q1 & Q2 of 2010. The study used expert panel research followed by a survey. The research found essential interventions to easily and effectively increase security maturity for mid-market organizations. The research also found barriers for not implementing these interventions by the midmarket. This paper provides a minimum core set of practices for organizations. It shows that mid-market organizations struggle with implementing relevant interventions. This research contributes a new pragmatic approach to assist mid-market organizations' practitioners with more guidance on how to effectively establish the desired state of security maturity.

Chapter 15
Detection of Strategies in IT Organizations through an Integrated IT Compliance Model

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In the past few years, many frameworks and standards have been developed to cover different aspects of IT to provide best practices, such as COBIT, ITIL, CMMI, ISO/IEC 20000, ISO/IEC 38500 and ISO/IEC 27000, and improve IT governance and IT service management in organizations. This research presents how self-assessments for IT standards improve significantly the strategic and tactical evaluation of IT requirements. Self-assessments measure the state of an organization in relation to experts' recommendations of a specific framework. As a result of the number and excellence of the current standards, the authors propose a Compliance Model (MOPLACO) that uses, as a starting point, a combination of self-assessments and standards to plan the early strategic and tactical stages of the IT departments.

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About the Contributors

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