Preface

Why does it seem like every time I pick up a magazine or journal today, there is a leading story on the subject of very large IT projects (VLITP)? The subject of governments and multinationals trying, often miserably, to implement VLITPs has grown in both popularity and application. The academic community has also seemingly jumped onto this bandwagon with journals and conference papers (reporting justifications for VLITPs, quality management in VLITPs implementation, human resources management during VLITPs implementation, social and economical issues within VLITPs, amongst others). Regardless of what these papers and the popular press say about VLITPs, the final results appear to have similar emphasis. This book takes a cross-disciplinary and cross-functional approach towards VLITP implementation, enabling it to address the needs of the host organization. This includes aligning customer needs with business objectives to eliminate waste and increase costs, and to reduce cycle time, thereby driving the improvement objectives of VLITPs towards productivity that provides an opportunity to achieve the business goals—of both profitable revenue grown and market share expansion—for the host organization.

That VLITPs are beginning to play an increasingly central role in employment affairs; this is broadly acknowledged. Academicians in the 21st century are confronted with an entirely new challenge—to deliver a technologically-based alteration in cultural life, that is so rapid and all encompassing. Disappearing is the luxury of looking backward to understand the present, or even surveying the current terrain for a significant pattern. So variegated, chaotic, and rapidly proliferating are the changes in business culture that working practices can be little encompassed through rationally coherent analysis. The many attempts by VLITPs to change the way our world works, demonstrate that any analysis that is not already extended into the future is threatened with obsolescence at its moment of crystallization.

This book is different from the previous writings on the subject of project management primarily because it concentrates only on VLITPs. Moreover, it takes a more systemic or holistic organizational view by merging the contributions of all VLITP management issues into a single, unified approach to deliver breakthrough business process change as a result of implementing VLITPs.

In such spirit, the book offers several socio-technological arguments by both framing a single form of technological change as a result of implement VLITPs, and considering its implications for business practices in general and the management ethos in particular. It also proposes that by virtue of a confluence of VLITP emerging within this period of Internet age, businesses are immersed in a cacophony of competing claims for the real and good value of such technologies. In effect, there is a profound relativization of reality. With these conjectures in place, the book partly contributes to the concept of knowledge as a relational by-product, and to examine the implications of this view for the VLITPs as a pedagogical project in today's business environment. The author has argued that a transformation in the conception of knowledge heralds a radical reorientation to the strategic management of business processes through VLITPs. The book strongly suggests that this reorientation is already manifested, and it is anticipated that the present account may sharpen deliberation on the future directions of organizations efforts to manage VLITPs more successfully. In effect, this may be viewed as a transitional analysis, to be variously appropriated or refuted as VLITPs shape the future of innovation in different types of organizations and industries.

IMPACT

Traditionally, project managers have been allocated a project and their role has been to deliver on time, the quality standards and within budget (Youker, 1989). The host organization only recognizes the project outcome once the project is delivered—often leaving a gap between expectation and the final product. As the total budget of VLITP increases to uncontrollable amounts, project management's role is now changing and the total impact on the business needs to be addressed more effectively. The true role of a VLITP manager today may include:

- Acting as an orchestral conductor (which often requires demonstrating to the host organization an understanding of the VLITP's short, medium, and long-term objectives.
- Translating VLITP objectives into a something which the project team can satisfactorily address.

- Receiving from the many sub-projects a specification of the work to be undertaken, with the intention of selling its value to the host organization.
- Ensuring the host organization does not believe the VLITP can solve all their business problems.

Today, not only do most VLITP managers submit to the harsh logic of technical excellence for the final outcome, but also that the strategies for managing VLITP can be fundamentally redesigned to better serve the host organizations. That means a significant proportion of expectations, when evaluating the overall impact, should depend not primarily on technical innovations (Argarwal and Prasad, 1998) but also on concerns for fundamental issues like social philosophy (Wideman, 1998), the neutrality of technology (Mochal, 2003), and the related theory of technological determinism (Patzak, 1990).

If a VLITP delivers new technologies into an organization that is neutral, then its immense and often disturbing social and environmental impacts are accidental side effects of progress in the organization's business activities. This part of VLITP management functions deals with the current debate that polarizes around the question of whether the side effect of IS outweighs its benefits (Fish, 2002; Hagel, and Brown, 2001; Weill, 2004; Lacity, and Willcocks, 2006). Thus advocating the need to further progress in VLITP management strategies, claiming "strategic improvement" as an ally while the adversaries defend "business value" against emerging technologies and business process modernization as an environment wherein which the VLITP manager must strive to make a significant contribution. Some readers may consider impact factor—as explained in this section—to be a form of struggle for and against VLITPs that sometime do not seem to justify their apparent "colossal" budgets.

Critical Theory of IT rejects this observation and argues that the real issue is not the degree of improvements in IT *per se* but the variety of possible VLITP management strategies and the volume of IT projects among which businesses today must choose (Probert, 2002; Ray, 2001). IT is no more neutral than medieval cathedrals, but it embodies the values of a particular civilization and especially of its customary users, which rest their claims to hegemony on technical mastery. This book articulates and judges business values critique of VLITP. By so doing, the readers can grasp the outlines of another possible explanation for project management theories based on values to the host organization. This requires a different sort of thinking from the dominant technological rationality given to previous books on IT project management; a critical rationality capable of reflecting on the larger context of IT.

Throughout this book, it is shown that despite the support often voiced for staff participation in decision making when implementing VLITP, research provides no clear evidence that it results in higher productivity than management decision without

participation. As a result of participation in decision-making, more demands are made on management than the other forms of employee involvement used within VLITP (Rodrigues and Hickson, 1995).

Several sections of this book analyze the roles of management teams for VLITP. The author shows how they need to take a number of actions to improve the decision-making during project implementations. This process starts with clearly defined objectives for all sub-projects, setting boundaries for each project manager and helps to lessen the dangers of outdated management beliefs having an influence on decisions. In addition to this, all managers on a VLITP should recognize and be aware of the limitations that exist which could affect the freedom of decisions. These limitations often stem from the host organization's political and social background, competition and economic scarcities, or even subordinates' attitudes to a particular project manager (Chang, Jackson and Grover, 2002; Dyer and Singh, 1998; Fiedler, Grover and Teng, 1995). Probably the most important concern about decision making, as far as VLITP is concerned, is the analysis of decision making in project stages to ensure that the project management process has formulated the reasons for taking a particular decision when problems occur during project implementation. This requires not just analyzing the nature of the problem but also examining alternative solutions and their possible consequences on the overall project's objectives. The author addresses these issues from several different angles in the chapters that follow.

This book should appeal to both academics and practitioners interested in the effective management of VLITPs wherein businesses. It is embedded in nested, interdependent networks of technical projects details as well as project management strategies that seem to be causing more obstacles for the success of VLITP. To adequately deliver its value, the author has given a balance and breadth of coverage to the necessary organizational literature. As a book for academics with groundbreaking work, the theoretical efforts of this author may invoke rather strong reactions—both positive and negative—from project management and organizational scholars.

CHAPTERS REVIEW

The book consists of 15 chapters, divided in three sections, visually represented in Figure P.1. Section I is made up of the first four chapters which frames and summarizes the book's contributions (see Figure P.1). Chapter I sets out the structure of the book by clearly defining the scope of a VLITP. It identifies vital characteristics that distinguish a VLITP from other types of IT projects. Chapter II defines a number of IS theories and situates them in relation to other approaches to VLITP management before giving details for various sources of project management mean-
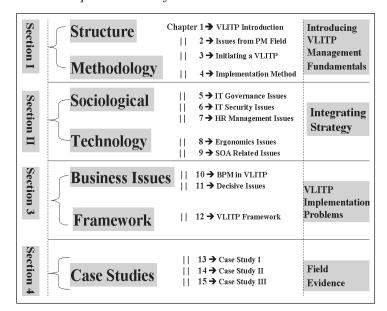
Figure P.1. A visual representation of the book structure

Section I	**Structure**
	Methodology
		Chapter 1 ➔ VLITP Introduction
		   || 2 ➔ Issues from PM Field
		   || 3 ➔ Initiating a VLITP
		   || 4 ➔ Implementation Method
			Introducing
			VLITP
			Management
			Fundamentals

Section II	**Sociological** **Technology**	|| 5 ➔ IT Governance Issues || 6 ➔ IT Security Issues || 7 ➔ HR Management Issues || 8 ➔ Ergonomics Issues || 9 ➔ SOA Related Issues	**Integrating** **Strategy**
Section 3	**Business Issues** **Framework**	|| 10 ➔ BPM in VLITP || 11 ➔ Decisive Issues || 12 ➔ VLITP Framework	**VLITP** **Implementation** **Problems**
Section 4	**Case Studies**	|| 13 ➔ Case Study I || 14 ➔ Case Study II || 15 ➔ Case Study III	**Field** **Evidence**

ings. The author argues here, that for all its insights in the 20th century, IS lacks a plausible strategy to change the way VLITP is managed. The historical experience of organizational improvement shows that businesses are not the primary agents of radical technological transformation, as Internet strategists believed (Guah and Currie, 2006). In Chapter III, the author establishes the value and reasoning behind the recent surge in implementing VLITP, while Chapter IV reviews various project management methodologies putting value to their significances for VLITP.

Section II consists of five chapters wherein various types of technologies involved in the implementation of VLITP and how the people that actually implement VLITP interact. These seemingly opposing factors of VLITP implementation are brought together in the discussion using management frameworks and principles that are formally developed and compared with conventional business management explanations for VLITP relative success or failure (see Figure P.1). Section II advances the on-going debate comparing relationship of human initiative to technical systems, both to general IT management and specifically to VLITP management situations. Since modernization of businesses is increasingly organized around VLITP, this relationship has become central to the exercise of management strategies.

Chapter V deals with recent improvements in IT Governance strategy, which can be used as strategic tools during VLITP implementation in the 21st century. It also investigates various IT control standards and provides evidence for their use

in a VLITP situation. Chapter VI reminds the reader of the most risky aspect of any VLITP: security. It narrates how paramount and relevant IT security is to the most important stakeholder in the entire process: the customer. Chapter VII is about the human resource issues in organizations that implement VLITP. Such issues affect the environment within which important decisions have to be made to manage VLITP successfully. Chapter VIII is devoted to the ergonomics of IT and other social pressures on VLITP. It explains how different challenges can be managed during the implementation of a VLITP. Section II ends with a chapter on SOA and suggests some strategies for managing resources during a VLITP. Chapter IX describes SOA as the latest emerging technology and shows how SOA as a methodology for VLITP management is actually a means that offers a new way to construct an organization's IT infrastructure. SOA ensures objectives are always connected to VLITP desired outcomes. As a new form of application integration, SOA does not integrate; and explains how the architecture is only an enabler. The technologies used in this architecture are the enablers, without which the organization is only left with a framework, but no integration model for its IT. All chapters in Section II give a number of problems in VLITP management for the purpose of understanding how each of these relates to organizational actions in relation to VLITP.

Section III provides an overview of critical business issues involved in VLITP management. This section begins with Chapter X explaining the process stages of business and issues surrounding change management during the VLITP implementation. Chapter XI combines the most striking problems that can easily lead to the dismantling of a VLITP team and even abandonment. These are the issues of outsourcing and escalation during a VLITP implementation process.

This book considers the larger cultural context of technological change through the implementation of VLITP. Too often IT and culture are rectified and opposed to each other in arguments about the "trade-offs" between efficiency and substantive goals such as speed of implementation or participation and job security for existing staff or even compatibility to existing systems (Gerowitz et al, 1996; Mark, 1991; Williams, Dobson and Walters, 1990). A better understanding of the relationship between VLITP objectives and the overall goals of the host organization dissolves these apparent contradictions in chapter formulation of a VLITP management framework in Chapter XII.

Section IV provides an overview of VLITP management with evidence obtained from three different VLITPs, relating them to the theories in this book (see Figure P.1). All three chapters (XIII through XV) offer a deeper analysis of the histories of the illustrated project. Each demonstrates how VLITP management practices and procedures can change in response to different kinds of challenges. Chapter XIII focuses on the strategic role of VLITP in giving values to healthcare sectors in the United Kingdom. The chapter gives the reader detailed processes underlying the

emergence and institutionalization of the stakeholder view. Chapter XIV focuses on the airline industry and similarly makes sense of the corporate strategies depicted in earlier chapters in light of the theoretical lens developed in Section I. Chapter XV highlights the descriptive and normative implications of this framework (see Chapter XII) to create value in VLITP implementation. It does this by detailing the implementation of OV-Chipcard in the Dutch public transport systems, where multiple companies collaborated in the implementation of a VLITP; forcing them to share costs and income from the final deliverable.

The book has been designed for use in a modular fashion. Students can refer to their syllabus and match certain chapters to the sequence presented in their specific syllabus. Practitioners, on the other hand, can also read it from start to finish and begin to experience the dynamics of the real world of management of VLITPs. Embedded in every chapter is a set of reflective questions to help readers link the theory with their own experience as well as examples and project situations, which runs throughout the book. Lecturers may find it useful for illustrating the key learning objectives in their syllabus.

The author's main objectives with this book are to update and extend the project management theory of IT, especially bringing VLITP management thoughts in line with current practices, and linking the theory to existing views of value creation and competitive advantage from new technology. To document current "best practices" in VLITP management, and how they were develop, the author has compiled an extensive case history on the largest non-military IT project by all conceivable standards:

- The National Health Services (provider of healthcare and services in the United Kingdom) national program for information technology currently referred to as the larges civil IT project, at the costs of US$ 10 billion (see Chapter XIII).

In making sense of this case, the author finds it helpful to draw on a wide range of organizational literatures (from IT governance to strategic business value). Particularly useful and central to this book, however, is a novel extension of recent work on VLITP implementation strategies with regards to service providers (Mark, 1991; Lacity and Willcocks, 2006; Williams, Dobson and Walters, 1990). The author highlights the instrumental and economic value of VLITP management in generating what could be business value from IT investment. Supported by the evidence from three cases, the author then details how and why business value from VLITP over the past two decades is reciprocally related to other forms of value being created by the host organizations for competitive advantage—such as the unique resource capabilities and industry-positioning advantages typically prescribed in the strategy literature.

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