Enhancing Enterprise Intelligence

Leveraging ERP, CRM, SCM, PLM, BPM, and BI

Vivek Kale



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To

Tanaya and Abhishek

at the start of the new chapter in their lives

Preface

As experiences with enterprise systems are being collated during the past decade or more across companies world-wide, the overall sense of elation has been missing. Despite hundreds of consultants working overtime to assuage the absence of unequivocal success of enterprise systems implementations, there is a distinct sense of puzzlement as to the real benefit of a decade-long investment into IT enablement of company operations and management.

There is no panacea for elevating or correcting the situation. One thing is clear, one cannot hope to gain much by merely migrating the traditional operations and processes to enterprise systems (ES). Traditional operations and systems are innately constrained by the limitations of manual operations and systems, consequently, migrating traditional operations and processes directly to ES pitches them at the lowest-end of the value-add spectrum. Migrating mundane operations and processes without optimization or re-design or re-engineering does not even begin to unleash the stupendous potential and power inherent in integrated enterprise-wide process-oriented information-driven real-time systems like ES-enterprise systems begin from where traditional systems reach the pinnacle of their performance! Thus, what is required is to revisit the basics of enterprise systems and rededicate ourselves to improve the application, relevance, and usage of these cross-company platforms. This book attempts to help you in that endeavor.

This book provides an overview of the characteristics and essential strengths of various categories of Enterprise Systems (ES), namely, Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Supply-Chain Management (SCM), Product LifeCycle Management (PLM), Business Process Management (BPM), and Business Intelligence (BI).

Initiating change and confronting change are the two most important issues facing today's enterprises. The ability to change business operations and processes contributes directly to the innovation bottom line. The traditional concept of change management is usually understood as a one-time event or at least a non-frequent event. But if an enterprise is looking for the capability to handle not only change management but also

management of changes on a continual basis, then establishing a constellation of integrated enterprise systems such as ERP, CRM, SCM, PLM, BPM, and BI is a must!

Customary treatment of business excellence seldom highlights the change-enabling aspects of IT generally, and ES more specifically. Conventional work in this area has the now familiar refrain of the notion of business and IT alignment to assure optimal creation of business value, but it seldom discusses the very key enabler role of IT: IT makes enterprisewide change possible, more easily and effortlessly.

It is phenomenally important to realize that business processes that reside or are internalized within an organization's employees are difficult to change simply because human beings naturally find it more difficult to change. However, processes that reside within computerized systems are easy to change because they are not thwarted by problems of inertia, fatigue, or lack of motivation. ES enable the essential and continual changing of processes that are so critical to the successes of an enterprise. However, the requisite rationale and supporting details are too technical to be tackled here and are beyond the scope of the objectives of this book, which is essentially focused on business management.

WHAT MAKES THIS BOOK DIFFERENT

This book presents the phenomenon of the emergence of ES such as ERP, CRM, SCM, PLM, BPM, and BI from business and technological perspectives. It attempts to demystify ES and their power and potential to transform businesses. Unlike customary work on ES, which seldom discusses the key differentiators of ES from the earlier mission-critical systems, this book brings to the fore the fact that ES collectively contribute to enhancing the intelligence quotient of the enterprise.

Enterprise intelligence can be defined as the ability to initiate change (to unsettle competitors) and confront change (initiated by competitors, regulators, and other players) in the market environment.

This book presents a case that ES enhance enterprise intelligence by enabling

1. Integrated Enterprise with ERP ERPs enable the integration of heterogeneous and disparate business units, functions, and processes to coordinate, cooperate, and

- collaborate in aligning the business operations of the enterprise with its corporate strategy.
- 2. Customer-Centric Enterprise with CRM
 CRMs enable the relationships with individual customers to cocreate and coinnovate solutions to the satisfaction of customers at optimal cost on an ongoing basis.
 - 3. Customer-Responsive Enterprise with SCM SCMs enable the flexibility to obtain the capability and capacity needed to respond quickly to individual customer requests.
- 4. Renewing Enterprise with PLM PLMs enable the continuous renewal (creation and innovation) of enterprise offerings, i.e., products and services in sync with the continuous changes in customer preferences and needs and also in the changing market environment (because of the impact of competitors, regulators, activists, etc.).
- 5. Collaborative Enterprise with BPM
 BPMs enable the reconciled, i.e., collaborative working of different cross-company stakeholders of any business process, activity, or decision in compliance with its strategy, policy, and procedures.
 - 6. Informed Enterprise with BI BIs enable enterprises to access current, correct, consistent, and complete information on any process or transaction to take informed decisions in compliance with its strategy, policy, and procedures.

Students of engineering, management, compare

HOW THIS BOOK IS ORGANIZED

Chapter 1 presents an overview of agile enterprises and dimensions of intelligent enterprises. Chapter 2 introduces enterprise systems and related concepts of enterprise value and enterprise performance management. Chapter 3 elaborates on the characteristics of ERP and Service-Oriented Architecture (SOA). While Chapter 4 details the CRM's focal concept of customer centricity as also a constellation of related concepts such as customer relationships, customer life cycle, and customer lifetime value, Chapter 5 presents SCM's focal concept of customer responsiveness. Product Lifecycle Management (PLM) and Product Life Cycle (PLC), which are at the heart of ongoing enterprise renewal, are discussed in Chapter 6. Chapter 7 discusses establishing a collaborative enterprise with BPM and enterprise BPM

methodology. Chapter 8 deals with the realization of an informed enterprise with BI along with the novel concept of *decision patterns*. This chapter highlights the fact that any end-user application's effectiveness and performance can be enhanced by transforming it from a *bare* transaction to a transaction *clothed* by a surrounding context formed as an aggregate of all relevant decision patterns in the past. Finally, Chapter 9 presents details of various issues relating to an enterprise systems implementation project.

To give a practical context to the discussions on ES presented in the book, Appendix I provides an overview of the SAP Business Suite.

WHO SHOULD READ THIS BOOK

All who are involved with any aspect of ES projects—ERP, CRM, SCM, PLM, BPM, BI—will profit by reading this book to make a more meaningful contribution to the success of their ES implementation project(s).

The following categories of stakeholders will benefit from reading this book:

- Executives, and business and operational managers
- ES evaluation and selection team members
- ES technical and project managers, and module leaders
- · ES functional and technical members
- · Industry professionals interested in understanding the role of ES

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- Students of engineering, management, computer, and technology courses
- · General readers interested in the use of ES in organizations

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Vivek Kale has more than two decades of professional IT experience during which he has handled and consulted on various aspects of enterprise-wide information modeling, enterprise architecture, business process redesign, and e-business architecture. He has been Group CIO of Essar Group, the steel/oil and gas multi-national conglomerate of India, as well as Raymond Apparel Ltd., the textile and apparel manufacturer of India. He is a seasoned practitioner in transforming the business of IT, facilitating business agility, and enabling the Process-Oriented Enterprise. He is the author of Implementing SAP R/3: The Guide for Business and Technology Managers, Sams (2000), A Guide to Implementing the Oracle Siebel CRM 8.x, McGraw-Hill India (2009), and Inverting the Paradox of Excellence: How Companies Use Variations for Business Excellence and How Enterprise Variations Are Enabled by SAP, Productivity Press (2014).

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