

GOING

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CORPORATE

A GEEK'S
GUIDE

BY
SHAIENDRA KADRE

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GOING CORPORATE

A GEEK'S GUIDE

Shailendra Kadre

Apress®

GOING CORPORATE: A Geek's Guide

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To

*My mother, Shakuntala Kadre
and
My wife, Meenakshi Kadre*

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About the Author

Shailendra Kadre has more than 17 years of industry experience, including 15 years in the Information Technology domain with services and products companies such as Satyam Computers, TCS (TATA Consultancy Services), and Oracle Financial Services Software. He has handled large customer accounts with multilocation project teams. He has also handled many large IT outsourcing deals as a bid manager. As a presales manager, he was instrumental in winning a \$200 million deal for Satyam Computers. Later he worked as a transition manager from Austin, Texas, on the same assignment. He specializes in IT delivery and operations management. Kadre has also worked extensively in the manufacturing and capital markets sectors. On the technology side, he has hands-on experience designing and structuring complex web applications.

Kadre holds a master's degree in Mechanical Engineering from the Indian Institute of Technology (IIT) in Delhi. He is certified as a PMP and as a lead auditor for information security. He has published in the fields of management and IT consulting, mainly focusing on improving operational efficiencies and business transformation. He is also active as a writer and reviewer in various professional forums and trade journals. Currently, Kadre resides in Bangalore with his wife Meenakshi and two children. His hobbies include playing tennis, traveling, and photography.

About the Technical Reviewer

Philip Alexander began his career in computers back in the late 1980s while serving in the U.S. military. Since then, he has worked in both the public and private sectors in positions including engineer, project manager, principal security consultant, security architect, and IT director. He currently works for Wells Fargo Bank as an information security officer.

Philip is also an author of three books: *Data Breach Disclosure Laws – A State by State Perspective*, *Information Security: A Manager’s Guide to Thwarting Data Thieves and Hackers*, and *Home and Small Business Guide to Protecting your Computer Network, Electronic Assets, and Privacy*. He is also an avid public speaker, and he regularly presents at security conferences around the country and abroad on a wide range of topics.

Foreword

When Shailendra Kadre asked me to write this foreword, I was truly humbled and curious. My technical expertise is negligible, so why ask me? Over the course of the time that I have known Mr. Kadre, I have learned that he possesses both exemplary technical and leadership skills—a rare combination of attributes. What I have also learned about him through the course of our association is that he embraces the fact that it is leadership that makes the difference between average and excellent in any organization. While technology is exciting, it takes the human touch to turn it into something brilliant.

This brings me to the point where I am writing the foreword to the book. The thing that drives me—that I am passionate about—is assisting people and teams to be all that they can be so that they can transform organizations and communities. The fact that Mr. Kadre honored me with the opportunity to write the foreword speaks volumes about the level of importance that he places on effective leadership. Indeed, he understands that as our dependence on technology deepens, our need for skilled leaders grows exponentially.

Our society is fraught with the most rapid change ever experienced by mankind. Archeologists know that, historically, change in human society was not measured in years, but in millennia. Each improvement in “technology” took thousands of years of slow evolution to implement.

Then, around 1900, all of that changed. Up until that time a person could expect to see little or no change in their environment during their lifespan. They knew how to plan for and react to most situations. Elders could pass on a wealth of knowledge regarding the solutions to life’s challenges because those challenges were predictable. Now, the emphasis is on remaining flexible and adaptable to the ever-changing environment in order to survive.

Consider that in a single life span, a person born in 1900 saw the advent of the radio, television, cars, motorcycles, airplanes, space travel, a moon landing, genetic engineering, a cloned sheep, two world wars, computers, organ transplants and other medical miracles, an ushering in of the nuclear age, and a host of other changes both good and bad.

Technology has allowed businesses of all sizes and descriptions to accomplish things that would have been considered science fiction a short time ago. Seemingly the only boundaries of what we can accomplish are those that our own imaginations impose on us. It is truly amazing when you think that the average home computer is more powerful than what major corporations would have invested millions of dollars to acquire a few decades ago.

Yet there is a dark side to the rapid changes that technology has allowed us. With change comes uncertainty and stress. Therefore, now more than ever, organizations need strong leaders. These individuals are not the paternalistic supervisors of the past who micromanaged with a heavy hand, and who were expected to have all the answers and be obeyed without question, as described in the classical management theories.

Many people who are drawn to IT Program Management as a profession may tend to think that the technology is the focus of the skill set required to be successful. This mindset has historical roots to the time when employees were not well educated and lacked the sophistication that employees now possess. What this book informs its readers is that organizations today require strong leaders with well-developed emotional intelligence competencies. These leaders are more than just technicians who have been promoted to a position of authority. They understand that the single most important resource in any company is the people.

A client of ours recently suffered through a situation that exemplifies the necessity of strong, emotionally intelligent leadership. The organization, a midsized IT company, had a site manager who ruled with a heavy hand. The owner, who spent a majority of her time in another city at the company's headquarters, relied on the manager to keep the team motivated, to answer technical questions, and to be able to work effectively to resolve any customer concerns related to the work that his team was doing. Because of poor people skills, the company endured high employee turnover, which impacted the bottom line. Additionally, productivity suffered, as did customer relationships. The manager lacked even the basic emotional intelligence competencies, and thus the team was highly dysfunctional. After this manager was dismissed, it took nearly a year to turn the culture around and to repair the damage that he had caused. The next challenge was to locate a qualified leader to fill the position. This person needed to have not only the technical skills, but, even more importantly, the attributes necessary to work well with the staff and customers. As it turned out, this was an incredibly difficult mixture to find. There were plenty of people with the necessary technical credentials, but for the most part they lacked the

leadership skills. This is a prime example of the destruction that a person who is not an effective leader can cause to a company and how difficult it is to locate that rare combination of emotional intelligence and technology expertise.

Examples of the need for the ability to lead people, not just manage them, are evident in the case studies included in this book. Whether one is responsible for managing the bidding cycle for a multimillion-dollar contract opportunity, managing a global outsourcing project, or managing the complete design cycle for the development of automotive systems, many competencies are required to affect a positive outcome for all stakeholders.

Mr. Kadre has provided valuable insights that not only will assist program managers to avoid the many pitfalls waiting to derail projects, but will also inspire confidence and help to ensure successful delivery of even the most complex of programs. The combination of systems, technology, and people skills comes together in a balance that is so often absent in many program management plans. When one brings together a logical plan with the right tools for implementation, the groundwork is prepared for successful execution. However, as is so well illustrated in the book, it takes a leader to create a team able to bring the plan to fruition. If any part is lacking, it is like a three-legged stool missing a leg.

In my experience, working with organizations from midsized to very large multinational corporations and government agencies, this balance is all too often ignored. If you, the reader, can incorporate the tools and competencies laid out here, you will find that you are a rare commodity indeed.

One of the reasons that the combination is a rarity is that it is difficult to achieve. Many people who are comfortable with part of the equation are not adept at the other. So I implore you to remember that this is a journey that continues each day that we take a breath. With each step of your journey you will learn new lessons—some of which will be quite difficult and even frustrating. The important thing is to keep moving forward and to celebrate your successes.

Rebecca Lacy

President, Pinnacle Management Group, Missouri

Foreword

Shailendra Kadre and I have worked together for many years. Together, we managed many team ramp-ups for “mega” projects. When he came to me with the first draft of this book, I was not surprised. Shailendra has been publishing papers on these topics for some time now. I have read through the book, and it’s a wonderful combination of concepts and case studies—some of which I took part in.

This book will be very relevant for project leaders and project managers, and those hoping to move into these and even higher positions. Many of you will have wonderful skills in one technology vertical, or category, but severely lack knowledge on issues related to the industry/domain. As Shailendra points out, clients always want team leaders who can interact with senior business leaders in their language. And some clients, like small and medium-sized enterprises, may not talk technology all the time. They always therefore value project personnel who know their business.

This book covers many topics that a new team leader, project manager, program manager, or delivery manager should know but often does not. IT delivery is a vast topic; it requires specific management knowledge such as developing project plans and schedules, costing, and scope control. A good manager also needs soft skills for things like managing people, handling clients, grooming the team, training the team adequately, and so on. There are various fields for project managers to practice in, like delivery, transition, service delivery, portfolio management, and infrastructure, among others. IT managers can work in one or many of these areas over the course of a career. And almost every organization needs to streamline its IT operations. Things like business transformation, business analytics, and ERP are of prime importance right now. Keeping IT aligned with the business goals is another area of challenge for top IT managers. Any aspirant to top IT posts must maintain an awareness on these topics right from the beginning of his or her career as a team leader or a project manager. This book will help you do that.

The world is exploding with information, and knowledge is the key to success. Managers, right from the start, should be able to appreciate all the

disciplines practiced by IT executives. Large IT deals and bid management is another area that no manager can afford to ignore. Today's IT deals run into tens and hundreds of millions of dollars. I have even seen some deals running into a couple of billion dollars. Many of these deals are managed by expert third-party consultants. Enterprise mergers and acquisitions are happening now more often than before. The needs of system integration arising due to such mergers is another area in which many managers and engineers specialize. It requires both technical and managerial skills to successfully achieve enterprise application integration on such a scale.

All these topics very realistically describe today's IT landscape and the variety of skills that an enterprising IT manager may need. This book meaningfully touches all these topics with relevant case studies taken from real-world projects. Most of the case studies are unique and published here for the first time. They are based upon the author's own experience in the IT industry.

I don't know of any other book that covers such a wide spectrum of topics with relevant case studies. Many of these topics were first-time knowledge even for me. Now I feel motivated to research further in areas like business analytics and the alignment of IT with the strategic thinking of an organization. I thank and appreciate Shailendra for bringing out this book for the benefit of all IT professionals.

Prabhakar Kanagarajan

Vice President, Mahindra Satyam Computers, India

Preface

Younger technology professionals typically get very deep into small pieces of technology and tend to ignore the business and operational aspects of their projects and products. The aim of this book is to create practical awareness of business and other topics related to operations that are important to middle management. Such awareness is essential for any IT person who would like to move into team or project leadership, management, consulting, or other, higher-level positions.

After reading this book, technology professionals should be able to appreciate enterprise architecture, delivery, and IT operations management, commercial (financial and legal) concerns, and strategic management, along with their interrelationships. The goal is to give you practical awareness of these topics and touch some issues that are important in practice but get lesser attention. It's not possible to cover each and every topic in depth, due to space constraints, and that is not the aim here. I have tried to cover the challenges in practical implementation and promote thinking in the right directions. Important concepts are explained with the help of detailed case studies. These cover such topics as business transformation, enterprise application integration, legacy transformation, and strategic management.

The overall theme behind the material in this book is as follows: Ultimately, technology professionals have to appreciate and understand business to succeed.

The target audiences of this book are technology professionals aiming for leadership and management slots, fresh graduates starting their career in the corporate world, and business management students. This book will be very useful for practicing engineers and managers as a refresher course on operational challenges encountered in the day-to-day life of executives in middle management positions.

How to Use This Book

This book is divided into two parts. The purpose of the first part is to familiarize you with the operational issues concerning an IT company or department. It starts by explaining how a project fits into the larger IT landscape of an organization. It discusses interfaces among applications and introduces the user to the concept of Enterprise IT, which takes into account the crucial business aspects of a company that too many technical people ignore. Part 1 also covers project management and deliveries, program management, production support and SLAs, portfolio analysis, and infrastructure elements. Part 1 is supplemented by two appendixes that familiarize you with a cross section of the challenges faced by IT project managers and CIOs, respectively. After reading this material, you will be able to appreciate the viewpoint of your immediate bosses and CIOs and others in executive management.

Part 2 covers topics in finance, business processes, analytics, and supply chain management. These topics are included to familiarize you with the next higher level of challenges in business and functionality and to promote thinking from a business and commercial perspective. Part 2 ends with a chapter on how to streamline IT using Service-Oriented Architecture and concepts learned throughout the book. This book starts with a generalized discussion on the same topic of achieving a lean and streamlined IT organization.

The chapters are written informally and not in typical textbook style. They include my own practical experiences and case studies—most of which come out of my experience—wherever needed.

Depending upon your familiarity with the various topics, you may want to skip some chapters and come back to them later. But I suggest you go through all the material in order, as each chapter is based on practical challenges we all face, and they contain unique case studies from the real world.

Again, the idea of the book is simple: By becoming aware of what's important to your superiors, and what's current in the industry, you will do your job better. And it will prepare you for bigger, more lucrative jobs that can amplify the positive impact you have in the companies you work for.

Please feel free to write me at shailendrakadre@yahoo.com for any suggestions and criticism.

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No book is complete without the hard work and dedication of a group of people. That includes this one.

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Neena Kadre: For reviews and language support. Neena is a gold medalist from Indore University in M.Sc. Microbiology. She is currently pursuing a career in the field of English language education in Pune.

Shailesh Kadre: For contributing Chapter 14, which describes IT in vehicle development programs. Shailesh earned his master's degree in Mechanical Engineering from IIT Kharagpur. He is currently pursuing a career in CAD, CAM, and CAE with Mahindra Engineering in Pune. He has many national and international research publications to his credit in this field.

Yogesh Jain: For contributing the case study on strategic management in a ferrous foundry Yogesh is a management and quality consultant to many big industrial companies in India. He is also a serial entrepreneur now running his own consulting firm from Indore. He earned his master's degree in management from Birla Institute of Technology & Science, Pilani.

Vijay Venkatachalam: For contributing the case concerning spatial analytics in Chapter 11. Vijay is the director of Omega Analytics, Bangalore, a multimillion-dollar company spread across the globe. He earned an MBA from the Indian Institute of Management, Bangalore, and an M.Sc. in Finance from University of Strathclyde, UK.

Laxmi Narayan Sahu: For co-authoring three of the case studies. Laxmi is currently working as a delivery manager with Mahindra Satyam, Bangalore. He earned his bachelor's degree in Engineering from University of Sambalpur, Orrissa.

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List of Acronyms, Terms, and Abbreviations

ABAP: Advanced Business Application Programming, a programming language for SAP

ABC: Activity-Based Costing

ADMS: Application Development, Maintenance, and Support

ADR: American Depository Receipt

APAC: Asia-Pacific Countries

API: Application Programming Interface

ATM: Automated Teller Machine

BA: Business Analyst

BASIS: The foundation of SAP applications, working like an operating system in the SAP environment

BCA: Business Component Architecture

BEP: Break-Even Point

BI: Business Intelligence

BOM: Bill of Materials

BPR: Business Process Reengineering

BRM: Business Relationship Manager

BT: Business Transformation

CAD: Computer-Aided Design
CAE: Computer-Aided Engineering
CAM: Computer-Aided Manufacturing
CAPEX: Capital Expenditure
CD: Certificate of Deposit
CEO: Chief Executive Officer
CFO: Chief Finance Officer
CIO: Chief Information Officer
CMM: Capability Maturity Model
CMS: Content Management System
COA: Chart of Accounts
CP: Commercial Paper
CPU: Central Processing Unit (of Computer)
CRM/RM: Customer Relationship Manager
CTO: Chief Technology Officer
DAO: Data Access Object
DB: Data Base
DBA: Data Base Administrator
DCF: Discounted Cash Flow
Dev: Software Development Environment
DW: Data Warehouse
EA: Enterprise Architecture
EAI: Enterprise Application Integration
EDA: Event-Driven Architecture
EDI: Event-Driven Infrastructure
EDI: Electronic Data Interchange

E-ERP: Extended ERP
EJB: Enterprise Java Beans
EQ: Emotional Quotient
ERP: Enterprise Resource Planning
EVA: Economic Value Addition
FAB: Fabrication facility for Integrated Circuits
FDI: Foreign Direct Investment
FTP: File Transfer Protocol
GDP: Gross Domestic Product
GDR: Global Depository Receipt
GIS: Geographic Information System
GOF: Gang of Four, who pioneered run-time design patterns
GUI: Graphical User Interface
HR: Human Resources
HRMS: Human Resources Management System
HTML: HyperText Markup Language
IBM: International Business Machines
IDE: Integrated development Environment
IMS: Infrastructure Management System
IP: Intellectual Property
IQ: Intellectual Quotient
ISO: International Organization for Standardization
IT: Information Technology
ITIL: Information Technology Infrastructure Library
J2EE: Java 2 Platform, Enterprise Edition
JDBC: Java Database Connectivity

JVM: Java Virtual Machine
LDAP: Lightweight Directory Access Protocol
MBA: Master of Business Administration
MIS: Management Information System
MNC: Multinational Corporation
MOM: Minutes of Meeting
MOM: Message-Oriented Middleware
MPS: Master Production Schedule
MRP: Material Requirement Planning
MRP II: Manufacturing Resource Planning
MSA: Master Service Agreement
MVC: Model View Controller Architecture
mySAP: An all-in-one SAP business suite software program
NAB: Netscape Application Builder
NAS: Netscape Application Server
NAV: Net Asset Value
NDA: Non Disclosure Agreement
.NET: Software framework for Microsoft Windows operating systems
NPV: Net Present Value
OE/OEM: Original Equipment Manufacturer
OHRATE: Overhead Rate
OPEX: Operational Expenses
O-R Mapping-Object-Relational Mapping
Oracle Apps: Oracle Applications ERP software
P-D-C-A: Plan-Do-Check-Act, a four-step problem-solving process, also known as the Deming Cycle