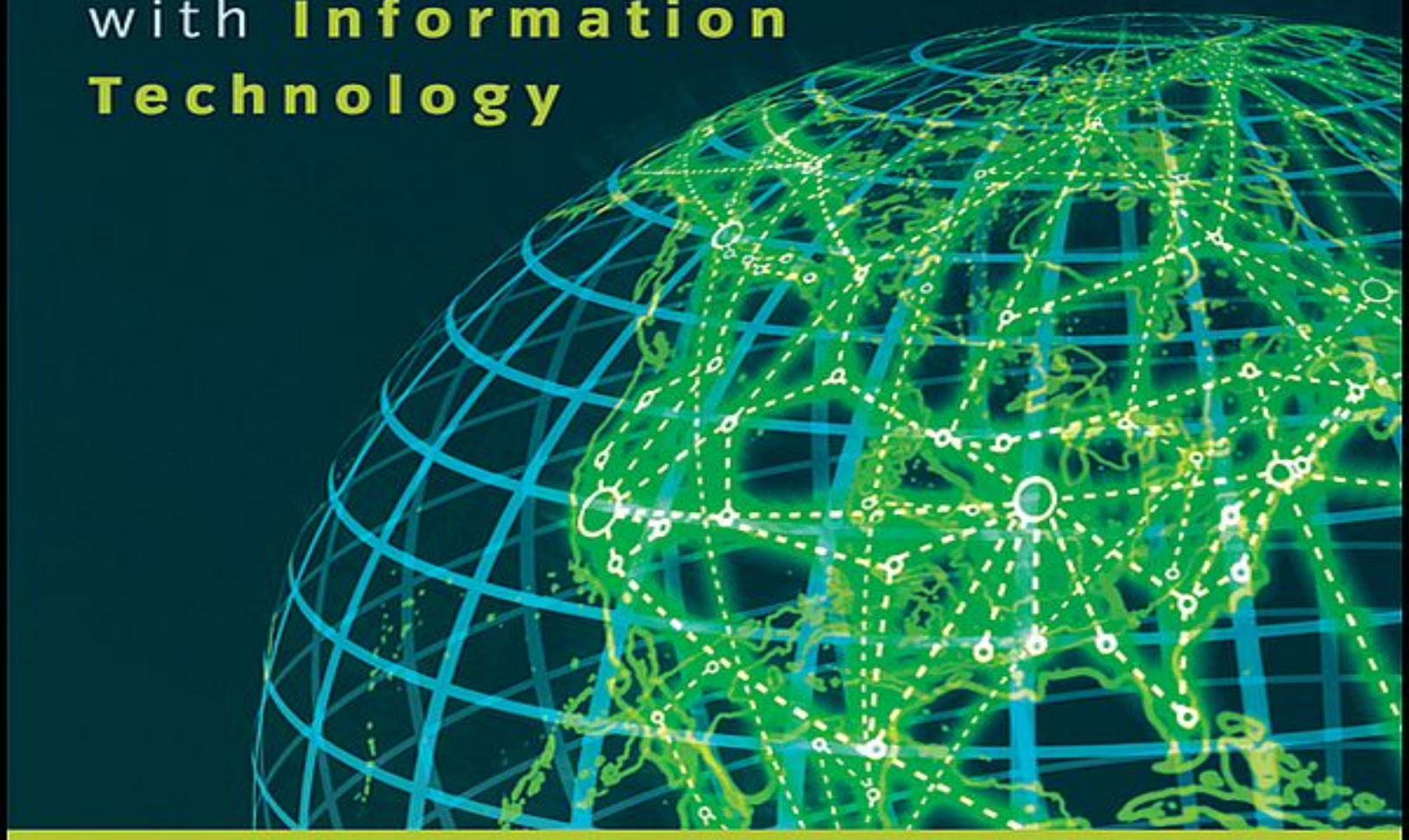
SECOND EDITION

CIO BEST PRACTICES

Enabling Strategic Value with Information Technology



EDITED BY **JOE STENZEL**

COAUTHORED BY RANDY BETANCOURT, GARY COKINS, ALYSSA FARRELL, BILL FLEMMING, MIKE HUGOS, JONATHAN HUJSAK, KARL SCHUBERT

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CIO Best Practice

Second Edition

Enabling Strategic Value with Information Technology

Joe Stenzel

John Wiley & Sons, Inc.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

Library of Congress Cataloging-in-Publication Data:

CIO best practices : enabling strategic value with information technology / [edited by] Joe Stenzel. – 2nd ed.

p. cm. – (Wiley & SAS business series)

Includes bibliographical references and index.

ISBN 978-0-470-63540-7 (cloth); ISBN 978-0-470-91253-9 (ebk); ISBN 978-0-470-91254-6 (ebk); ISBN 978-0-470-91255-3 (ebk)

1. Chief information officers. 2. Information technology-Management. 3. Information resources management. 4. Management. I. Stenzel, Joe.

HD30.2.C55 2011

658.4'038–dc22
2010019067

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Preface

Anyone working in information technology today feels the opportunities for creating and enabling lasting value, and the CIO helps define those opportunities and turn them into realities. That's what this book is about. Humanity has discovered an evolutionary tool that allows us to realize our true potential—intellectually, artistically, socially, and above all, creatively. But we must be circumspect as we explore the uses of this new tool that works as an extension of our own minds. Living as we do, on the very edge of an evolutionary horizon that once seemed far away, we must learn to respect the two native forces that have pulled human creativity in opposite directions since the beginning: (1) the drive to understand more about ourselves and our world, and (2) the desire for safety and security. Some part of us craves the entirely new; another part longs to be safe and is uncomfortable with change.

No senior executive feels the disjointed pull of these two forces more than the Chief Information Officer,[1] who seeks to create new frontiers of strategic information technology value for the enterprise, while working in an environment of service and stewardship for other people's interests. New strategic frontiers demand that the CIO take bold, decisive risks as new technologies offer competitive opportunities. Service and stewardship responsibilities demand that the CIO also take care of the day-to-day needs of people that depend on more basic information technology resources to perform what the enterprise requires of them.

Other forces distinguish the world of the CIO from executive team peers. More than any other member of the enterprise, the information technology professional works

with products and services built according to designs that represent the most current understanding of the ways our world is organized. While people from other functional areas of the enterprise work within organizational structures marginally evolved from the beginning of the industrial age, IT organizations embody the principles that underlie information technology products and services—self-referencing, chaotic, morphogenic systems. The CIO must work to reconcile IT' s more mature, inclusive perspective on the enterprise with the traditional views of peers that prefer the illusory safety and security of departmental silos that use command and control management policies.

Then there' s the matter of the emerging role of the CIO, with its many facets in terms of the myriad expectations of the many people throughout the enterprise, which often boils down to a simple three-word question of focus. Business or technology? This book acknowledges and addresses these factors by incorporating a few basic premises in each chapter.

Premise 1: The business of the IT organization is technology, and the business of the CIO is the business of the enterprise. As such, the best practice CIO works and makes decisions in a realm of strategy, customer value creation, cost and performance management, and outsourcing partnerships while building and maintaining an IT organization that can develop and manage enterprise technology that enables strategy.

Premise 2: As a new executive role with an evolving set of responsibilities and expectations, CIOs cannot prepare themselves to learn what they need to know about the business of the enterprise without the help of non- IT experts. In addition to the chapters written by experienced, practicing CIOs acknowledged for their excellence, this

book includes chapters written by performance management, accounting, and customer relationship management experts familiar with leveraging IT value.

Premise 3: The CIO is an investor of enterprise resources accountable for realizing a return on those investments. This premise acknowledges that the rest of the executive team depends on the CIO's specialized understanding and insights of information technology value opportunities. All the chapters discuss how the CIO can realize a return on IT investments—including the investment of IT' s many intangible resources.

Premise 4: All enterprises are unique, and their IT organizations must align to the specific needs of the enterprise. Each chapter includes considerations for small, medium, and large enterprises across all sectors. Inherent in this premise is the understanding that all enterprises have one thing in common: Success depends on the articulation and implementation of a clear business vision and strategy. As such, the IT organization must be aligned with the enterprise vision and strategy so that it can align its products and services to realize strategic objectives. Each chapter discusses ways that the best practice CIO works to align IT products and services to fit enterprise vision and strategy.

Premise 5: All CIOs live and work in a competitive world, and customer relationship management excellence has become one of the most important competitive advantages in all sectors. The chapters in this book consistently address the importance of the IT organization' s internal and external customers, and the book includes an entire chapter on customer relationship management best practices.

Premise 6: There can be no comprehensive treatment of the CIO 's role as leader of the IT organization at this point

in the development of this executive office. At the same time, building on Premise 4, there are common elements to CIO best practices that apply to enabling strategic value from IT in any enterprise:

- Aligning information technology with evolving business needs, and devising IT strategies that mesh with enterprise strategy
- Designing and maintaining an enterprise architecture that reflects and enables enterprise strategy
- Organizing, motivating, and managing the IT organization to focus on agile strategy execution and deliver consistently outstanding performance
- Strategic cost management practices for IT Finance that transparently reveal the operational costs of IT services to the CIO and IT customers
- Strategic performance management practices that align the work of the IT organization with enterprise strategy
- Customer relationship management practices that reflect enterprise strategy as the build value for internal and external IT customers
- Carefully selected outsourcing relationships managed according to enterprise strategy
- Calculating and managing for continuous improvement for the return on investments of tangible and intangible IT resources

CHAPTER 1 EXECUTIVE SUMMARY

Freedom with Fences: Robert Stephens Discusses CIO Leadership and IT Innovation

More often than not, the best practice CIO addresses day-to-day responsibilities with improvisational and extemporaneous solutions. Entrepreneurial innovation and creativity depend on these nontradi-tional, spontaneous executive capacities, but these leadership freedoms must be grounded in the general standards of professional discipline informed by each unique enterprise strategy. Product and service innovation have become increasingly dependent on the ways that information technology gives enterprise decision-makers new ways to develop an ongoing, interactive dialogue with customers through enterprise customer-facing employees. Chapter 1 addresses CIO leadership responsibilities and opportunities that promote ways the IT organization can creatively enable this dialogue between customers and enterprise decision makers while safeguarding brand integrity, assuring information security, and creating competitive advantage.

This chapter explores the CIO 's challenges to promote and lead innovation for the enterprise from within the IT organization in a highly improvisational style—an unrehearsed interview format—with subsequent, relevant, fact-checked examples added to support the extemporaneous insights. In the end, Chapter 1 demonstrates the ways that best practice CIOs work from a grounded set of personal guidelines for self-discipline and inspiration.

CHAPTER 2 EXECUTIVE SUMMARY

Why Does IT Behave the Way it Does? by Bill Flemming

Chapter 2 explores IT performance management practices that align the IT organization and its resources with enterprise strategy. This chapter blends the essential elements of core business management best practices with the cutting-edge technology acumen, and discusses how the best practice CIO integrates these two skill sets. In its current form, performance management is a control mechanism that exerts its influence by aligning employees at all levels of the enterprise through a balanced set of financial and nonfinancial objectives with timely data that tracks progress and promotes better decision making to achieve those objectives. Performance management addresses group behaviors, and this chapter focuses on the ways that informed performance management practices optimize behaviors in the IT organization.

The IT organization is a business within a business for enterprises of any size or industry. Best practice CIOs recognize the ways that the enterprise IT business differs from other functional areas and departments, and they design their performance management systems accordingly. Similarly, within any IT organization, the CIO is responsible for optimizing the performance of a few basic essentials: capacity, service, IT finances, and alignment of IT business resources with enterprise strategy. This discussion examines current IT performance management challenges in the context of historical precedent by articulating the ways that the evolution from mainframe to distributed systems redefines CIO responsibilities for the ways that the IT organization behaves.

CHAPTER 3 EXECUTIVE SUMMARY

Cloud Computing and the New Economics of Business by Michael Hugos

Cloud computing represents one of the Internet 's most revolutionary technologies, with transformative, disruptive influences on the ways that CIOs and their C-suite peers understand enterprise information technology. While best practices are nascent, CIOs who expect to keep their jobs can ' t stand back and wait for the competition to discover and master the competitive opportunities of cloud computing. Chapter 3 is a thorough, deliberate examination of all elements of cloud computing that any CIO must understand to inform and guide the enterprise executive team.

Using a balanced assessment of opportunity and risk, this chapter discusses cloud computing technology, transition considerations, performance and security concerns, and a matrix of cloud computing configurations from which enterprises can choose to optimize their strategic objectives by means of this enabling information technology. While presenting all the technology options, this discussion considers each element of cloud computing practice options in terms of how each makes good business sense in the context of specific IT settings across enterprises of different sizes and industries.

CHAPTER 4 EXECUTIVE SUMMARY

Leading with Green: Expanding the CIO's Role in Eco-Efficient Information Technology Adoption by Randy Betancourt and Alyssa Farrell

Sitting at the center of this book is a discussion of one of the most hotly debated, but potentially significant influence on global IT best practices: enterprise energy utilization and sustainability practices, otherwise known as Green IT. This chapter draws on a 12-member panel of expert contributors that provide the widest possible perspective on IT-related sustainability management, and as in the previous chapters, the presentation focuses on the business case for Green IT. There are as many different perspectives on Green IT best practices as there are regulatory environments, but the best practices are out there, and this chapter collects them into one basket.

With a focus on the business proposition, the discussion begins with examples of Green IT practices as a rapidly maturing and increasingly accepted management discipline. This chapter extends the presentation of IT performance management best practices from Chapter 2 to include essential Green IT metrics. The author and contributing experts also explore emerging Green IT innovations, opportunities and risks, the important role of public policy, and the ways that the best practice CIO and the CIO professional community must proactively engage and shape this emerging IT management discipline, with tremendous regulatory implications, for the enterprise bottom line.

CHAPTER 5 EXECUTIVE SUMMARY

Sustainability, Technology, and Economic Pragmatism: A View into the Future by Jonathan Hujsak

Building on the business case for Green IT presented in Chapter 4, Chapter 5 extends that foundation into a comprehensive discussion of enterprise IT with greater emphasis on the technology and best practice technology management. The CIO and CFO share many similarities in their responsibility profiles as service providers to virtually all enterprise stakeholders. This chapter addresses Green IT in terms of the many hard, measurable facts about the intersection of IT resources with energy and environmental concerns that CIOs must be able to readily access and understand, to develop and articulate the best Green IT practice strategies for their enterprises. Peer executives (especially CFOs), utility providers, vendors, employees, shareholder activists, and other major enterprise stakeholders already have access to these facts, and they increasingly use this information to challenge the executive team strategy.

With a focus on broad, well-developed sustainability best practices deployed by Fortune 500 enterprises around the world, this chapter explores essential definitions, terminology, technologies, employment and telecommunication trends, and security issues that CIOs can use to inform peer decision makers at any stage during the development of enterprise sustainability management practices. Integrating this detailed information, Chapter 5 presents a performance management and strategic mapping model customized for managing the sustainable enterprise.

CHAPTER 6 EXECUTIVE SUMMARY

How to Measure and Manage Customer Value and Customer Profitability by Gary Cokins

In the first edition of *CIO Best Practices,* CRM was a new competitive advantage. CRM practices have continued to evolve and be refined by the expert use of new information technologies. Three years later, CRM has become a core management practice for the C-suite. In the latest wave of social networking and ubiquitous connectivity, customers are handing CIOs information about their preferences and other sometimes-unsavory behaviors, on a silver platter. All customer behaviors add insight because not all customers are worth the time and effort it takes to please them.

The CIO 's strategic partnership with the CFO has become increasingly essential for enterprise information technology to capture, organize, and leverage investments in the customer. This means that the best practice CIO needs to understand how the CFO and other senior executives translate a wide range of information about customer preferences for their financial resource allocation decisions.

Chapter 6 breaks down CRM into six sections. Parts 1 and 2 address current CRM best practices in terms of the relationship between customer preferences and shareholder wealth as a foundation for understanding customer value and profitability drivers as they relate to focused, targeted marketing delivery systems. Parts 3 and 4 move from customer analytics to deliberations about customer value determinations with a focus on customer costs and measuring lifetime customer value, such that the best practice CIO manages IT and enterprise resources as investments in the customer. Parts 5 and 6 address an

increasingly outdated and incorrect senior management perception about the competing interests between shareholder value and customer value. The discussion presents metrics for assessing both customer value and loyalty, and inevitably, the ways that the CIO and CFO must work to provide comprehensive CRM information for the enterprise CMO and Sales Director.

CHAPTER 7 EXECUTIVE SUMMARY

Evolution of Networks into Networking by Karl Schubert

Chapter 7 moves full circle to pick up and more deeply explore a critical new IT development discussed in Chapter 1: The risks and competitive advantages of social networking. Like cloud computing, social networking was born of the Internet, and like so many other facets of information technology, exponential development seems to be the order of the day in terms of the body of information the CIO must digest to responsibly guide the management of this new phenomenon.

This discussion carefully explores the increasingly inextricable relationships between customers, employees, their use of personal information technologies, emerging cultural expectations and standards outside the workplace, and the ways that these factors pose opportunities and risks for the enterprise. With a focus on the business case for participation in social networking forums on both the individual employee and enterprise levels, Chapter 7 explores the business impacts of both business and social networking, the virtual world, the democratization and socialization of information, and ways that the CIO, IT organization, and enterprise can leverage the new reality of human connectivity on the Internet.

NOTE

1. This book uses the term “Chief Information Officer” (CIO) to stand for any title the enterprise might use to designate the leader of its information technology organization, such as Chief Technology Officer, and

acknowledges that a person may serve more than one executive role in some enterprises.

About the Contributing Authors

Randy Betancourt (Chapter 4) has more than 25 years of experience with both program development and product management. He currently works as a client support resource for SAS IT Intelligence Group, responsible for the technical and business development of its Green IT initiative. This initiative is a project to refine the instrumentation and data collection techniques used to analyze IT asset utilization.

Randy's previous product management experiences include the expansion of capacity planning and analysis solutions for UNIX environments and network infrastructures. He holds a BA in Political Science and an MA in Public Policy with an emphasis on quantitative analysis from North Carolina State University. He can be contacted at randy.betancourt@sas.com.

Gary Cokins (Chapter 6) is an internationally recognized expert, speaker, and author in advanced cost management and performance management systems. He is a manager in performance management solutions with SAS Institute (headquartered in Cary, North Carolina), the leader in business analytics software and services, and the largest independent vendor in the business intelligence market (www.sas.com/businessanalytics/index.html). Gary received a BS in Industrial Engineering/Operations Research from Cornell University in 1971 and an MBA from Northwestern University's Kellogg School of Management in 1974. Gary began his career as a financial controller and operations manager for FMC Corporation, and he has been a management consultant with Deloitte, KPMG Peat Marwick, and Electronic Data Systems (EDS).