

Preface

What does it mean to successfully outsource software, systems, and information technology (IT)? Successful acquirer organizations use best practices to execute outsourcing projects that are completed on time and within budget, and these projects result in a product that meets the organization's business needs or mission. In addition, the product is of acceptable quality and meets the needs of customers or end users.

When you apply an outsourcing business strategy, it can improve your organization's operational efficiency by leveraging a supplier's capabilities to deliver quality solutions rapidly, at lower cost. With globalization, suppliers in developing countries can offer a highly skilled workforce at significantly lower labor rates, forcing organizations to leverage low-cost providers if they want to compete in the global marketplace. Companies also use outsourcing to gain a competitive advantage, creating value for the business customer and ultimately for the consumer.

Many organizations, both commercial and governmental, are becoming acquirers of software, systems, and IT. In both worlds, companies acquire systems, software, and IT that they cannot build or maintain themselves, especially within the required time frame. The constant pressure to deliver systems that meet cost, schedule, and quality objectives drives government program offices to contract with suppliers. Virtually all U.S. civil agencies and armed forces acquire systems. Often, the product to be delivered is unlike anything that has ever been built or even conceived of. In this case, acquiring the system externally allows the agency or company to evaluate various ideas about product design, implementation, and maintenance. Market forces require companies and government agencies to evaluate internal and external options for system development and make practical business decisions about whether to develop or acquire.

What factors are critical to these decisions? What processes should be followed? And once the decision is made to acquire, what are the necessary processes that help ensure a reasonable level of success in acquiring that system?

The Purpose of This Book

The purpose of this book is to help answer these questions and illustrate some of the processes and practices of successful acquirers. It is also intended to capture some of the challenges associated with acquisition projects. This book addresses acquiring organizations' need for information about how to effectively outsource software, systems, and IT in the current global marketplace.

Our intent in writing this book is to provide all organizations, whether in industry or in government, a pragmatic resource that captures some of the proven practices to make the acquisition of technology solutions successful and to guide process improvement efforts. By reading this book, those working in acquiring organizations will better understand the environment in which they are working, the challenges they face, and the processes, standards, and frameworks that can help them achieve success.

Who Should Read This Book?

This book is not intended to be simply an explanation of the initial draft CMMI for Acquisition (CMMI-ACQ). Rather, it is intended to help business leaders—from CEOs to project managers—tap in to the power of the “outsourcing movement” that has transformed the development of systems for some of the world’s most successful companies. Reading this book will help decision makers become informed about the challenges of outsourcing technology solutions and will provide them with information about options available to guide their decisions and monitor their organizations’ progress. It will help suppliers understand what is required of them to work well with acquiring organizations.

The Organization of This Book

This book contains five chapters, the order of which loosely corresponds to the phases of an acquisition life cycle for a project or program.

- Chapter 1, Introduction to the CMMI-ACQ, sets the stage with a series of “hidden truths” of successful acquisition projects. Some of these truths may not be hidden from you, depending on your acquisition experience.

But all are valuable to IT acquirers. This chapter also describes the characters that appear throughout the book. As you follow them through an IT acquisition project in the chapters that follow, you will experience the challenges and learn, along with them, the best practices and ideas for acquiring software, systems, and information technology solutions.

- Chapter 2, *Getting Started*, discusses how to formulate an acquisition strategy and align your strategy with your organization goals. This chapter also presents a framework for acquiring solutions. It describes outsourcing activities, with a focus on acquisition planning, writing requests for proposals (RFPs), handling supplier responses, negotiating, creating standard contracts, and collaborating with suppliers.
- Chapter 3, *Engineering Solutions*, explains how to get requirements right. It also describes how an acquirer translates requirements into practical design constraints that can be documented or referenced by the supplier agreement; in this way, the supplier can produce value-added technology solutions.
- Chapter 4, *Delivering Solutions*, outlines how to execute projects using integrated project plans and standards for measurement. You will learn how to manage uncertainty and risk, how to transition to operations, and how to implement ongoing maintenance and support.
- Chapter 5, *Accelerating Acquisition Improvement*, describes how to continuously improve acquisition processes and become a catalyst for change within an organization.

Finally, the Appendix, *Overview of CMMI-ACQ*, presents the six key process areas that are specific to acquisition organizations as well as the process areas common to all CMMI models.

Background and History

Capability Maturity Models (CMMs) were developed by the Carnegie Mellon Software Engineering Institute (SEI) to support a number of specific disciplines. The SEI acknowledged the need for organizations to leverage multiple models, so the government, industry, and the SEI embarked on an integration project to bring the various independent models into an integrated framework to support process improvement throughout the company or enterprise. The Capability Maturity Model Integration (CMMI) Framework that emerged from this integration initiative was designed to

allow for future integration of other models, such as those covering development, acquisition, and services.

In 2005, General Motors Corporation teamed up with the SEI to help adapt CMMI to reflect the acquisition of technology solutions, and together the two organizations have published an initial draft version of the CMMI-ACQ. To develop this book and the CMMI-ACQ, we interviewed more than 250 executives, program managers, team members from government agencies, commercial companies, and their respective suppliers over the course of three years.

Acknowledgments

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The central themes of this book have their roots in the practices of leading companies and government agencies that acquire systems, software, and IT, as well as leading suppliers of technology solutions. Although these organizations remain unnamed, we are deeply indebted to them for inspiring us to think in new and ever-evolving ways about acquiring technology solutions.

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