

Proactive Risk Management:

Controlling Uncertainty in **Product Development**

By Preston G. Smith and Guy M. Merritt 2002, 226 pp, \$32.95 Productivity Press, 444 Park Avenue South, Suite 604 New York, NY 10016 Telephone 212/686-5900 e-mail:info@productivityinc.com

itnessing teams develop new products, the authors have often seen surprise problems pop up late in the project, which had also occurred in other projects and shouldn't have been a surprise at all. The authors, who have a bestselling book, *Developing Products in Half the Time*, have shown with this book on risk management that a company will have a hard time developing products in a competitive timeframe without engaging a process for identifying and managing project risks.

Risk identification is a tool of modern project management, the U.S. Department of Defense, and some software tools. The work of identifying risk in a product development project very often stops with identifying the risk. Until this book, there has not been a definitive process with detailed "how to" tools for identifying and developing probabilities for risk events and impacts, and then managing and minimizing the risk and impact drivers throughout the project.

The authors have made this book an easy read for the management reader who wants just a summary. First they advise top management executives to read chapters 1-3, where they will learn the definitions of types of risks, the standard risk model described in the book, and an executive summary of the details of the risk management process of chapters 4-8. The

book also has handy indicators in the margins of the text such as key ideas, pitfalls to avoid, many examples, and cases illustrating a point being made, and supplementary reading references.

Chapter 4, "Identifying Project Risks," points out that identifying risks is just the first step of project risk management. New risks may also occur throughout the project and the cross-functional team must be prepared to identify, analyze, and manage them while the project progresses. The authors require that the project team be cross-functional and that the risk manager be someone other than an engineer. They find that while risk events do occur in the technical design of the product, a majority will often occur in other functions of the business process.

Chapters 5-8 discuss the process of assessing the probability of a risk event occurring and identifying the detailed drivers, which are the root causes of the risk. The second part of the process is identifying the impact of each risk and the probability of the impact occurring. The drivers, or causes, of the impact must also be identified and managed or eliminated if possible. When the risk events and their impacts have been identified, the authors provide a spreadsheet for prioritizing each risk, weighted by its probability of occurrence and probability of impact. The high risk/impact

probabilities, together with the estimated loss for each risk, determine the priority. The authors are aware that all of the possible risks in a project cannot be worked on but the highest risk/loss ones receive top priority and the resources to mitigate or eliminate the risk.

The authors present an approach for using metrics to manage risk. One type of risk they identify is strategic, normally seen in many different projects, usually not identified at the outset of the project but almost always occurring later on in the project. The project managers must maintain historical records of projects in order to identify this type of strategic risk. Tactical risks are specific to each project and the authors recommend a risk dashboard for tracking risks resolved, still open, and the losses incurred as the project progresses. Of course the reason for tracking the status of risk at all is to manage them and in some cases eliminate them through action taken at the beginning and throughout the project.

The reader will find useful spreadsheets, serving as tools for tracking the risk event and impact drivers and for monitoring the action plans for driver resolution.

In chapter 9, the authors include a chapter of toolkits for managing various types of risks. Chapter 10 provides strategies and approaches for managing risk. Chapter 11 offers some advice on implementing a project risk management program and how to integrate risk management into project management. The last chapter presents two actual cases where risks were

identified and managed as the project developed. The authors show that not all identified risks happen in a project and some pop up which were not identified in the beginning of the project. But by managing them, most can be mitigated and some eliminated entirely. "Risk management is a constant game of improving your odds," and is easily integrated into the project management process.

The authors are careful to include many references for supplemental reading at the end of each chapter. Since more companies are adopting crossfunctional teams in the design of new products, this book on managing the risk (success or failure) of the lifeblood of the company (new products) should be a part of the library of every manufacturing professional.

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Boston 2005

Association of Manufacturing Excellence

21st Annual Conference



Paul Reverere

Folk hero of the American Revolution, whose dramatic horseback ride on the night of April 18, 1775 warned Boston-area residents that the British were coming. Paul Revere was also one of the earliest successful U.S. manufacturers, producing everything from elegant silver tea sets to surgical instruments. He also built the first mill in the U.S. to roll sheets of copper, used for boats and buildings. Whether or not Revere used "Lean Practices" remains unknown.

