



Proactive Risk Management: Controlling Uncertainty in Product Development

*Preston G. Smith and Guy M. Merritt
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REVIEWED BY GREGG TONG

With a greater than 50% failure rate, new product development has been a consistently risky business for companies of all industries. Since few firms have turned their attention to preventing the risks associated with these failures, and typically rely instead on fire fighting and late corrective actions that can greatly inflate the cost of the project from a development expense as well as a market performance perspective, this is a fertile opportunity for consultants who master the techniques of proactive risk management. Those consultants would be hard-pressed to find better guides than Preston Smith, a respected management consultant, and Guy Merritt, a staff project manager at Tellabs, coauthors of *Proactive Risk Management*. The book explains their five-step process for anticipating, preventing, and resolving product development risks. This model has been

used at various companies, including Merritt's.

The unofficial theme of this book is “no surprises,” and the aim is to arm developers with a suite of tools to anticipate and treat risks in the many different forms it can take, including defect opportunities, resource allocation, and many other technical and market dangers. Smith and Merritt explain the basics of what risk is, its various negative effects, and the benefits of an active system to manage risks. Because they recognize that proper management can require significant effort (a risk in and of itself), they endorse embedding it within the development process to make the additional tasks a more natural part of any project. While their model is a thorough and disciplined one, resistance to the time and care required is a significant challenge to implementation.

The five-step process outlined in the book follows a very logical methodology:

1. *Identify Project Risks.* To start out, the authors encourage assembling diverse opinions from a cross-functional group on the potential risks of the project. To keep this step controlled and focused, a variety of techniques is offered on how to elicit ideas from the group by

using the schedule, past project performance, and the development process itself as the drivers for exposing problem hot spots.

2. *Analyze Risks.* Here is where perception is separated from reality. Risks identified in step 1 are sorted and investigated further to ensure their inclusion is based on solid facts and not unsupported conjecture. Risks that pass this litmus test are further analyzed using quantitative tools that enable the team to assign them a level of severity. That gives a better understanding of their potential damage to the project, such as delays to the schedule, wasted time in the test lab, or project investments that must be scrapped.

3. *Prioritize and Map Risks.* Once a list of risk candidates is assembled, it is then prioritized so that the team can identify a reasonable number of risks for active, ongoing management. The authors explain mapping and charting tools to help with this analysis, as well as methods for considering the tradeoffs between risks that are difficult to choose over one another.

4. *Plan Resolution of Targeted Risks.* Now, with a short list of high priority risks, decisions are made on how to address them and whether they will be actively

managed, ignored, or resolved in other ways. Various options for dealing with risks are explored, ranging from mitigation to contingency planning. An interesting and useful analogy is how the authors' methods would apply to a person with a heart condition and the management of his or her potential for myocardial infarction, and that illustration is carried out in useful detail.

5. *Monitor Project Risks*. This is the step where companies get the majority of the benefits for their efforts. If the first four steps are completed, it's logical to then establish ongoing efforts to ensure that resolved risks remain resolved, actively managed risks are not forgotten, and plans are made to deal with changing conditions and new risks as they appear. Good use of metrics is essential in this phase, especially communicating the status of risks between the development team and senior management. Smith and Merritt present a dashboard-reporting technique and other tips to accomplish this.

The book itself is written and laid out so it's more practical and user-friendly than other books of its type. Each of the twelve chapters is augmented with icons that appear in the

page margins to highlight the content of specific ideas. For example, key ideas are marked with a picture of a key; and an exclamation mark inside a triangle is used to label concepts that can create pitfalls or dangerous situations. This is a technique that is carried over from Smith's earlier book, *Developing Products in Half the Time*, and is a helpful augmentation that could well be used by more business authors. In addition, there is a handy reference guide that folds out of the back cover with summarized checklists and graphical representations of the five-step process. My only suggestion for future editions is to design this flap to also function as a bookmark.

In addition to the helpful layout of the book, Smith has also embedded a subtle concentration on the economics of product development, a major focus of his earlier book mentioned above. This is exceptionally helpful when discussing various points of decision making within the risk management process. Readers are encouraged to express risks in monetary terms, such as what a schedule delay will cost in real dollars. The point is that it is much easier to evaluate a risk's severity when using a measure (such as money) that everyone in the company can relate to.

The remainder of the book contains discussion of additional tools, techniques, and strategies to aid the implementation of the risk-management process, and is peppered with real-life examples and helpful tips from the authors' experience. Each chapter is also appended with supplemental reading, and a helpful glossary appears at the end of the book.

The authors understand that this program appears intimidating, and they have eased this by anticipating and addressing the resistance that clients and even consultants may face when attempting implementation. They do not hide the fact that risk management is a heavy challenge, but they provide an effective road map for those willing to take it on and achieve its many economic benefits.

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