

## Real Time Agility

As the Fourth Industrial Revolution barrels forward and the pace of disruption accelerates, all organizations must operate with agility. But this urgent priority, now widely-accepted by senior leaders, presents a major challenge: In business, government, and warfare, agility is a buzzword. There is no common understanding of what it means, or of what it takes to be consistently agile. In this groundbreaking book, Leo Tilman and Charles Jacoby offer the first comprehensive assessment of the fundamental nature of organizational agility and then describe the essential leadership practices for achieving it. They show that agility is far superior to mere speed or adaptability. Pinpointing its distinctive features, they define agility as the ability to detect and assess changes in the competitive environment in real time and then take decisive action. They demonstrate that agility enables an organization to outmaneuver competitors by seizing opportunities; better defending against threats; and acting as a well-orchestrated collective of teams that are empowered to take disciplined initiative. Combining their personal experience of building and leading agile organizations, Tilman in the realm of business and finance and Jacoby in battlefield command and homeland security, they present a powerful approach to fostering agility up and down an organization, and out to its very edges. They show how to detect opportunities and threats by fighting for risk intelligence; how to pierce through complexity and unleash creativity by nurturing a culture of honesty and trust; how to meld top-down vision and planning with decentralized execution; and how to enhance strategy by recognizing organizations as dynamic portfolios of risk. In a world where leaders and their teams must brave the unknown and step confidently forward – or risk extinction – Agility provides a vital roadmap for seizing the unprecedented possibilities of the new age and dominating change instead of being dominated by it.

The Agile Model-Based Systems Engineering Cookbook distills the most relevant MBSE workflows and work products into a set of easy-to-follow recipes, complete with examples of their application. This book serves as a quick and reliable practical reference for systems engineers looking to apply agile MBSE to real-world projects.

Agile is a vast global movement and it's transforming the world of work. From beginnings in software development it's now appealing to mainstream business because it helps them be more productive, profitable and successful - by delivering greater customer value. If you're on a journey to agile, at some point you'll be 'agile-ish'. 'Ish' means somewhat, to a degree, more or less. It's not perfect or finished or done. Agile-ish acknowledges that the gifts of imperfection are incredible learning experiences; that, the benefits of getting momentum outweighs the time spent over-planning; and that delivering value to customers is what makes 21st Century businesses successful. Lynne Cazaly is a speaker, mentor and the author of six books on topics of business agility, collaboration, creativity and productivity. She regularly presents conference sessions and workshops on what it takes to respond to the future challenges of work and the demands of customers in a changing world.

In recent years, the concept of agility has captured the executive imagination, and leaders in a variety of industries and companies of all sizes are now searching for ideas on how to effectively utilize agile thinking. This book provides insights on agility from world-class experts on leadership, strategy and organization, alongside seasoned practitioners who have successfully implemented agility programs for companies such as Daimler, Ford Motor Company, J. W. Thompson, Siemens, and NASA. By combining theoretical expertise with a variety of managerial experiences, it provides a wide-ranging yet succinct guide for companies seeking to engage in the transformative journey towards becoming more agile. As such, it will be of great use and interest to executives in all industries, executive education participants and consultants, M.B.A. students and researchers interested in agile. Agility.X prepares leaders for managing under uncertainty and organizations for thriving in turbulent environments.

A recent survey stated that 52% of embedded projects are late by 4-5 months. This book can help get those projects in on-time with design patterns. The author carefully takes into account the special concerns found in designing and developing embedded applications specifically concurrency, communication, speed, and memory usage. Patterns are given in UML (Unified Modeling Language) with examples including ANSI C for direct and practical application to C code. A basic C knowledge is a prerequisite for the book while UML notation and terminology is included. General C programming books do not include discussion of the constraints found within embedded system design. The practical examples give the reader an understanding of the use of UML and OO (Object Oriented) designs in a resource-limited environment. Also included are two chapters on state machines. The beauty of this book is that it can help you today. Design Patterns within these pages are immediately applicable to your project Addresses embedded system design concerns such as concurrency, communication, and memory usage Examples contain ANSI C for ease of use with C programming code

Would you like to build a better bond with your dog? Make new friends? Travel to new places? Accept new challenges? You can do it all through the sport of agility. Agility blends desire, control training and athletic ability into a rip-roaring good time. All healthy dogs can enjoy agility work, releasing their energy constructively and learning how to be under control even when they're in high spirits. All About Agility explains how to get involved in this exciting canine sport, including training tips for every challenge on the course. Learn how the sport has evolved, how the courses differ in different organizations and what the rules and titles are. Find out what to expect at a competition and how to prepare. Get training tips from the top pros, including: Stuart Mah S. Shane McConnell Harry and Pat Guticz Mike Bond Richard Budny The Revised Edition includes the new AKC Jumpers With Weaves classes, revised USDAA jump heights and all the latest information on the fastest-growing sport in the canine world. "Written in an easily readable, upbeat style, this book has much to offer both the agility novice and the experienced competitor...Chances are you will be tempted to start out as soon as you can with your own agility star." —AKC Gazette

Agile Systems Engineering presents a vision of systems engineering where precise specification of requirements,

structure, and behavior meet larger concerns as such as safety, security, reliability, and performance in an agile engineering context. World-renown author and speaker Dr. Bruce Powel Douglass incorporates agile methods and model-based systems engineering (MBSE) to define the properties of entire systems while avoiding errors that can occur when using traditional textual specifications. Dr. Douglass covers the lifecycle of systems development, including requirements, analysis, design, and the handoff to specific engineering disciplines. Throughout, Dr. Douglass couples agile methods with SysML and MBSE to arm system engineers with the conceptual and methodological tools they need to avoid specification defects and improve system quality while simultaneously reducing the effort and cost of systems engineering. Identifies how the concepts and techniques of agile methods can be effectively applied in systems engineering context Shows how to perform model-based functional analysis and tie these analyses back to system requirements and stakeholder needs, and forward to system architecture and interface definition Provides a means by which the quality and correctness of systems engineering data can be assured (before the entire system is built!) Explains agile system architectural specification and allocation of functionality to system components Details how to transition engineering specification data to downstream engineers with no loss of fidelity Includes detailed examples from across industries taken through their stages, including the "Waldo" industrial exoskeleton as a complex system This dissertation proposes and tests a new construct applicable to real-time adaptation. Cognitive agility is a formative construct that measures the individual ability to exhibit cognitive flexibility, cognitive openness and focused attention. This research seeks to demonstrate whether the formative construct of cognitive agility predicts adaptive performance in a dynamic-decision-making microworld. 181 undergraduates performed three consecutive trials, each of increasing difficulty and cognitive demand, in a microworld computer game called Networked Fire Chief (NFC). The changes within and between trials require the participants to flexibly adapt strategies using both cognitive openness and focused attention, in order to score highly. The individual variables that form cognitive agility, as well as the formative construct, explain unique variance beyond measures of general intelligence on the total score of adaptive performance. Most notably, the cognitive agility construct explains unique variance beyond general intelligence in each of the respective methods of measurement ( $R^2=11\%$  for performance measures and  $R^2=6\%$  for both the self reports and other rater reports). The results indicate a novel combination of abilities that may further the study of real-time adaptability. This is the first book to seriously address the disconnection between nimble Agile teams and other groups in the enterprise, including enterprise architecture, the program management office (PMO), human resources, and even business executives. When an enterprise experiments with practice improvements, software development teams often jump on board with excitement, while other groups are left to wonder how they will fit in. We address how these groups can adapt to Agile teams. More importantly, we show how many Agile teams cause their own problems, damaging scalability and sustainability, by requiring special treatment, and by failing to bridge the gaps between themselves and other groups. We call this phenomenon "Agile illth." Adopting a set of "best practices" is not enough. All of us, Agile teams and the corporate groups, must change our intentions and worldviews to be more compatible with the success of the enterprise. Join us on the journey to enterprise agility. It is a crooked path, fraught with danger, confusion and complexity. It is the only way to reach the pinnacles we hope to experience in the form of better business value delivered faster for less cost.

Sustaining a competitive edge in today's business world requires innovative approaches to product, service, and management systems design and performance. Advances in computing technologies have presented managers with additional challenges as well as further opportunities to enhance their business models. Software Engineering for Enterprise System Agility: Emerging Research and Opportunities is a collection of innovative research that identifies the critical technological and management factors in ensuring the agility of business systems and investigates process improvement and optimization through software development. Featuring coverage on a broad range of topics such as business architecture, cloud computing, and agility patterns, this publication is ideally designed for business managers, business professionals, software developers, academicians, researchers, and upper-level students interested in current research on strategies for improving the flexibility and agility of businesses and their systems.

Instructional Agility: Responding to Assessment With Real-Time Decisions explores one of the six tenets authors Cassandra Erkens, Tom Schimmer, and Nicole Dimich Vagle present in their first title Essential Assessment. Instructional Agility outlines why K-12 teachers and administrators must become instructionally agile; assessing evidence of learning as instruction unfolds and deciding where instruction should go so they can help students achieve at the highest levels. Moving seamlessly among instruction, formative assessment, and feedback, educators can foster a classroom culture that enhances student engagement, proficiency, and ownership of learning. When teachers discover how to make thoughtful decisions based on moment-to-moment assessment information, they can take full advantage of their limited class time with students.

Proven Solutions for the Most Widespread and Frustrating Agile Challenges "This book gives you the answers that a wise mentor would have given you, if you had one. Daniel Gullo shares his insights on the principal questions that everyone coming to the world of Agile will inevitably encounter." –From the foreword by Stephen Denning, author of The Leader's Guide to Radical Management Agile is becoming ubiquitous, but successful Agile implementation remains difficult. Organizations keep getting stuck on the same issues. However, with Real World Agility: Practical Guidance for Agile Practitioners, that need not happen to you. World-renowned Agile coach and consultant Daniel James Gullo identifies and addresses nearly sixty widespread challenges faced by anyone trying to derive value from Agile. Drawing on his vast experience guiding Agile teams to success, Gullo helps you accurately diagnose your problems, describes each solution with maximum clarity, and concisely presents the details you need in order to act effectively. This accessible guide is for every project participant and stakeholder: from ScrumMasters and team leads to developers, project managers, product owners, and customers. Gullo addresses methods ranging from Scrum to Kanban, guides you on scaling Agile, and even helps you apply it beyond software development. Coverage includes Making sense of Agile's many "flavors" Overcoming key hurdles in transitioning from waterfall Addressing cultural obstacles Meshing Agile teams with your management hierarchy Engaging executives with Agile practices and values Clarifying relationships among ScrumMasters, product owners, and project managers Smoothly handling key tasks, such as organizing backlogs and defining sprints Taking advantage of continuous integration and test-driven development Bringing Agile to distributed teams and large

product portfolios Throughout, vignettes show exactly how Agile problems manifest in the real world—and how Gullo's solutions can help you overcome them. As you learn from others' experiences, you'll quickly begin to see a clear path to success. This is the eBook version of the printed book. If the print book includes a CD-ROM, this content is not included within the eBook version. Real-time and embedded systems face the same development challenges as traditional software: shrinking budgets and shorter timeframes. However, these systems can be even more difficult to successfully develop due to additional requirements for timeliness, safety, reliability, minimal resource use, and, in some cases, the need to support rigorous industry standards. In "Real-Time Agility," leading embedded-systems consultant Bruce Powel Douglass reveals how to leverage the best practices of agile development to address all these challenges. Bruce introduces the Harmony/ESW process: a proven, start-to-finish approach to software development that can reduce costs, save time, and eliminate potential defects. Replete with examples, this book provides an ideal tutorial in agile methods for real-time and embedded-systems developers. It also serves as an invaluable "in the heat of battle" reference guide for developers working to advance projects, both large and small. Coverage includes How Model-Driven Development (MDD) and agile methods work synergistically The Harmony/ESW process, including roles, workflows, tasks, and work products Phases in the Harmony/ESW microcycle and their implementation Initiating a real-time agile project, including the artifacts you may (or may not) need Agile analysis, including the iteration plan, clarifying requirements, and validation The three levels of agile design: architectural, mechanistic, and detailed Continuous integration strategies and end-of-the-microcycle validation testing How Harmony/ESW's agile process self-optimizes by identifying and managing issues related to schedule, architecture, risks, workflows, and the process itself

Master breakthrough new approaches to enterprise software delivery that address today's radically new development and business challenges • Helps development leaders strategically balance agility and efficiency in response to massive new global economic and technical trends. • Offers specific, practical solutions for improving control, visibility, and efficiency. • By Alan W. Brown -- IBM Distinguished Engineer, IBM Rational CTO, and one of the world's leading experts on high-value enterprise software delivery. Globalization, rapid technology churn, and massive economic shifts have made today's enterprise software delivery challenges radically different than those faced just three or four years ago. In this book, IBM Distinguished Engineer Alan W. Brown offers deep new insights into today's best approaches to enterprise software delivery. Brown guides decision-makers in choosing solutions that respond to their new challenges, and successfully anticipate what's coming next. He provides a compelling vision for 'software supply chains': one that can help software leaders create global software factories that successfully balance agility and efficiency. Brown illuminates today's new revolution in enterprise software delivery, focusing on key drivers for change, their impact on the day-to-day work of software engineers, and how enterprise software organizations are being reformed in response. He introduces the modern 'software factory' concept, addressing key trends including global outsourced teams, collaborative application lifecycle management, and cloud-based virtual infrastructures; Replete with examples, this informative, practical book will help organizations surface crucial issues they may have overlooked, and then identify and leverage the best new ways to deliver software. From start to finish, it offers powerful new opportunities to reduce costs, standardize processes, improve control and visibility, and become far more responsive to the business.

The two-volume set LNAI 6591 and LNCS 6592 constitutes the refereed proceedings of the Third International Conference on Intelligent Information and Database Systems, ACIIDS 2011, held in Daegu, Korea, in April 2011. The 110 revised papers presented together with 2 keynote speeches were carefully reviewed and selected from 310 submissions. The papers are thematically divided into two volumes; they cover the following topics: intelligent database systems, data warehouses and data mining, natural language processing and computational linguistics, semantic Web, social networks and recommendation systems, technologies for intelligent information systems, collaborative systems and applications, e-business and e-commerce systems, e-learning systems, information modeling and requirements engineering, information retrieval systems, intelligent agents and multi-agent systems, intelligent information systems, intelligent internet systems, intelligent optimization techniques, object-relational DBMS, ontologies and knowledge sharing, semi-structured and XML database systems, unified modeling language and unified processes, Web services and semantic Web, computer networks and communication systems.

Practical Guidance and Inspiration for Launching, Sustaining, or Improving Any Agile Enterprise Transformation Initiative As long-time competitive advantages disappear, astute executives and change agents know they must achieve true agile transformation. In *Unlocking Agility*, Jorgen Hesselberg reveals what works, what doesn't, and how to overcome the daunting obstacles. Distilling 10+ years of experience leading agile transformation in the enterprise, Hesselberg guides you on jumpstarting change, sustaining momentum, and executing superbly on customer commitments as you move forward. He helps you identify appropriate roles for consultants, optimize organizational structures, set realistic expectations, and measure against them. He shares first-hand accounts from pioneering transformation leaders at firms including Intel, Nokia, Salesforce.com, Spotify, and many more. • Balance building the right thing, the right way, at the right speed • Design a holistic transformation strategy using five dimensions of agility: Technology, Organizational Design, People, Leadership, and Culture • Promote agile skills, knowledge, and abilities throughout your workforce • Incorporate powerful leadership models, including Level 5, Teal, and Beyond Budgeting • Leverage business agility metrics to affect norms and change organizational culture • Establish your Agile Working Group, the engine of agile transformation • Define operating models and strategic roadmaps for unlocking agility, and track your progress You already know agile transformation is essential. Now, discover how to customize your strategy, execute on it in your environment, and achieve it.

Real-Time Agility The Harmony/ESW Method for Real-Time and Embedded Systems Development Pearson Education Leadership Agility is the master competency needed for sustained success in today's complex, fast-paced business environment. Richly illustrated with stories based on original research and decades of work with clients, this groundbreaking book identifies five levels that leaders move through in developing their agility. Significantly, only 10% have mastered the level of agility needed for consistent effectiveness in our turbulent era of global competition. Written in an engaging, down-to-earth style, this book not only provides a map that guides readers in identifying their current level of agility. It also provides practical advice and concrete examples that show managers and leadership development professionals how they can bring greater agility to the initiatives they take every day.

Launch effective real-time communications to win in today's always-on world Gone are the days when you could plan out your marketing and public relations programs well in advance and release them on your timetable. "Real time" means news breaks over minutes, not days. It means companies develop (or refine) products or services instantly, based on feedback from customers or

events in the marketplace. And it's when businesses see an opportunity and are the first to act on it. In this eye-opening follow-up to *The New Rules of Marketing and PR*, a BusinessWeek bestseller, David Meerman Scott reveals the proven, practical steps to take your business into the real-time era. Find out how to act and react flexibly as events occur, position your brand in the always-on world of the Web, and avoid embarrassing mistakes and missteps. Real-Time Marketing and PR will also enable you to:

- Develop a business culture that encourages speed over sloth
- Read buying signals as people interact with your online information
- Crowdsource product development, naming, and even marketing materials such as online videos
- Engage reporters to shape stories as they are being written
- Command premium prices by delivering products at speed
- Deploy technology to listen in on millions of online discussions and instantly engage with customers and buyers

Scale and media buying power are no longer a decisive advantage. What counts today is speed and agility. While your competitors scramble to adjust, you can seize the initiative, open new channels, and grow your brand. Master Real-Time Marketing and PR today and become the first to act, the first to respond, and the first to win!

"This book communicates the various challenges and great opportunities that information systems research produces"--Provided by publisher.

"This book brings together the necessary methodologies and resources for organizations to understand the challenges and discover the solutions that will enhance their businesses"--

This is the eBook version of the printed book. A Practical Framework for Gaining Agility's Benefits Without the Risk Agile methodologies, such as XP, Scrum, Crystal, and Lean Software Development enable development organizations to deliver higher-quality software far more rapidly. However, for the "non-agile" development organization, transitioning to agility is an enormous leap, requiring radically new skills and presenting profound risks. In this book, leading agile practitioner Carol A. Wellington introduces the first systematic, three-phase process for moving smoothly to agility. Just as developers have learned to refactor code to improve performance and maintainability, Wellington shows how to refactor processes to improve agility. Using Wellington's framework, you can gradually move toward agility, while maintaining full control and avoiding disruption. You'll lay a solid foundation for agility, and then refactor more and more of your processes, systematically introducing agility wherever it delivers compelling value. You can retain current processes that work, and implement the best agile methods for your organization, regardless of their source. This practical approach can help you build organizational confidence in agility, drive measurable benefits, and minimize risk every step of the way. Coverage includes

- Phase 1: Time-boxed iterations that deliver customer-visible functionality—not just components
- Phase 2: A lightweight measurement process to detect problems and evaluate changes without wasting too much time gathering and analyzing data
- Phase 3: Identifying your worst process "smells," uncovering their true underlying causes, and fixing them
- Incrementally bringing agility to planning, estimation, analysis, design, development, and process management
- Eliminating tasks and processes that don't add value
- Overcoming pitfalls and hidden interconnections that complicate your agile transition
- Learning to lead the transition to agility, gaining buy-in from team members, customers, and executives

Whatever your role, organization, or current methodology, Refactoring to Agility can help you reap powerful value from agile methods—without the risks. Dr. Carol A. Wellington is a professor of computer science and the department chair at Shippensburg University of Pennsylvania. Prior to this position, she was a leader in large software development organizations, building operating systems and real-time embedded applications. Dr. Wellington currently uses this combination of academic and industrial experience as a consultant to help companies question their assumptions about development processes to improve their agility and product quality.

Real-time and embedded systems face the same development challenges as traditional software: shrinking budgets and shorter timeframes. However, these systems can be even more difficult to successfully develop due to additional requirements for timeliness, safety, reliability, minimal resource use, and, in some cases, the need to support rigorous industry standards. In *Real-Time Agility*, leading embedded-systems consultant Bruce Powel Douglass reveals how to leverage the best practices of agile development to address all these challenges. Bruce introduces the Harmony/ESW process: a proven, start-to-finish approach to software development that can reduce costs, save time, and eliminate potential defects. Replete with examples, this book provides an ideal tutorial in agile methods for real-time and embedded-systems developers. It also serves as an invaluable "in the heat of battle" reference guide for developers working to advance projects, both large and small. Coverage includes

- How Model-Driven Development (MDD) and agile methods work synergistically
- The Harmony/ESW process, including roles, workflows, tasks, and work products
- Phases in the Harmony/ESW microcycle and their implementation
- Initiating a real-time agile project, including the artifacts you may (or may not) need
- Agile analysis, including the iteration plan, clarifying requirements, and validation
- The three levels of agile design: architectural, mechanistic, and detailed
- Continuous integration strategies and end-of-the-microcycle validation testing
- How Harmony/ESW's agile process self-optimizes by identifying and managing issues related to schedule, architecture, risks, workflows, and the process itself

The leading authority on agile marketing shows how to build marketing operations that can pivot freely and yet remain committed to priorities. As a marketer, are you tired of chasing marketing fads and algorithm rumors that seem to change every couple of months? This guide to building the perfect marketing department will help you achieve the latest and greatest without having to rebuild your operations from scratch every time the wind shifts. Agile strategies have been the accepted modus operandi for software development for two decades, and marketing is poised to follow in its footsteps. As the audiences we market to become ever more digital, agile frameworks are emerging as the best and only way to manage marketing. This book is a signpost showing the way toward the agile future of marketing operations, explaining how every role, from social media intern up to chief marketing officer, can work in unison, responding to the market's demanding challenges without losing focus on the big picture. You will learn what it takes for marketing agility to thrive—customer focus, transparency, continuous improvement, adaptability, trust, bias for action, and courage—along with the antipatterns that can drag you down. Most important, you will learn how to implement the systems, strategies, and practices that will truly transform your marketing operations.

Enterprise Agility is practical framework for enhancing Agility and equipping your company with the tools to survive. Key Features

- Prepare your company to navigate the rapidly-moving business world
- Enhance Agility in every component of your organization
- Build a framework that meets the unique requirements of your enterprise

Book Description The biggest challenge enterprises face today is dealing with fast-paced change in all spheres of business. Enterprise Agility shows how an enterprise can address this challenge head on and thrive in the dynamic environment. Avoiding the mechanistic construction of existing enterprises that focus on predictability and certainty, Enterprise Agility delivers practical advice for responding and adapting to the scale and accelerating

pace of disruptive change in the business environment. Agility is a fundamental shift in thinking about how enterprises work to effectively deal with disruptive changes in the business environment. The core belief underlying agility is that enterprises are open and living systems. These living systems, also known as complex adaptive systems (CAS), are ideally suited to deal with change very effectively. Agility is to enterprises what health is to humans. There are some foundational principles that can be broadly applied, but the definition of healthy is very specific to each individual. Enterprise Agility takes a similar approach with regard to agility: it suggests foundational practices to improve the overall health of the body—culture, mindset, and leadership—and the health of its various organs: people, process, governance, structure, technology, and customers. The book also suggests a practical framework to create a plan to enhance agility. What you will learn Drive agility-oriented change across the enterprise Understand why agility matters (more than ever) to modern enterprises Adopt and influence an Agile mindset in your teams and in your organization Understand the concept of a CAS and how to model enterprise and leadership behaviors on CAS characteristics to enhance enterprise agility Understand and convey the differences between Agile and true enterprise agility Create an enterprise-specific action plan to enhance agility Become a champion for enterprise agility Recognize the advantages and challenges of distributed teams, and how Agile ways of working can remedy the rough spots Enable and motivate your IT partners to adopt Agile ways of working Who this book is for Enterprise Agility is a tool for anyone with the motivation to influence outcomes in an enterprise, who aspires to improve Agility. Readers from the following backgrounds will benefit: chief executive officer, chief information officer, people/human resource director, information technology director, head of change program, head of transformation, and Agile coach/consultant.

This is the eBook version of the printed book. If the print book includes a CD-ROM, this content is not included within the eBook version. Real-time and embedded systems face the same development challenges as traditional software: shrinking budgets and shorter timeframes. However, these systems can be even more difficult to successfully develop due to additional requirements for timeliness, safety, reliability, minimal resource use, and, in some cases, the need to support rigorous industry standards. In Real-Time Agility, leading embedded-systems consultant Bruce Powel Douglass reveals ho.

“Companies have been implementing large agile projects for a number of years, but the ‘stigma’ of ‘agile only works for small projects’ continues to be a frequent barrier for newcomers and a rallying cry for agile critics. What has been missing from the agile literature is a solid, practical book on the specifics of developing large projects in an agile way. Dean Leffingwell’s book *Scaling Software Agility* fills this gap admirably. It offers a practical guide to large project issues such as architecture, requirements development, multi-level release planning, and team organization. Leffingwell’s book is a necessary guide for large projects and large organizations making the transition to agile development.” —Jim Highsmith, director, Agile Practice, Cutter Consortium, author of *Agile Project Management* “There’s tension between building software fast and delivering software that lasts, between being ultra-responsive to changes in the market and maintaining a degree of stability. In his latest work, *Scaling Software Agility*, Dean Leffingwell shows how to achieve a pragmatic balance among these forces. Leffingwell’s observations of the problem, his advice on the solution, and his description of the resulting best practices come from experience: he’s been there, done that, and has seen what’s worked.” —Grady Booch, IBM Fellow Agile development practices, while still controversial in some circles, offer undeniable benefits: faster time to market, better responsiveness to changing customer requirements, and higher quality. However, agile practices have been defined and recommended primarily to small teams. In *Scaling Software Agility*, Dean Leffingwell describes how agile methods can be applied to enterprise-class development. Part I provides an overview of the most common and effective agile methods. Part II describes seven best practices of agility that natively scale to the enterprise level. Part III describes an additional set of seven organizational capabilities that companies can master to achieve the full benefits of software agility on an enterprise scale. This book is invaluable to software developers, testers and QA personnel, managers and team leads, as well as to executives of software organizations whose objective is to increase the quality and productivity of the software development process but who are faced with all the challenges of developing software on an enterprise scale.

The relentless pursuit of industrial efficiency no longer yields the profits it once did because it requires a level of business predictability that no longer exists. Instead, the Internet and global video and telecom systems provide a massive and continuous flow of data that causes the whole world to behave like a giant stock market, with all the volatility and uncertainty that goes along with such markets. Responsiveness now trumps efficiency. By being responsive to the evolving needs and desires of specific groups of customers, companies can wrap their products and services in a tailored blanket of value-added services to consistently earn an additional four percent or more gross margin than they would otherwise earn for the product or service alone. This customer and market specialization is the most promising and the most sustainable source of profits in our fluid, real-time economy. Part of the Microsoft Executive Leadership Series, *Business Agility* discusses the three fundamental process loops that drive an agile enterprise and how they work together to deliver the responsiveness that generates profits in a high-change economy. Providing strategies for innovative and pragmatic use of people, process, and technology to drive operations in an agile enterprise, this book reveals the principles of the agile enterprise, backed by real-world case studies from the author's own experience. Michael Hugos is a speaker, writer, and practitioner in IT and business agility, and agile system development methods. He writes a column for *Computerworld* and a blog titled "Doing Business in Real Time" for *CIO* magazine.

Ensuring an efficient and agile information system in organizations is a real challenge. Only an agile IT strategy can underpin this. *Strategic Information System Agility* offers methodological and practical support to achieve effective IT agility in complex and dynamic environments.

"The counterintuitive approach to achieving your true potential, heralded by the Harvard Business Review as a groundbreaking idea of the year"--

When software development teams move to agile methods, experienced project managers often struggle—doubtful about the new approach and uncertain about their new roles and responsibilities. In this book, two long-time certified Project Management Professionals (PMPs) and Scrum trainers have built a bridge to this dynamic new paradigm. They show experienced project managers how to successfully transition to agile by refocusing on facilitation and collaboration, not “command and control.” The authors begin by explaining how agile works: how it differs from traditional “plan-driven” methodologies, the benefits it promises, and the real-world results it delivers. Next, they systematically map the Project Management Institute’s classic, methodology-independent techniques and terminology to agile practices. They cover both process and project lifecycles and carefully address vital issues ranging from scope and time to cost management and stakeholder communication. Finally, drawing on their own extensive personal experience, they put a human face on your personal transition to agile—covering the emotional challenges,

personal values, and key leadership traits you'll need to succeed. Coverage includes Relating the PMBOKR Guide ideals to agile practices: similarities, overlaps, and differences Understanding the role and value of agile techniques such as iteration/release planning and retrospectives Using agile techniques to systematically and continually reduce risk Implementing quality assurance (QA) where it belongs: in analysis, design, defect prevention, and continuous improvement Learning to trust your teams and listen for their discoveries Procuring, purchasing, and contracting for software in agile, collaborative environments Avoiding the common mistakes software teams make in transitioning to agile Coordinating with project management offices and non-agile teams "Selling" agile within your teams and throughout your organization For every project manager who wants to become more agile. Part I An Agile Overview 7 Chapter 1 What is "Agile"? 9 Chapter 2 Mapping from the PMBOKR Guide to Agile 25 Chapter 3 The Agile Project Lifecycle in Detail 37 Part II The Bridge: Relating PMBOKR Guide Practices to Agile Practices 49 Chapter 4 Integration Management 51 Chapter 5 Scope Management 67 Chapter 6 Time Management 83 Chapter 7 Cost Management 111 Chapter 8 Quality Management 129 Chapter 9 Human Resources Management 143 Chapter 10 Communications Management 159 Chapter 11 Risk Management 177 Chapter 12 Procurement Management 197 Part III Crossing the Bridge to Agile 215 Chapter 13 How Will My Responsibilities Change? 217 Chapter 14 How Will I Work with Other Teams Who Aren't Agile? 233 Chapter 15 How Can a Project Management Office Support Agile? 249 Chapter 16 Selling the Benefits of Agile 265 Chapter 17 Common Mistakes 285 Appendix A Agile Methodologies 295 Appendix B Agile Artifacts 301 Glossary 321 Bibliography 327 Index 333

This two-volume set (CCIS 134 and CCIS 135) constitutes the refereed proceedings of the International Conference on Intelligent Computing and Information Science, ICICIS2011, held in Chongqing, China, in January 2011. The 226 revised full papers presented in both volumes, CCIS 134 and CCIS 135, were carefully reviewed and selected from over 600 initial submissions. The papers provide the reader with a broad overview of the latest advances in the field of intelligent computing and information science.

The ability to renew competitive advantage with flexibility is essential for any business in today's turbulent world. How do you go beyond trendy buzzwords and master the principles of business agility? Resetting Management helps leaders understand why business agility matters. Agility releases a new level of energy, innovation and entrepreneurship, enabling organizations to respond to disruption while still delivering business strategies with rigour and efficiency. Using diagnostic tools and practical models, the book describes how to master the essential components and principles of agility and respond to uncertain and fast-changing environments. Featuring case studies from some of the world's leading companies and illustrating how they have successfully and less successfully transformed for greater agility - including Lego, General Electric, LMVH and ING - Stéphane J.G. Girod and Martin Králik provide leaders with the skills to master the transformation journey that is right for their business.

Know how to lead and establish business agility in your organization. Benefit from clear, actionable steps based on change management truths that have been long underutilized and have limited the success of agile expansion into your business. This book provides a pragmatic framework for leading your business toward shifting to an agile mindset. Achieving Business Agility offers strategies and concrete examples to engage business executives and will teach you how to effectively execute these strategies. Whether you are a delivery executive, a change advocate, a consultant, a business leader, or a newcomer to agile, you will learn clear actions from a practical, business-oriented perspective that is vital to effect change and bring agile into your business. The book is structured in three sections. The first provides you with a deep understanding of each of four strategies. The second section tells the story of a company that applied these strategies through the eyes of several key players. The last section helps you get started applying what you learned in your own company. What You'll Learn Get the attention of your executives by alerting them to a company problem that can impact them personally and create a sense of urgency to address it Collaborate with your executives in a way that gets them to open up and to see how their operating model is a contributing cause to the company problem Demonstrate how your executives can specifically benefit from a new agile business operating model and address the company problem Create a reinforcement structure on a larger scale to establish agile as the new standard operating model in your organization Who This Book Is For Managers, business leaders, and consultants at/for large enterprises or small startups who want their company to better compete in today's fast-moving markets that present threats and opportunities at every turn. No agile expertise is required.

Rather than deciding whether or not to get involved in global sourcing, many companies are facing decisions about whether or not to apply agile methods in their distributed projects. These companies are often motivated by the opportunities to solve the coordination and communication difficulties associated with global software development. Yet while agile principles prescribe close interaction and co-location, the very nature of distributed software development does not support these prerequisites. Šmite, Moe, and Ågerfalk structured the book into five parts. In "Motivation" the editors introduce the fundamentals of agile distributed software development and explain the rationale behind the application of agile practices in globally distributed software projects. "Transition" describes implementation strategies, adoption of particular agile practices for distributed projects, and general concepts of agility. "Management" details practical implications for project planning, time management, and customer and subcontractor interaction. "Teams" discusses agile distributed team configuration, effective communication and knowledge transfer, and allocation of roles and responsibilities. Finally, in the "Epilogue" the editors summarize all contributions and present future trends for research and practice in agile distributed development. This book is primarily targeted at researchers, lecturers, and students in empirical software engineering, and at practitioners involved in globally distributed software projects. The contributions are based on sound empirical research and identify gaps and commonalities in both the existing state of the art and state of the practice. In addition, they also offer practical advice through many hints, checklists, and experience reports. Questions answered in this book include: What should companies expect from merging agile and distributed strategies? What are the stumbling blocks that prevent companies from realizing the benefits of the agile approach in distributed environments, and how can we recognize infeasible strategies and unfavorable circumstances? What helps managers cope with the challenges of implementing agile approaches in distributed software development projects? How can distributed teams survive the decisions taken by management and become efficient through the application of agile approaches?

Written as a workbook with a set of guided exercises that teach by example, this book gives a practical, hands-on guide to using UML to design and implement embedded and real-time systems. A review of the basics of UML and the Harmony process for embedded software development: two on-going case examples to teach the concepts, a small-scale traffic light control system and a large scale unmanned air vehicle show the applications of UML to the specification, analysis and design of embedded and real-time systems in general. A building block approach: a series of progressive worked exercises with step-by-step explanations of the complete solution, clearly demonstrating how to convert concepts into actual designs. A walk through of the phases of an incremental spiral process: posing the problems and the solutions for requirements analysis, object analysis, architectural design, mechanistic design, and detailed design.

Being a certified bibliophile and a professional geek, I have more shelf space devoted to books on software methods than any reasonable human should possess. Balancing Agility and Discipline has a prominent place in that section of my library, because it has helped me sort

through the noise and smoke of the current method wars. --From the Foreword by Grady Booch This is an outstanding book on an emotionally complicated topic. I applaud the authors for the care with which they have handled the subject. --From the Foreword by Alistair Cockburn The authors have done a commendable job of identifying five critical factors--personnel, criticality, size, culture, and dynamism--for creating the right balance of flexibility and structure. Their thoughtful analysis will help developers who must sort through the agile-disciplined debate, giving them guidance to create the right mix for their projects. --From the Foreword by Arthur Pyster Agility and discipline: These apparently opposite attributes are, in fact, complementary values in software development. Plan-driven developers must also be agile; nimble developers must also be disciplined. The key to success is finding the right balance between the two, which will vary from project to project according to the circumstances and risks involved. Developers, pulled toward opposite ends by impassioned arguments, ultimately must learn how to give each value its due in their particular situations. Balancing Agility and Discipline sweeps aside the rhetoric, drills down to the operational core concepts, and presents a constructive approach to defining a balanced software development strategy. The authors expose the bureaucracy and stagnation that mark discipline without agility, and liken agility without discipline to unbridled and fruitless enthusiasm. Using a day in the life of two development teams and ground-breaking case studies, they illustrate the differences and similarities between agile and plan-driven methods, and show that the best development strategies have ways to combine both attributes. Their analysis is both objective and grounded, leading finally to clear and practical guidance for all software professionals--showing how to locate the sweet spot on the agility-discipline continuum for any given project. 0321186125B10212003

Adopting the latest agile tools and practices won't be enough to respond to rapid market change. Leaders must first lay the groundwork by creating the right environment for these tools to work. Many managers struggle to install the underlying organizational operating system for business agility. High-performing agile organizations depend on the strength of six key enabling factors: leadership, culture, structure, people, governance, and ways of working. This book explains why these factors are important and how they work together to increase organizational agility. Real-world examples, stories, and tools will help leaders get realistic about the scope of changes needed in their organizations and show them how to get started. Karim Harbott does not offer a book of recipes. Instead, he focuses on mindset, principles, and general patterns. This book summarizes of the most important factors in increasing organizational agility and why they work, which leaders will need to consider in a so-called agile transformation. Because every organization is different, each will have its own route to agility and high performance. Managers will need to tackle all the areas that are crucial to creating an environment in which any chosen approach can work. This book is about improving and sustaining agility by focusing on people over process, as the first agile value advocates, and is the third and final book in the author's Lean and Agile Software trilogy. The first – A Tale of Two Systems: Lean and Agile Software Development for Business Leaders – describes what agile is and why we do it. The second – A Tale of Two Transformations: Bringing Lean and Agile Software Development to Life – guides leaders in transforming their organizations to adopt this approach. All three books mix description and elaboration of theory with practical demonstration in fictional companies and projects. This new, third book – People over Process: Leadership for Agility – presents a model of facilitative leadership for agility, which informs the entire book. It begins by describing the roots of the agile movement, which motivates the centrality of people and the need for leadership. The leadership model is then presented, very simply: rigor, alignment, efficiency, through frameworks. Leadership is considered for all team members, and then for the special case of the responsibilities of leaders in formal positions of organizational authority. With this strong background presented, the book proceeds to describe and demonstrate common and highly useful frameworks for agility. The fictional Pacifica Bank is introduced, and we see the Pacifica team work through architecture, project planning, team structure, governance, scrum meeting, and ultimately retrospectives, using frameworks that have been presented. An Appendix summarizes the most useful frameworks for future reference. Throughout the book concepts are illustrated with vignettes from my experience (in the didactic sections) and with the Pacifica fictional case study. The key benefits of the book are to make everyone involved in agile work more effective and fulfilled. Essentially, since agile was first introduced almost two decades ago, the primary focus in practice has been on process. The "scrum" methodology was developed and promulgated, and has been widely adopted. This has been on balance broadly positive, but as an industry we have progressed to the point where following the steps of a methodology, particularly one that seeks to implement concepts where the first value is "People over Process," has reached its limits. The reader of this book: • Gains a powerful, simple model of leadership that enables the "People" in "People over Process;" • Sees these principles in action in a fictional company, making agile leadership understandable and engaging; • Improves their ability to participate in and lead agility; • Learns extraordinarily useful "frameworks" that help in the most important activities in agile software. In short, the reader will be better at delivering valuable software solutions, more valuable to their organizations, and more fulfilled in their work.

This publication supports reforms towards greater strategic agility in the public sector through the use of budgeting policy levers, human resource management strategies and ICTs.

[Copyright: d6c7c01916c40ca72786f953fec9d5df](https://www.digipub.org/record/d6c7c01916c40ca72786f953fec9d5df)