

Pdma Handbook Third Edition

Provides an international collection of studies on knowledge-intensive organizations with insight into organizational realities as varied as universities, consulting agencies, corporations, and high-tech start-ups.

Boost your performance with improved project management tactics Project Management ToolBox: Tools and Techniques for the Practicing Project Manager, Second Edition offers a succinct explanation of when, where, and how to use project management resources to enhance your work. With updated content that reflects key advances in the project management field, including planning, implementation, control, cost, and scheduling, this revised text offers added material that covers relevant topics, such as agility, change management, governance, reporting, and risk management. This comprehensive resource provides a contemporary set of tools, explaining each tool's purpose and intention, development, customization and variations, and benefits and disadvantages. Additionally, examples, tips, and milestone checks guide you through the application of these tools, helping you practically apply the information you learn. Effective project management can support a company in increasing market share, improving the quality of products, and enhancing customer service. With so many aspects of project management changing as the business world continues to evolve, it is critical that you stay up to date on the latest topics in this field. Explore emerging topics within the world of project management, keeping up to date on the latest, most relevant subject areas Leverage templates, exercises, and PowerPoint presentations to enhance your project management skills

Product development professionals at the cutting edge of knowledge in their respective areas of new product expertise present a complete picture of the information needed for effective product development. Describes all aspects of the topic from the creation of the concept through development and design to the final production, marketing, and service. Discusses fundamental concepts including identifying customer needs, using multifunctional teams, and having an appropriate development procedure as well as important issues emerging in the field such as process ownership, pipeline management, metrics, and product architecture.

We have designed this book primarily for the business school student or marketing manager, who, with minimal background and technical training, must understand and employ the basic tools and models associated with Marketing Engineering. The 21st century business environment demands more analysis and rigor in marketing decision making. Increasingly, marketing decision making resembles design engineering—putting together concepts, data, analyses, and simulations to learn about the marketplace and to design effective marketing plans. While many view traditional marketing as art and some view it as science, the new marketing increasingly looks like engineering (that is, combining art and science to solve specific problems). We offer an accessible overview of the most widely used marketing engineering concepts and tools and show how they drive the collection of the right data and information to perform the right analyses to make better marketing plans, better product designs, and better marketing decisions. ** The latest edition includes up-to-date examples and references as well as a new chapter on the digital online revolution in marketing and its implications for online advertising. In addition, the edition now incorporates some basic financial concepts (ROI, Breakeven Analysis, and Opportunity Cost) and other tools essential to the new domain of marketing analytics. **

Strategic Targeting for Business and Technology Firms

Handbook of New Product Development Management

Handbook of Research on Knowledge-Intensive Organizations

Revolutionizing Product Development

Handbook of Market Segmentation

Winning at New Products

At an early stage of the development, the design teams should ask questions such as, "How reliable will my product be?" "How reliable should my product be?" And, "How frequently does the product need to be repaired / maintained?" To answer these questions, the design team needs to develop an understanding of how and why their products fails; then, make only those changes to improve reliability while remaining within cost budget. The body of available literature may be separated into three distinct categories: "theory" of reliability and its associated calculations; reliability analysis of test or field data - provided the data is well behaved; and, finally, establishing and managing organizational reliability activities. The problem remains that when design engineers face the question of design for reliability, they are often at a loss. What is missing in the reliability literature is a set of practical steps without the need to turn to heavy statistics. Executing Design for Reliability Within the Product Life Cycle provides a basic approach to conducting reliability-related streamlined engineering activities, balancing analysis with a high-level view of reliability within product design and development. This approach empowers design engineers with a practical understanding of reliability and its role in the design process, and helps design team members assigned to reliability roles and responsibilities to understand how to deploy and utilize reliability tools. The authors draw on their experience to show how these tools and processes are integrated within the design and development cycle to assure reliability, and also to verify and demonstrate this reliability to colleagues and customers.

Now in its third edition, this project management classic has been updated with an array of field-tested tools to help upper management ensure the success of projects within organizations. For over twenty years, Creating an Environment for Successful Projects has been a staple for upper managers who want to help projects succeed. This new edition includes case studies from companies that have successfully applied the approach, along with practical tools such as templates, surveys, and benchmark reports for savvy leaders who want to ensure project success throughout their organizations. The insights in this book will help management speed projects along instead of getting in their way. All too often, well-intentioned managers put roadblocks in the team's way instead of empowering them with the tools they need to succeed. This approach to project environments, grounded in decades of research and practice, will help you make your organization the most project-friendly it's ever been. Organizational changes rarely work unless upper management is heavily involved. Although project managers are most closely responsible for the success of projects, upper managers are the ones who ultimately create an environment that supports those projects. The way upper managers define, structure, and act toward projects has an important effect on the success or failure of those projects and, consequently, the success or failure of the organization. This book helps all managers understand the need for project management changes and shows how to develop project management as an organizational practice.

ATRAZENDO O VALOR DA MORTE é para gestores que têm a responsabilidade de aumentar receita e marketshare ou de abrir novos mercados e linhas de negócio. O processo contido neste livro provê um sistema completo para criar novo valor, começando pela análise das necessidades até o planejamento detalhado do negócio e sua adoção organizacional. Este é um livro avançado; assume-se que os gestores são bem experientes em seus mercados e nas capacidades organizacionais.

Publisher Description

DAMA-DMBOK

A Guide for Inventors and Entrepreneurs

Expert Product Management

A Step-by-Step Approach with Practical Examples

Innovation and Entrepreneurship

Creating an Environment for Successful Projects, 3rd Edition

Companies are experiencing a shortage of game-changing ideas that drive growth. This is a 'how to' book about generating a steady stream of breakthrough new product ideas. Experts, Dr. Cooper and Dr. Edgett, provide an unbiased evaluation of the top 15+ ideation methods used by leading companies. This book explains how to 'feed' your innovation funnel with a steady stream of breakthrough new product ideas. Through numerous examples of the methods, approaches and techniques being used by leading companies such as Motorola and Procter and Gamble, authors confirm the importance of a robust Discovery Stage and illustrate how to implement such a system. For more information, visit: www.stage-gate.com

Through yet concise, ESSENTIALS OF STRATEGIC MANAGEMENT, Third Edition, is a brief version of the authors' market-leading text STRATEGIC MANAGEMENT: AN INTEGRATED APPROACH. Following the same framework as the larger book, ESSENTIALS helps students identify and focus on core concepts in the field in a more succinct, streamlined format. Based on real-world practices and current thinking, the text's presentation of strategic management features an increased emphasis on the business model concept as a way of framing the issues of competitive advantage. Cutting-edge research, new strategic management theory, and a hands-on approach allow students to explore major topics in management, including corporate performance, governance, strategic leadership, technology, and business ethics. In addition, a high-quality case program examines small, medium, and large companies--both domestic and international--so that students gain experience putting chapter concepts into real-world practice in a variety of scenarios. Important Notice: Media content referenced within the product description or the text may not be available in the ebook version.

As we learned from New Coke, Pets.com, Apple's original handheld device, the Newton, and the reissued Ford Thunderbird, all the promotion in the world won't save a product that somehow isn't right. Robert Cooper is the world's leading expert on making sure your new-product introductions are more like Apple's iPods and less like Newtons.Cooper invented what's called the "stage-gate" process of new-product development-a process used by 60% of all businesses today. For this second edition Cooper has completed a major new study-the largest study of product development practices and results ever undertaken. He analyzed thousands of new successes and failures from hundreds of companies, with a particular emphasis on high-technology products and services. Product Leadership won't just tell you what things are helpful to your company's success. Now it will tell you how and how much they help.

Although companies have introduced product innovation processes, they are still struggling to achieve the financial results they expected. This book shows how to properly balance the need for speed with the drive for profitability. It demonstrates how to maximize the value of a new product portfolio, how to streamline the product innovation process, and how to achieve growth that is both profitable and sustainable. New product success is not simply about developing new products that sell: It's about getting them to market quickly with the lowest cost and the highest return. Dr. Robert G. Cooper and Dr. Scott J. Edgett use their latest research and draw upon their combined 60 years of experience in the field to show you what the companies that continuously win at new products are doing. Top performers have discovered how to properly balance the need for speed with profitability. With a new process they call NexGen(TM) Stage-Gate(R), Dr. Cooper and Dr. Edgett show precisely how you can ensure that your innovation is not only lean and rapid but profitable as well. For more information, visit: www.stage-gate.com

Strategic Targeting for Business and Technology Firms, Third Edition

Appreciating Our Pdma Accomplishments – Celebrating People, Lasting Friendships, and Our Collective Accomplishments

Pdma History, Publications and Developing a Future Research Agenda

Principles of Marketing Engineering and Analytics, 3rd Edition

Integrating Technological, Market and Organizational Change

Executing Design for Reliability Within the Product Life Cycle

Managing Innovation is the bestselling text for graduate and undergraduate students and a classic in the field. Emphasizing practical, evidence based tools and resources, this title provides students with the knowledge base to successfully manage innovation, technology, and new product development. The holistic approach addresses the interplay between the markets, technology, and the organization, while relating the unique skill set required to manage innovation and innovation processes. The sixth edition of Managing Innovation continues to include the popular Innovation in Action sections in each chapter which are now newly titled Case Studies, and also features a number of new cases, updated and new research notes and references, and links to videos, audio interviews, activities, and case studies. The sixth edition also features new material on emerging innovation themes, including business model innovation, user innovation, crowd-sourcing, creativity, entrepreneurship, service innovation, public services, and more. The rapid pace of the field's evolution has brought an increase in multi-disciplinary approaches and skills, while expanding the available tool kit and pushing the boundaries of possibility forward. This text provides expert navigation through the abundance of new data, new methods, new concepts, and approaches but it is designed to encourage and support tailored experimentation, not replace it. Equipped with a strong foundation and a productive innovation management mindset, todays students will be equipped to bring about the eras next great advances.

The software industry is regarded as one of the most creative and dynamic industries in the world. At the same time, sheltering software through copyright and patent law has been a major point of contention for the past 40 years. This doctoral thesis aims to provide new insights to this discussion. Through the use of sociological methodology, it supplies the necessary basic scientific research regarding how software is developed and commercialized nowadays. Based on these findings, it then legally evaluates to what extent copyright and patent law are able to reflect these structures and determines how an optimal protection scope for computer programs could look like today. This doctoral thesis on one hand offers novel insights and points of view on existing legal doctrines. It further acknowledges as well as legally qualifies some prevailing trends in the software industry, such as Scrum and continuous delivery, that have so far been largely unaddressed by copyright and patent law.

Provides a quick reference guide to the speciality, covering diagnoses, investigation and management in a user-friendly, accessible format. Contributors provide evidence-based guidelines which highlight the core knowledge for diagnosing and managing common problems and emergencies.

This is a practical how-to guide to what marketers need to know about defining, segmenting and targeting business markets: assessing customer needs; gauging the competition; designing winning strategies; and maximising corporate resources.

Pathways to Profitable Innovation

Feeding the Innovation Funnel

Baukastenstrategien im Automobilbereich - Erklärung der entstehenden Komplexität und Optimierungsansätze zu ihrer Beherrschung

Human Behaviour in Design 05

Commercializing Consumer Engagement: A Blueprint for the Healthcare Industry

Durch Baukastenstrategien im Automobilbereich können eine Vielfalt von Produktvarianten trotz technischer Standardisierung angeboten werden. Die Modularisierung reduziert also die Komplexität der Produktegestaltung, andererseits steigt in der Praxis die Herausforderung der Planung und Steuerung der Fahrzeugentwicklungsprojekte. Diese Auswirkungen werden in einer Fallstudie und Simulationsexperimenten untersucht, um der Praxis dabei zu helfen, die Projektkomplexität nachhaltig zu beherrschen.

With over 50% new content, this update of Industry classic "Developing Products in Half the Time" reveals how engineers and manufacturing, design, and marketing managers can dramatically accelerate product development projects--from packaged goods to medical electronics--while simultaneously improving quality.

Appreciating Our PDMA Accomplishments Celebrating People, Lasting Friendships, and Our Collective Accomplishments

This guide is designed to help researchers, inventors and entrepreneurs gain access to and use technology and business information and knowledge in the public domain, for the development of new innovative products and services in their own country. The focus of the guide is on information and technology disclosed in patent documents. Designed for self-study, the guide provides easy-to follow training modules that include teaching examples and other useful practical tools and resources.

Data Management Body of Knowledge

Lean, Rapid and Profitable New Product Development

Of the Handbook of Obstetrics and Gynaecology

Managing Innovation

Advanced Techniques, Tips & Strategies for Product Management & Product Marketing

Product Innovation and Technology Strategy

Taking a managerial approach, in order to acquaint students with the managerial steps and processes involved in new product development, this work includes coverage of product protocol.

No longer restricted to the engineering industry, project management has at long last crossed over to mainstream business. Project Management for Business Professionals is the definitive reference on the essentials of contemporary project management. Featured here are some of the foremost practitioners and researchers from academia, consulting, and private industry, sharing their various areas of project management expertise and providing a wide range of perspectives on everything from risk management to resource planning to ethics management. Focusing on both the technical and human sides of the field, this unique resource follows the main points of the "project management body of knowledge"--the certification standard of the Project Management Institute. The experts address the procedures and processes for planning and managing projects and explore project team/group dynamics, examining the interpersonal relations and the political and organizational considerations that can impact a project.

Innovation and Entrepreneurship 3rd Edition is an accessible text on innovation and entrepreneurship aimed specifically at undergraduate students studying business and management studies, but also those on engineering and science degrees with management courses. The text applies key theories and research on innovation and entrepreneurship and then reviews and synthesises those theories and research to apply them in a much broader and contemporary context, including the corporate and public services, emerging technologies and economies, and sustainability and development and creating and capturing value from innovation and entrepreneurship. In this third edition the authors continue to adopt an explicit process model to help organise the material with clear links between innovation and entrepreneurship. This text has been designed to be fully integrated with the Innovation Portal at www.innovation-portal.info, which contains an extensive collection of additional resources for both lecturers and students, including teaching resources, case studies, media clips, innovation tools, seminar and assessment activities and test questions.

The healthcare industry did not change overnight, but it changed in a big way Healthcare costs are rising and the health industry is shifting rapidly. Healthcare Insurance Payers and Medical Providers want to retain customers and lower costs by engaging consumers. They need to tune their strategy, organization culture, experiences, and processes to support a consumer's lifestyle with consistent experiences across channels, relevant interactions, and useful, easy-to-use products and services. If you want to engage consumers, you must embrace and adopt B2C principles How do consumers think and make decisions? How can I coordinate the thinking and effort in my business? How can I align to my business to the consumer?

Project Management for Business Professionals

Handbook of Marketing Decision Models

Discovering the Creative Scope in Software Engineering from the Perspective of Copyright and Patent Law

New Products Management

Developing Products in Half the Time

PROCEEDINGS OF THE XIV INTERNATIONAL SYMPOSIUM SYMORG 2014

Marketing models is a core component of the marketing discipline. The recent developments in marketing models have been incredibly fast with information technology (e.g., the Internet), online marketing (e-commerce) and customer relationship management (CRM) creating radical changes in the way companies interact with their customers. This has created completely new breeds of marketing models, but major progress has also taken place in existing types of marketing models. Handbook of Marketing Decision Models presents the state of the art in marketing decision models. The book deals with new modeling areas, such as customer relationship management, customer value and online marketing, as well as recent developments in other advertising, sales promotions, sales management, and competition are dealt with. New developments are in consumer decision models, models for return on marketing, marketing management support systems, and in special techniques such as time series and neural nets.

New Product Development is one of the most important challenges facing organizations today. The Product Development and Management Association (PDMA) Handbook of New Product Development 3rd Edition provides an exceptional review of cutting edge topics for both new and experienced product development leaders. It offers a comprehensive and updated guide to the practices, processes and tools critical to achieving and sustaining new product/service development success in today's world, delivering valuable information about the fundamentals as well as emerging practices such as venturing, virtual product development and the use of social media in NPD. As the premier global advocate for professionals and organizations working in the fields of new product/service development, PDMA has assembled in the Handbook unique content on the critical aspects of product development success including its 2012 Best Practices Research, Lessons Learned from its Outstanding Corporate Innovator Award Winners and keys to success from organizations with proven innovation track records. The 3rd Edition is an essential reference for anyone with responsibility for product development activities, from novices looking for

fundamentals to experts seeking insights on emerging concepts, and is relevant for all functions and all product/service industries.

Develop a successful strategy for segmenting high-tech and industrial markets? Whether it's due to a lack of focus, lack of time, or just bad planning, most companies fall short of the mark in their target marketing. The Handbook of Market Segmentation, 3rd Edition: Strategic Target Marketing for Business and Technology Firms is a practical, how-to guide to what marketers need to know about defining, segmenting, and targeting business markets: assessing customer needs; gauging the competition; designing winning strategies; and maximizing corporate resources. The latest edition of this marketing classic combines content and features from the previous editions with an emphasis on successful practices in business-to-business and high-tech segmentation. This valuable research source puts the latest thinking from the business and academic communities at your fingertips. From the author: The most important thing I've learned from working in market segmentation research and strategy for more than 15 years is that few companies get the most from their target marketing. Their top executives advocate the need to be market- or customer-oriented but base their marketing plans on cursory, incomplete, or emotional analyses. They end up with "fuzzy" business missions, unclear objectives, information that isn't decision-oriented, unfocused promotional strategies, and no real plan to attack niche markets. This happens because they haven't developed an effective strategy for segmenting high-tech and industrial markets. They don't have a process that introduces and improves their business segmentation planning and execution. What they need is a handbook for improving their organization's performance in new and existing business markets. Handbook of Market Segmentation, Third Edition: Strategic Target Marketing for Business and Technology Firm is a state-of-the-art guide to market identification, analysis, selection, and strategy. The book is organized into four parts (segmentation planning, business segmentation bases, implementing segmentation strategy, segmentation strategy cases) and includes applications, case studies, checklists, figures, and tables. Each chapter features a Segmentation Skillbuilder (a field-tested exercise that improves your working knowledge of key business-to-business segmentation topics) and a Business Segmentation Insight (an in-depth look at a key segmentation issue). Handbook of Market Segmentation, Third Edition: Strategic Target Marketing for Business and Technology Firms examines: how to conduct effective, cost-efficient, and profitable segmentation studies segmentation options such as differentiation and niche marketing defining business markets (planning and research) business segmentation bases (geographics, firmographics, benefits, usage, purchasing behavior) how North American Industrial Classification System (NAICS) has replaced SIC analysis criteria for choosing target markets implementing segmentation in business organizations how to conduct (and benefit from) a segmentation audit detailed segmentation studies on six companies--Collins Aviation Services, Dev-Soft, Dow Corning, Lexmark International, Pharmacia Corporation, and Sportmed and much more! Handbook of Market Segmentation, Third Edition: Strategic Target Marketing for Business and Technology Firms is an essential resource for business professionals working in the high-tech, industrial, and business service industries, and for educators training the next generation of marketers, managers, and strategists.

For more than two decades, Winning at New Products has served as the bible for product developers everywhere. Robert G. Cooper demonstrates why consistent product development is vital to corporate growth and how to maximize your chances of success. Citing the author's most recent research, Winning at New Products showcases innovative practices by industry leaders to present a field-tested game plan for achieving product leadership. Cooper outlines specific strategies for making sound business decisions at every step-from idea generation to launch. This fully updated and expanded edition is an essential resource for product developers around the world. "This is a must read. There's so much new in this book, from how to generate the breakthrough ideas, picking the winners, and driving them to market successfully." -- Philip Kotler, Professor of International Marketing, Northwestern University, Kellogg School of Management

Atravessando o Vale da Morte

The Practice of New Products and New Business

Creating Value Through Innovation

Quantum Leaps in Speed, Efficiency, and Quality

PM Net Work

Using Inventions in the Public Domain

Backed by years of rigorous academic research and industry experience, this book brings together the salient points of effective product innovation, strategic management, and innovation governance. In this book, two of the world's foremost experts, Dr. Robert G. Cooper and Dr. Scott J. Edgett, take you step-by-step through the critical phases of developing your own product innovation strategy - a master plan for your business's entire new product effort. No other business authors give you this kind of uncomplicated narrative, informed by significant industry dominance in the marketplace.

An easy-to-follow blueprint for getting the project done on schedule, under budget, and according to specifications--every time This Third Edition of an internationally bestselling guide provides project managers- in-training, product developers, and team leaders with a quick, easy way to master the basics of project management. Using a lively, conversational style, project management guru Mickey Rosenau equips you with a set of general principles and "tested-in-the-trenches" techniques for managing projects in virtually any type of organization. He also arms you with the tools you need to make the complex discipline of project management as easy to understand and master as possible. Rosenau breaks it down to 22 chronological steps, grouped into five phases or processes-from defining project goals and planning the work, monitoring progress, and completing the project. Extensively revised to reflect the latest trends in the field, this Third Edition is nearly one-third larger than its predecessor and features fully integrated coverage of the latest cost estimating and project management software.

Management, Third Edition is an ideal primer for students and an indispensable quick reference for experienced project managers, team leaders, and new product developers. Managing new product development is a key area of management, straddling strategy, innovation and entrepreneurship and macro-organizational behaviour. All of the contributors in the Handbook of New Product Developmentare are well-known and leading experts to theory of New Product Development and to methods used in practice. They draw upon their experience and work to offer a comprehensive view of the challenges in managing the development of new products. Existing knowledge in the different topics is examined and the key management challenge interaction with companies and practice and this is presented in the examples and the case studies cited. The Handbook of New Product Development and Management surveys this area in the context of an overall framework that explains how aspects interact and combine in a successful NPD process. Each chapter outlines open questions and highlights needs for future research. *A comprehensive view of the challenges in managing the development of new products from well-known and leading contributors in the field * The first handbook to fill the gap for students and practitioners alike

Defining a set of guiding principles for data management and describing how these principles can be applied within data management functional areas: Providing a functional framework for the implementation of enterprise data management practices: including widely adopted practices, methods and techniques, functions, roles, deliverables and metrics: Establishing a common vocabulary for data management concepts and serving as the basis for best practices for data management professionals. DAMA-DMBOK2 provides data management and IT professionals,

mature their information infrastructure, based on these principles: Data is an asset with unique properties: The value of data can be and should be expressed in economic terms: Managing data means managing the quality of data: It takes metadata to manage data: It takes planning to manage data: Data management is cross-functional and requires a range of skills and expertise: Data management requires an enterprise perspective: Data management must account for a range of perspectives: Data management is data lifecycle management: Different types of data require different management requirements: Data management requires information technology decisions: Effective data management requires leadership commitment.

The PDMA Handbook of New Product Development

Tools and Techniques for the Practicing Project Manager

Software Configuration Management Handbook, Third Edition

Compression Testing of Honeycomb Paper Pallets

Generating Breakthrough New Product Ideas

Product Leadership

Software configuration management (SCM) is one of the scientific tools that is aimed to bring control to the software development process. This new resource is a complete guide to implementing, operating, and maintaining a successful SCM system for software development. Project managers, system designers, and software developers are presented with not only the basics of SCM, but also the different phases in the software development lifecycle and how SCM plays a role in each phase. The factors that should be considered and the pitfalls that should be avoided while designing the SCM system and SCM plan are also discussed. In addition, this third edition is updated to include cloud computing and on-demand systems. This book does not rely on one specific tool or standard for explaining the SCM concepts and techniques; In fact, it gives readers enough information about SCM, the mechanics of SCM, and SCM implementation, so that they can successfully implement a SCM system.

Today, a company's capability to conceive and design quality prototypes and bring a variety of superior products to market quicker than its competitors is increasingly the focal point of competition, contend leading product development experts Steven Wheelwright and Kim Clark. Drawing on six years of in-depth, systematic, worldwide research, they present proven principles for developing the critical capabilities for speed, efficiency, and quality that have worked again and again in scores of successful Japanese, American, and European fast-cycle firms. The authors argue that to survive, let alone succeed, today's companies must construct a new "platform" -- with new methodologies -- on which they can compete. Using their model for development strategies, Wheelwright and Clark show that firms can create a solid architecture for the integration of marketing, manufacturing, and design functions for problem solving and fast action -- particularly during the critical design-build-test cycles of prototype creation. They demonstrate further how successful firms such as Honda in automobiles, Compaq in personal computers, Applied Materials in semi-conductors, Sony in audio equipment, The Limited in apparel, and Hill-Rom in hospital beds have employed recent methodologies to bring new products to market at break-neck speed. Such innovations include design for manufacturability, quality function deployment, computer-aided design, and computer-aided engineering. Finally, Wheelwright and Clark emphasize the importance of learning in the organization. Companies that consistently "design it right the first time" and follow a path of continuous improvement in product and process development have a formidable edge in the crucial race to market.

New Rules, New Tools

NEW BUSINESS MODELS AND SUSTAINABLE COMPETITIVENESS

Project Management ToolBox

Successful Project Management

Essentials of Strategic Management

Ideation, Conceptualization, Realization