Business Process Analysis Including Architecture Engineering Management And Maturity

Your first Business Process Management (BPM) project is a crucial first step on your BPM journey. It is important to begin this journey with a philosophy of change that allows you to avoid common pitfalls that lead to failed BPM projects, and ultimately, poor BPM adoption. This IBM Redbooks publication describes the methodology and best practices that lead to a successful project and how to use that success to scale to enterprise-wide BPM adoption. This updated edition contains a new chapter on planning a BPM project. The intended audience for this book includes all people who participate in the discovery, planning, delivery, deployment, and continuous improvement activities for a business process. These roles include process owners, process participants, subject matter experts (SMEs) from the operational business, and technologists responsible for delivery, including BPM analysts, BPM solution architects, BPM administrators, and BPM developers.

ARIS (Architecture of Integrated Information Systems) is a unique and internationally renowned method for optimizing business processes and implementing application systems. This book enhances the proven ARIS concept by describing product flows and explaining how to classify modern software concepts. The importance of the link between business process organization and strategic management is stressed. Bridging the gap between the different approaches in business theory and information technology, the ARIS concept provides a full-circle approach from the organizational design of business processes to IT implementation. With an emphasis on SAP R/3, real-world examples of standard software solutions illustrate these business process frameworks.

Business Process Management (BPM) has become one of the most widely used approaches for the design of modern organizational and information systems. The conscious treatment of business processes as significant corporate assets has facilitated substantial improvements in organizational performance but is also used to ensure the conformance of corporate activities. This Handbook presents in two volumes the contemporary body of knowledge as articulated by the world's leading BPM thought leaders. This second volume focuses on the managerial and organizational challenges of BPM such as strategic and cultural alignment, governance and the education of BPM stakeholders. As such, this book provides concepts and methodologies for the integration of BPM. Each chapter has been contributed by leading international experts. Selected case studies complement their views and lead to a summary of BPM expertise that is unique in its coverage of the most critical success factors of BPM. The second edition of this handbook has been significantly revised and extended. Each chapter has been updated to reflect the most current developments. This includes in particular new technologies such as in-memory data and process management, social media and networks. A further focus of this revised and extended edition is on the actual deployment of the proposed theoretical concepts. This volume includes a number of entire new chapters from some of the world's leading experts in the domain of BPM.

Some organizations significantly outperform others in their industry. They become more agile by adopting smarter work practices and transforming their business processes to be more dynamic, collaborative, and connected. Often, the business processes themselves create competitive advantage. Increased revenue at reduced cost makes more money for a very effective business. Changing market opportunities, customer demands, new technology and calls for cost reduction can make it seem impossible to keep operational chaos at bay. Competitive advantage is gained when companies reduce operational risk by making sure that internal guidelines and external regulatory requirements are fulfilled. Companies thus offer customers a faster, more accurate and consistent service. To position your organization for success, you need the ability to continually optimize, streamline and align business processes to meet changing business needs for greater performance, competitive advantage and to drive growth. The companies whose award-winning case studies are featured in this book have proven excellence in their creative and successful deployment of advanced and business process management concepts. The positive impact to their corporations includes increased revenues, more productive and satisfied employees, product enhancements, better customer service and quality improvements.

This book is the first publication that combines the principles of business process management with strategic IT planning: the result being a groundbreaking work on strategic IT and process planning. While Breakthrough Strategic IT and Process Planning focuses on the real world of organizations, extensive treatment is also devoted to the politics of strategic planning. As such, a project management approach that combines process improvement, IT, and change management is employed. Other important aspects of process planning are discussed in detail: the strategic allocation of resources, short and long term implementation of the strategic plan, marketing of the plan to gain support for implementation, and development of strategic IT and process plans for business units and departments.

Enterprises have to adapt their business processes quickly and efficiently to new business environments to ensure business success and long term survival. It is not sufficient to apply best business
practices but new practices have to be developed and executed. These requirements are met by new business process automation technologies, based on concepts like web services, EAI, workflow, enterprise service architectures, and automation engines. Business process automation becomes a key enabler for business process excellence. This book explains major trends in business process automation and shows how new technologies and solutions are applied in practice. It outlines how process automation becomes an element of an overall process lifecycle management approach, structured on the basis of the ARIS House of business excellence and implemented through software tools like the ARIS toolkit.

This textbook provides organisational leadership with an understanding of business process management and its benefits to an organisation. It provides a practical framework, complete with a set of tools and techniques, to successfully implement business process management projects.


Business Process Change, 3rd Edition provides a balanced view of the field of business process change. Bestselling author Paul Harmon offers concepts, methods, cases for all aspects and phases of successful business process improvement. Updated and added for this edition is new material on the development of business models and business process architecture development, on integrating decision management models and business rules, on service processes and on dynamic case management, on integrating various approaches in a broad business process management approach. New to this edition: How to develop business models and business process architecture, How to integrate decision management models and business rules on service processes and on dynamic case management.

Learn to integrate various approaches in a broad business process management approach.

This book also discusses some key concepts using practical examples and business scenarios around Business Rules Management and Business Activity Monitoring with BPM and SOA. This book is for CIOs, executives, SOA project managers, business process analysts, BPM and SOA architects, who are responsible for improving the efficiency of business processes through IT or for designing SOA. It provides a high-level coverage of business process modeling, but it also gives practical development examples on how to move from model to execution. We expect the readers to be familiar with the basics of SOA.

This book constitutes a collection of selected contributions from the 12th International Conference on Perspectives in Business Informatics Research, BIR 2013, held in Warsaw, Poland, in September 2013. Overall, 54 submissions were rigorously reviewed by 41 members of the Program Committee representing 21 countries. As a result, 19 full and 5 short papers from 12 countries have been selected for publication in this volume. The book also includes the two keynotes by Witold Abramowicz and Bernhard Thalheim. The papers cover many aspects of business information research and have been organized in topical sections on: business process management; enterprise and knowledge architectures; organizations and information systems development; information systems and services; and applications.

The increasing adoption of Business Process Management (BPM) has inspired pioneering software architects and developers to effectively leverage BPM-based software and process-centric architecture (PCA) to create software systems that enable essential business processes. Reflecting this emerging trend and evolving field, Process-Centric Architecture
This book explores the Business Process Management cycle in theory and practice, from the technical as well as the business point of view. Both the ARIS Platform and the methodical approach of ARIS Value Engineering (AVE) are referred to in detail. More than half of the articles are case studies. The book offers valuable ideas to companies on how to optimize their own business processes and thus become more competitive.

This book provides a comprehensive treatment of the rapidly changing world of Web-based business technologies and their often-disruptive innovations. The history of the Web is a short one. Indeed many college graduates today were not even born when the Web first emerged. It is therefore an opportune time to view the Web as having reached the point of graduation. The Web has led to new ways in which businesses connect and operate, and how individuals communicate and socialize; related technologies include cloud computing, social commerce, crowd sourcing, and the Internet of Things, to name but a few. These developments, including their technological foundations and business impacts, are at the heart of the book. It contextualizes these topics by providing a brief history of the World Wide Web, both in terms of the technological evolution and its resultant business impacts. The book was written for a broad audience, including technology managers and students in higher education. It is also intended as a guide for people who grew up with a background in business administration or engineering or a related area but who, in the course of their career paths, have reached a point where IT-related decisions have become their daily business, e.g., in digital transformation. The book describes the most important Web technologies and related business applications, and especially focuses on the business implications of these technologies. As such, it offers a solid technology- and business-focused view on the impact of the Web, and balances rules and approaches for strategy development and decision making with a certain technical understanding of what goes on “behind the scenes.”

The refereed proceedings of the International Conference on Business Process Management, BPM 2003, held in Eindhoven, The Netherlands, in June 2003. The 25 revised full papers presented together with an introductory survey article were carefully reviewed and selected from 77 submissions. Among the issues addressed are Web services, workflow modeling, business process modeling, collaborative computing, computer-supported collaborative work, workflow patterns, business process engineering, business process patterns, workflow systems, Petri nets, process services, business process reengineering, and business process management tools.

Business Process Management (BPM) has become one of the most widely used approaches for the design of modern organizational and information systems. The conscious treatment of business processes as significant corporate assets has facilitated substantial improvements in organizational performance but is also used to ensure the conformance of corporate activities. This Handbook presents in two volumes the contemporary body of knowledge as articulated by the world’s leading BPM thought leaders. This first volume focuses on arriving at a sound definition of BPM approaches and examines BPM methods and process-aware information systems. As such, it provides guidance for the integration of BPM into corporate methodologies and information systems. Each chapter has been contributed by leading international experts. Selected case studies complement their views and lead to a summary of BPM expertise that is unique in its coverage of the most critical success factors of BPM. The second edition of this handbook has been significantly revised and extended. Each chapter has been updated to reflect the most current developments. This includes in particular new technologies such as in-memory data and process management, social media and networks. Further focus of this revised and extended edition is on the actual deployment of the proposed theoretical concepts. This volume includes a number of entirely new chapters from some of the world’s leading experts in the domain of BPM.

Business processes are the production lines of the new economy. When they fail, our services and products fail our customers, and our business fails its owners. The more businesses change, the more they must concern themselves with their stakeholder relationships and manage their processes so that technologies and organization designs have a common business purpose. This book shows you how to deliver integral processes and helps you build a fully process-managed enterprise. The Process Management Framework provides the strategic guidance and tactical steps to make the switch. Encompassing eight phases, the Framework migrates organizational and process transformation through strategy, design, realization, and actual operations. For each phase, this book provides detailed descriptions of the steps, their inputs, outputs, guides, and enablers, as well as the tricks, traps, and best practices learned by experienced practitioners. It also covers the related disciplines of managing programs, risk, controls, projects, and human change, and how process management is the key to ensure a fit among all these areas. For those of you about to embark on a process journey, this book provides a compelling call to action, a guide for management, and an invaluable reference. Learn the concepts and transform your business! See why process management is an inevitable trend that won’t go away. Understand why relationship management needs effective processes to work. Define your stakeholders and determine their needs. Discover what other organizations have done to manage processes successfully. Explore a complete framework for managing business, process, and human change. Apply your knowledge to manage process projects effectively and efficiently. Learn what to do and what to avoid in every step. Develop processes to align technology, organization, and facility transformation. Gain cross-organizational acceptance of process and personal change. Anticipate objections and proactively manage stakeholder concerns.

The popularity of enterprise architecture (EA) has increased in the last two decades, in both business and academic domains. Despite the cumulative interest from all sectors, the implementation and practice of EA have been entangled with numerous challenges and complexities. Consequently, some organisations continue to theorise the concept, which has ramifications on practice and return on investment (ROI). This has led to many studies that have been conducted to understand the complexities impacting the implementation and practice of EA in organisations. Yet, the trajectory of some convolutions remains mystery in many quarters. This attributes to the struggle to articulate the value of EA in many environments. Hence many organisations find it difficult to apply EA for strategic management of modern information technology (IT) solutions. Enterprise Architecture for Strategic Management of Modern IT Solutions provides guidance on how to employ EA in deploying and managing IT solutions from pragmatic and implementable strategies’ perspectives. Now, implementation and practice of EA have been slow, despite its growing popularity and interest from all sectors. The author employs sociotechnical theories such as actor-network theory (ANT) and structuration theory (ST) as lenses to examine and explain why and how challenges and complexities exist and derail the implementation or practice of EA in organisations. By doing so, this serves to enable practitioners and readers to gain fresh insights on why the challenges exist and how they can be addressed in creating collaborative capabilities for business enhancement, sustainability, and competitiveness. The book provides detailed insights on how to apply EA for organisational purposes, from three main fronts. First, it explains the implications that lack of understanding of EA have on organisational strategies and processes. Second, it examines the challenges and complexities that hinder the implementation and practice of EA in organisations. Third, it proposes models and frameworks on how EA can be applied for strategic management of modern IT solutions in organisations. Written for postgraduates, researchers, academics, and professionals in the fields of EA, IT, and information systems, this book provides a valuable resource that will enable and enhance implementation and practice of EA including future studies.
IBM® Business Process Manager (IBM BPM) is a comprehensive business process management (BPM) suite that provides visibility and management of your business processes. IBM BPM supports the whole BPM lifecycle approach: Discover and document, Plan, Implement, Deploy, Manage, Optimize. Process owners and business owners can use this solution to engage directly in the improvement of their business processes and IBM BPM excels in integrating role-based process design, and provides a social BPM experience. It enables asset sharing and creating versions through its Process Center. The Process Center acts as a unified repository, making it possible to manage changes to the business processes with confidence. IBM BPM supports a wide range of standards for process modeling and exchange. Built-in analytics and search capabilities help to further improve and optimize the business processes. This IBM Redbooks publication provides valuable information for project teams and business people that are involved in projects using IBM BPM. It describes the important design decisions that you face as a team. These decisions invariably have an effect on the success of your project. These decisions range from the more business-centric decisions, such as which should be your first process, to the more technical decisions, such as solution analysis and architectural considerations.

This book contains the refereed proceedings of the 15th International Conference on Business Process Modeling, Development and Support (BPMDS 2014) and the 19th International Conference on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2014), held together with the 26th International Conference on Advanced Information Systems Engineering (CAiSE 2014) in Thessaloniki, Greece, in June 2014. The 20 full papers accepted for BPMDS were selected from 48 submissions and cover a wide spectrum of issues related to business process development, modeling, and support. They are grouped into topical sections on business process modeling as a human-driven process, representing the human perspective of business processes, supporting humans in business processes, variability-enabling process models, various models for various process perspectives, and BPMDS in practice. The ten full and three short papers accepted for EMMSAD were chosen from 27 submissions and focus on exploring, evaluating, and enhancing modeling methods and methodologies for the analysis and design of information systems, enterprises, and business processes. They are grouped into sections on conceptual modeling, requirements modeling, business process modeling, goal and language action modeling, enterprise and business modeling, and new approaches.

Enterprise Architecture (EA) is an essential part of the fabric of a business; however, EA also transcends and transforms technology and moves it into the business space. Therefore, EA needs to be discussed in an integrated, holistic, and comprehensive manner. Only such an integrated approach to EA can provide the foundation for a transformation that reads the business for the myriad enterprise-wide challenges it will face. Highly disruptive technologies such as Big Data, Machine Learning, and Mobile and Cloud Computing require a fine balance between their business and technical aspects as an organization moves forward with its digital transformation. This book focuses on preparing all organizations – large and small – and those wishing to move into them for the impact of leveraging these emerging, disruptive, and innovative technologies within the EA framework.

After a brief introduction to the topic of business process modeling, the book offers a quick-start to model-based business process engineering. After that, the foundations of the modeling languages used are conveyed. Meaningful examples are in the foreground - each of the underlying formalisms is treated only as far as needed. Next the Horus Method is described in detail. The book defines a sequence of activities which finally leads to the creation of a complete business process model. The Horus Method, incidentally, is not bound to the use of the Horus software tools. It can be used with other tools or, if necessary, be used even without tool support. Important application fields of business process engineering are described, where the spectrum ranges from business process reengineering to the development and implementation of information systems. The book concludes with an outlook on the future of business process engineering and highlights current research activities in the area.

This IBM Redbooks publication explains how to combine business process management (BPM) and Enterprise Architecture (EA) for better business outcomes. This book provides a unique synergistic approach to BPM and EA, based on a firm understanding of the life cycles of the enterprise and the establishment of appropriate collaboration and governance processes. When carried out together, BPM provides the business context, understanding, and metrics, and EA provides the discipline to translate business vision and strategy into architectural change. Both are needed for sustainable continuous improvement. This book provides thought leadership and direction on the topic of BPM and EA synergies. Although technical in nature, it is not a typical IBM Redbooks publication. The book provides guidance and direction on how to collaborate effectively across tribal boundaries rather than technical details about IBM software products. The primary audience for this book is leaders and architects who need to understand how to effectively combine BPM and EA to drive, as a key differentiator, continuous improvement and transformational change with enterprise scope.

Business Process Management (BPM) is about managing all the work that is necessary for delivering an end product or service. This book is well-suited for teaching an academic course as a part of a final year Bachelor and Master Degree programs in IT& Management, and also, other related disciplines. It can also be used for conducting an equivalent training programme for in-house professionals. Although no book can be a substitute for the wide and varied experience of an instructor, this book will help the instructor to concentrate on teaching rather than worrying about creating the teaching material and assembling the student material. In view of the likely differences in background of the readers, some material has been placed into appendices to enable them to read on a need to know basis. Besides, this book, in its present form, is equally useful for the professionals, who wish to grasp the essentials of BPM without attending a formal instructional course. KEY FEATURES:

- Chapters are appropriately organized as per the process life cycle
- Highly illustrative with diagrams and sketches
- PMS T TARGET AUDIENCE:
  - (Computer Science/Engineering/Technology) Students
  - (Computer Science/Engineering/Technology) Faculty
  - (Computer Science/Engineering/Technology) Graduates
  - (Computer Science/Engineering/Technology) Professionals

This book contains a collection of papers from the very best of WebPROM (the Fourth International Conference on Web Information Systems and Technologies), held in Puchalik, Madeira, in 2008, organized by the Institute for Systems and Technologies of Information, Control and Communication (INSTICC), and co-sponsored by the WfMC. The purpose of the WebPROM series of conferences is to bring together researchers, engineers and practitioners interested in the technological advances and business applications of web-based information systems. The series focuses on four main areas, covering different aspects of web information systems, including: web interfaces and applications; web and e-government; and e-learning. WEBIST 2008 received 238 paper submissions from more than 40 countries on all continents. A double-blind review process was enforced, with the help of more than 200 experts from the international Program Committee, each of them specialized in one of the main conference topic areas. After reviewing, 32 papers were selected to be published and presented as full papers and 64 additional papers, describing work in progress, as short papers for oral presentation only. Furthermore, 58 papers were presented as posters. The full-paper acceptance ratio was 13%, and the total oral paper acceptance ratio was 40%. Therefore, we hope that you find the papers included in this book interesting, and we trust they may represent a helpful reference to the future for all those who need to address any of the research areas mentioned above.
This book is a valuable addition to the reading list of executives, managers, and staff in business, government, and other sectors who seek to keep their enterprises agile and efficient as they manage change, implement new business processes and supporting technologies, and pursue important strategic goals'--Provided by publisher.

This book constitutes the proceedings of the 16th International Conference on Business Process Management, BPM 2018, held in Sydney, Australia, in September 2018. The 27 papers presented in this volume were carefully reviewed and selected from 140 submissions. They were organized in topical sections named: reflections on BPM; concepts and methods in business process modeling and analysis; foundations of process discovery; alignments and conformance checking; process model analysis and machine learning; digital process innovation; and method analysis and selection.

Daily procedures such as scientific experiments and business processes have the potential to create a huge amount of data every day, hour, or even second, and this may lead to a major problem for the future of efficient data search and retrieval as well as secure data storage for the world's scientists, engineers, doctors, librarians, and business managers. Design, Performance, and Analysis of Innovative Information Retrieval examines a number of emerging technologies that significantly contribute to modern Information Retrieval (IR), as well as fundamental IR theories and concepts that have been adopted into new tools or systems. This reference is essential to researchers, educators, professionals, and students interested in the future of IR.

Since its first edition 15 years ago, Business Process Analysis has become a standard reference work in the library of many business process practitioners. This new edition continues the presentation of a portfolio of analysis techniques essential for any serious business process analysis work - and goes much further. Since those early days, there has been a rapid expansion of approaches to business process work, and most of these are reflected in the book's subtitle: architecture, engineering, improvement, management, and maturity. All these (and others) are addressed in the book, discussing the strengths and limitations of each. Whichever way you approach business process work, this book is essential reading for all practitioners because of its breadth and depth of commentary. It is careful to document sources, and has a comprehensive list of relevant material. The book is also essential reading for all students of business processes at final year undergraduate, and master's levels, as it meets relevant level descriptors. The book contains several innovative ideas, including: information technology is not the only enabling technology for business process improvement: business processes have been improved since time immemorial by the utilization of technology - and this will continue given modern technology convergence; the origin of virtually all approaches to systems analysis (including object-oriented analysis, and relational theory), is identified and documented; diagrammatic approaches to analyzing business processes are incapable of yielding models that can be checked for completeness and consistency, particularly as the number of processes increases; increasingly, the issue is not only business processes within an organization - the issue is business processes that cross organizational boundaries and may involve many enterprises; the book calls for a business process epistemology to complement business process ontology. Whatever your view about approaches to business processes, you will find this book stimulating, challenging, comprehensive, and thought provoking.

This book is for those Splunk developers who want to learn advanced strategies to deal with big data from an enterprise architectural perspective. You need to have good working knowledge of Splunk.

Every company wants to improve the way it does business, to produce goods and services more efficiently, and increase profits. Nonprofit organizations are also concerned with efficiency, productivity, and with achieving the goals they set for themselves. Every manager understands that achieving these goals is part of his or her job. BUSINESS PROCESS MANAGEMENT (or BPM) is what they call these activities that companies perform in order to improve and adapt processes that will help improve the way they do business. In this balanced treatment of the field of business process change, Paul Harmon offers concepts, methods, and cases for all aspects and phases of successful business process improvement. Updated and added for this edition are coverage of business process management systems, business rules, enterprise architectures and frameworks (SCOR), and more content on Six Sigma and Lean - in addition to new coverage of performance metrics. * Extensive revision and update to the six volumes, addressing the growing interest in Business Process Management (BPM) and Six Sigma concerns. * The best first book on business process, the most up-to-date book to read to learn how all the different process elements fit together. * Presents a methodology based on the best practices available that can be tailored for specific needs and that maintains a focus on the human aspects of process redesign. * Offers all new detailed case studies showing how these methods are implemented.

The Complete Business Process Handbook is the most comprehensive body of knowledge on business processes with revealing new research. Written as a practical guide for Executives, Practitioners, Managers and Students by the authorities that have shaped the way we think and work with process today. It stands out as a masterpiece, being part of the BPM bachelor and master degree curriculum at universities around the world, with revealing academic research and insight from the leaders in the market. This book provides everything you need to know about the processes and frameworks, methods, and approaches to implement BPM. Through real-world examples, best practices, LEADing practices and advice from experts, readers will understand how BPM works and how to best use it to their advantage. Cases from industry leaders and innovators show how early adopters of LEADing Practices improved their businesses by using BPM technology and methodology. As the first of three volumes, this book represents the most comprehensive body of knowledge published on business process. Following closely behind the second volume, unless one bridges theory with how BPM is applied today with the most extensive information on extended BPM. The third volume will explore award winning real-life examples of leading business process practices and how it can be replaced to your advantage. Learn what Business Process is and how to get started by establishing a way of Thinking, Working, and Modelling and Implementation. Explore comprehensive frameworks, Methods and Approaches to build BPM competencies and establish a Center of Excellence to learn how to apply Social BPM, Sustainable and Evidence based BPM. Learn how Value & Performance Measurement and Management. Learn how to roll-out and deploy process. Explore how to enable Process Owners, Roles and Knowledge Workers to discover how to Process and Application Modelling. Uncover Process Lifecycle, Maturity, Alignment and Continuous Improvement. Practical continuous improvement with the way of Governance Future BPM trends that will affect business. Explore the BPM Body of Knowledge.

This book collects ECM research from the academic discipline of Information Systems and related fields to support academics and practitioners who are interested in understanding the design, use and impact of ECM systems. It also provides a valuable resource for students and lecturers in the field. "Enterprise content management in Information Systems research -- Foundations, methods and cases" consolidates our current knowledge on how today’s organizations can manage their digital information assets. The business challenges related to organizational information management include reducing
search times, maintaining information quality, and complying with reporting obligations and standards. Many of these challenges are well-known in information management, but because of the vast quantities of information being generated today, they are more difficult to deal with than ever. Many companies use the term “enterprise content management” (ECM) to refer to the management of all forms of information, especially unstructured information. While ECM systems promise to increase and maintain information quality, to streamline content-related business processes, and to track the lifecycle of information, their implementation poses several questions and challenges: Which content objects should be put under the control of the ECM system? Which processes are affected by the implementation? How should outdated technology be replaced? Research is challenged to support practitioners in answering these questions.

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A comprehensive guide to exploring software architecture concepts and implementing best practices Key Features Enhance your skills to grow your career as a software architect Design efficient software architectures using patterns and best practices Learn how software architecture relates to an organization as well as software development methodology Book Description The Software Architect’s Handbook is a comprehensive guide to help developers, architects, and senior programmers advance their career in the software architecture domain. This book takes you through all the important concepts, right from design principles to different considerations at various stages of your career in software architecture. The book begins by covering the fundamentals, benefits, and purpose of software architecture. You will discover how software architecture relates to an organization, followed by identifying its significant quality attributes. Once you have covered the basics, you will explore design patterns, best practices, and paradigms for efficient software development. The book discusses which factors you need to consider for performance and security enhancements. You will learn to write documentation for your architectures and make appropriate decisions when considering DevOps. In addition to this, you will explore how to design legacy applications before understanding how to create software architectures that evolve as the market, business requirements, frameworks, tools, and best practices change over time. By the end of this book, you will not only have studied software architecture concepts but also built the soft skills necessary to grow in this field. What you will learn Design software architectures using patterns and best practices Explore the different considerations for designing software architecture Discover what it takes to continuously improve as a software architect Create loosely coupled systems that can support change Understand DevOps and how it affects software architecture Integrate, refactor, and re-architect legacy applications Who this book is for The Software Architect’s Handbook is for you if you are a software architect, chief technical officer (CTO), or senior developer looking to gain a firm grasp of software architecture.

The five-volume set LNCS 7971-7975 constitutes the refereed proceedings of the 13th International Conference on Computational Science and Its Applications, ICCSA 2013, held in Ho Chi Minh City, Vietnam, in June 2013. Apart from the general track, ICCSA 2013 also include 33 special sessions and workshops, in various areas of computational sciences, ranging from computational science technologies, to specific areas of computational sciences, such as computer graphics and virtual reality. There are 46 papers from the general track, and 202 in special sessions and workshops.