

Enterprise Information Systems: A Pattern Based Approach

"This book presents comprehensive coverage and understanding of the organizational and technological issues of enterprise information systems. It covers current trends such as enterprise resource planning and electronic commerce and their implications on supply chain management and organizational competitiveness"--Provided by publisher.

This five-volume set clearly manifests the great significance of these key technologies for the new economies of the millennium. The discussions provide a wealth of practical ideas intended to foster innovation in thought and, consequently, in the further development of technology. Together, they comprise a significant and uniquely comprehensive reference source for research workers, practitioners, computer scientists, academics, students, and others on the international scene for years to come.

This book comprises the refereed papers together with the invited keynote papers, presented at the Second International Conference on Enterprise Information Systems. The conference was organised by the School of Computing at Staffordshire University, UK, and the Escola Superior de Tecnologia of Setubal, Portugal, in cooperation with the British Computer Society and the International Federation for Information Processing, Working Group 8.1. The purpose of the 2nd International Conference was to bring together researchers, engineers and practitioners interested in the advanced in and business applications of information systems. The papers demonstrate the vitality and vibrancy of the field of Enterprise Information Systems. The research papers included here were selected from among 143 submissions from 10 countries in the following four areas: Enterprise Database Applications, Artificial Intelligence Applications and Decision Support Systems, Systems Analysis and Specification, and Internet and Electronic Commerce. Every paper had at least two reviewers drawn from 10 countries. The papers included in this book were recommended by the reviewers. On behalf of the conference organising committee we would like to thank all the members of the Programme Committee for their work in reviewing and selecting the papers that appear in this volume. We would also like to thank all the authors who have submitted their papers to this conference, and would like to apologise to the authors that we were unable to include and wish them success next year.

This book brings together enterprise modeling and software specification, providing a conceptual background and methodological guidelines that concern the design of enterprise information systems. In this, two corresponding disciplines (enterprise engineering and software engineering) are considered in a complementary way. This is how the widely recognized gap between domain experts and software engineers could be effectively addressed. The content on the one hand, based on a conceptual invariance (embracing concepts whose essence transcends the barriers

between social and technical disciplines) while on the other, the book is featuring a modeling duality, by bringing together social theories (that are underlying with regard to enterprise engineering) and computing paradigms (that are underlying as it concerns software engineering). In addition, the proposed approach as well as its guidelines and related notations further foster such enterprise-software modeling, by facilitating modeling generations and transformations. Considering unstructured business information in the beginning, the modeling process would progress through the methodological construction of enterprise models, to reach as far as a corresponding derivation of software specifications. Finally, enterprise-software alignment is achieved in a component-based way, featuring a potential for re-using modeling constructs, such that the modeling effectiveness and efficiency are further stimulated. For the sake of grounding the presented studies, a case study and illustrative examples are considered. They are not only justifying the idea of bringing together (in a component-based way) enterprise modeling and software specification but they are also demonstrating various strengths and limitations of the proposed modeling approach. The book was mainly written for researchers and graduate students in enterprise information systems, and also for professionals whose work involves the specification and realization of such systems. In addition, researchers and practitioners entering these fields will benefit from the blended view on enterprise modeling and software specification, for the sake of an effective and efficient design of enterprise information systems.

Cases on Enterprise Information Systems and Implementation Stages: Learning from the Gulf Region

Advances in Enterprise Information Systems II

International Conference, DEIS 2011, London, UK July 20 - 22, 2011, Proceedings

Merging Enterprise Modeling and Software Specification

Innovative Information Systems Modelling Techniques

Designing, Building, and Deploying Messaging Solutions

Enterprise Information Systems: Concepts, Methodologies, Tools and Applications

This book constitutes revised selected papers from the 18th International Conference on Enterprise Information Systems, ICEIS 2016, held in Rome, Italy, in April 2016. The 23 papers presented in this volume were carefully reviewed and selected from a total of 257 submissions to ICEIS 2016. The volume also contains one invited talk in full paper length. The papers selected to be included in this book contribute to the understanding of relevant trends of current research on enterprise information systems, including issues with regard to enterprise engineering, heterogeneous systems, security, software engineering, systems integration, business process management, human factors and affective computing, ubiquitous computing, social computing, knowledge management, and artificial intelligence.

Selected Papers from the Ninth International. This volume presents papers from the Ninth International Baltic Conference on

Databases and Information Systems Baltic DBIS 2010 which took place in Riga, Latvia in July 2010. Since this successful biennial series began in 1994, the Baltic DBIS confer

This book contains the best papers of the 10th International Conference on Enterprise Information Systems (ICEIS 2008), held in the city of Barcelona (Spain), organized by the Institute for Systems and Technologies of Information, Control and Communication (INSTICC) in cooperation with AAI and co-sponsored by WfMC. ICEIS has become a major point of contact between research scientists, engineers and practitioners in the area of business applications of information systems. This year, five simultaneous tracks were held, covering different aspects related to enterprise computing, including: "Databases and Information Systems Integration," "Artificial Intelligence and Decision Support Systems," "Information Systems Analysis and Specification," "Software Agents and Internet Computing" and "Human-Computer Interaction." All tracks focused on real-world applications and highlighted the benefits of information systems and technology for industry and services, thus making a bridge between academia and enterprise. Following the success of 2007, ICEIS 2008 received 665 paper submissions from more than 40 countries. In all, 62 papers were published and presented as full papers, i.e., completed work (8 pages in proceedings / 30-min oral presentations), and 183 papers, reflecting work-in-progress or position papers, were accepted for short presentation and another 161 for poster presentation.

"This book presents useful strategies, techniques, and tools for the successful design, development, and implementation of enterprise information systems"--Provided by publisher.

Digital Enterprise and Information Systems

ERP Future 2012 Conference, Salzburg, Austria, November 2012, Revised Papers

Professional Java EE Design Patterns

Challenges and Practices

Service-oriented Software System Engineering

Research and Practical Issues of Enterprise Information Systems II Volume 1

Intelligent Knowledge-Based Systems

Current IT developments like competent-based development and Web services have emerged as new effective ways of building complex enterprise systems and providing enterprise allocation integration. However, there is still much that needs to be researched before service-oriented software engineering (SOSE) becomes a prominent source for enterprise system development. Service-Oriented Software System Engineering: Challenges and Practices provides a comprehensive view of SOSE through a number of different perspectives.

"This book provides a wide compendium of references to topics in the field of the databases systems and applications"--Provided by publisher.

This book constitutes extended and revised papers from the 19th International Conference on Enterprise Information Systems, ICEIS 2017, held in Porto, Portugal, in April 2017. The 28 papers presented in this volume were carefully reviewed and selected for inclusion in this book from a total of 318 submissions. They were organized in topical sections named: databases and information systems integration; artificial intelligence and decision support systems; information systems analysis and specification; software agents and internet computing; human-computer interaction; and enterprise

architecture.

Enterprise Information Systems A Pattern Based Approach Glencoe/McGraw-Hill Enterprise Information Systems A Pattern-Based Approach

Enterprise Information Systems II

21st International Conference, CAiSE 2009, Amsterdam, The Netherlands, June 8-12, 2009, Proceedings

IFIP TC 8 International Conference on Research and Practical Issues of Enterprise Information Systems (CONFENIS 2006)

April 24-26, 2006, Vienna, Austria

Enterprise Integration Patterns

Practical Solutions for Recurring IT-Architecture Problems

Enterprise Architecture Patterns

Design and Use Patterns of Adaptability in Enterprise Systems

This book constitutes the refereed proceedings of the 10th International Conference on Business Information Systems, BIS 2007, held in Poznan, Poland in April 2007. Among the issues addressed in the 49 revised full papers presented together with one keynote lecture are business process management, Web services, ontologies, information retrieval, system design, agents and mobile applications, decision support, social issues, specific MIS issues.

Master Java EE design pattern implementation to improve your design skills and your application's architecture Professional Java EE Design Patterns is the perfect companion for anyone who wants to work more effectively with JavaEE, and the only resource that covers both the theory and application of design patterns in solving real-world problems. The authors guide readers through both the fundamental and advanced features of Java EE 7, presenting patterns throughout, and demonstrating how they are used in day-to-day problem solving. As the most popular programming language in community-driven enterprise software, Java EE provides an API and runtime environment that is a superset of Java SE. Written for the junior and experienced Java EE developer seeking to improve design quality and effectiveness, the book covers areas including: Implementation and problem-solving with design patterns Connection between existing Java SE design patterns and new Java EE concepts Harnessing the power of Java EE in design patterns Individually-based focus that fully explores each pattern Colorful war-stories showing how patterns were used in the field to solve real-life problems Unlike most Java EE books that simply offer descriptions or recipes, this book drives home the implementation of the pattern to real problems to ensure that the reader learns how the patterns should be used and to be aware of their pitfalls. For the programmer looking for a comprehensive guide that is actually useful in the everyday workflow,

Professional Java EEDesign Patterns is the definitive resource on the market.

This book contains the best papers of the Sixth International Conference on Enterprise Information Systems (ICEIS 2004), held in Porto (Portugal) and organized by INSTICC (Institute for Systems and Technologies of Information, Communication and Control) in collaboration with PORTUCALENSE UNIVERSITY, who hosted the event. Following the route started in 1999, ICEIS has become a major point of contact between research scientists, engineers and practitioners on the area of business applications of information systems. This conference has received an increased interest every year, from especially from the international academic community, and it is now one of the world largest conferences in its area. This year, five simultaneous tracks were held, covering different aspects related to enterprise computing, including: "Databases and Information Systems Integration", "Artificial Intelligence and Decision Support Systems", "Information Systems Analysis and Specification", "Software Agents and Internet Computing" and "Human-Computer Interaction". The sections of this book reflect the conference tracks.

Enterprise Information Systems: A Pattern Based Approach, 3e, by Dunn/Cherrington/Hollander presents a pattern-based approach to designing enterprise information systems with a particular emphasis on the enterprise-wide database. This edition is built on the idea that a separation between accounting information systems and management information systems should not exist. We believe patterns help people see the "big picture" of enterprises more clearly and therefore help design better systems. We believe you cannot identify anything that we need to account for that we do not also need to manage; nor can we identify anything we need to manage that we do not also need to account for. In this edition, we will show how a well-designed REA-based Accounting Information System is the Enterprise Information System.

10th International Conference, ICEIS 2008, Barcelona, Spain, June 12-16, 2008, Revised Selected Papers

Enterprise Information Systems and Implementing IT Infrastructures: Challenges and Issues

Business Information Systems

Global Implications of Modern Enterprise Information Systems: Technologies and Applications

Business and Technology in the New Millennium

Current and Future Trends

Handbook of Research on Innovations in Database Technologies and Applications

This volume presents work from the IFIP TC 8 WG 8.9 International Conference on the Research and Practical Issues of Enterprise Information Systems (CONFENIS 2007). Enterprise information systems (EIS) have become increasingly

popular. EIS integrate and support business processes across functional boundaries in a supply chain environment. In recent years, more and more enterprises world-wide have adopted EIS such as Enterprise Resource Planning (ERP) for running their businesses.

This book contains extended and revised papers from the 16th International Conference on Enterprise Information Systems, ICEIS 2014, held in Lisbon, Portugal, in April 2014. The 24 papers presented in this volume were carefully reviewed and selected from a total of 313 submissions. The book also contains two full-paper invited talks. The selected papers reflect state-of-the-art research that is oriented toward real-world applications and highlight the benefits of information systems and technology for industry and services. They are organized in topical sections on databases and information systems integration, artificial intelligence and decision support systems, information systems analysis and specification, software agents and Internet computing, human-computer interaction, and enterprise architecture. Every enterprise architect faces similar problems when designing and governing the enterprise architecture of a medium to large enterprise. Design patterns are a well-established concept in software engineering, used to define universally applicable solution schemes. By applying this approach to enterprise architectures, recurring problems in the design and implementation of enterprise architectures can be solved over all layers, from the business layer to the application and data layer down to the technology layer. Inversini and Perroud describe patterns at the level of enterprise architecture, which they refer to as Enterprise Architecture Patterns. These patterns are motivated by recurring problems originating from both the business and the underlying application, or from data and technology architectures of an enterprise such as identity and access management or integration needs. The Enterprise Architecture Patterns help in planning the technological and organizational landscape of an enterprise and its information technology, and are easily embedded into frameworks such as TOGAF, Zachman or FEA. This book is aimed at enterprise architects, software architects, project leaders, business consultants and everyone concerned with questions of IT and enterprise architecture and provides them with a comprehensive catalogue of ready-to-use patterns as well as an extensive theoretical framework to define their own new patterns.

After the introduction of Enterprise Information Systems (EIS) and Enterprise Resources Planning (ERP) applications to many business organizations, the functional issues such as technical problems, security threats, persistent end-user resistance, and the excessive hidden costs of these systems began coming to light. Cases on Enterprise Information Systems and Implementation Stages: Learning from the Gulf Region focuses on the Gulf region and its lead on the enterprise systems adoption which has exceeded those in many developed countries. This reference book highlights experiences implementing EIS, delivering a comprehensive multi-perspective account of EIS issues, and explores the concerns, risks, and critical success factors of EIS for a variety of organizations. It aims to be beneficial for both practitioners and academics alike.

A Pattern-Based Approach

Enterprise Information Systems VI

Challenges and Issues

Concepts, Methodologies, Tools and Applications
Social, Managerial, and Organizational Dimensions of Enterprise Information Systems

Research and Practical Issues of Enterprise Information Systems

This volume presents the revised and peer reviewed contributions of the "ERP Future 2012" conference held in Salzburg/Austria on November 11th - 12th, 2012?. The conference is a platform for research in ERP systems and closely related topics like business processes, business intelligence, and enterprise information systems in general. To master the challenges of ERP comprehensively, the ERP Future 2012 Research conference accepted contributions both with a business focus as well as with an IT focus to consider enterprise resource planning from various viewpoints. This combination of business and IT aspects is a unique characteristic of the conference and of this volume that resulted in valuable contributions with high practical impact. This book provides a method to plan, develop, validate, or evolve the design of an enterprise architecture function so that it fully meets the organization's needs. The reader will benefit from this book in two ways. First, it provides a structured overview and orientation to the subject of architecture from an architecture function perspective. Second, it guides through the process of planning, building, and operating your own architecture organization based on a generic architecture function blueprint presented in the form of a pattern language offering a structured means for navigating, contextualizing, combining, and composing the architecture function patterns. The book is structured in six chapters. Chapter 1 "Introduction" explains the starting position and objectives of the book and introduces key concepts that will be explained further in subsequent chapters. Chapter 2 "Architecture Function Pattern Language" introduces the concepts of pattern, pattern catalogue, pattern topology, and ontology and explains how these concepts are combined to form a pattern language for planning, designing, and operating an architecture function. Next, Chapter 3 "Architecture Function – Context" introduces concepts that are crucial for understanding the challenges that an architecture function faces and presents a generic schema for the business organizations and value chain. Chapter 4 "Architecture Function – Challenge" looks at an architecture function from a black box perspective and outlines the expectations and requirements that companies place on architecture organizations. It discusses the building blocks of an architecture function, the services it provides along the enterprise value chain, and the quality attributes that enterprises expect from their functions. Chapter 5 "Architecture Function – Constitution" then shifts from a black-box perspective to a white-box perspective and outlines the generic design of an architecture function in order to realize functional and quality-related requirements. Chapter 6 "Pattern Catalogue" eventually introduces the pattern catalogue with a total of 48 architecture function patterns. These patterns suggest designs for collaboration between the architecture function and enterprise organizations, for the elaboration and development of enterprise services along the enterprise value chain, or for aligning architecture governance with

enterprise governance. The book is intended for a broad readership, including enterprise, domain, and solution architects, lecturers and students, and anyone else interested in understanding the value proposition, responsibilities, outcomes, methods, and practices of architecture functions. It introduces the basic concepts and theories needed to understand the pattern language presented and the patterns it summarizes.

Shift from application-centric to data-centric to enable your organization to develop more efficient and successful Enterprise Information Systems. This book is the first part of a trilogy to follow Software Wasteland. In Software Wasteland, we detailed the current poor state of application software development. We offered some tactical advice for reducing some of the worse of the excess. This is the first book in the what to do instead trilogy. Even if the thought of data modeling makes you cringe, Dave McCombs latest book makes the case that it is a necessary exercise for the data-driven organization. The Data-Centric Revolution shows how to be data-driven in an extensible, flexible way that is baked-into organizational culture, rather than taking a typical project-by-project approach. The book is a fun, insightful and meaty read, well-illustrated, and with endless wonderful examples. Doug Laney, Principal, Data & Analytics Strategy, Caserta, and author of the best-seller, Infonomics: How to Monetize, Manage, and Measure Information for Competitive Advantage Dave McComb has laid out a roadmap to travel the exciting path towards data centrality. Daves passion for semantic modeling is contagious and his expert advice will give you the motivation to rethink application development and the direction needed to deliver value in your organization with linked data. Nic Seyot, Executive Director, Information Management at a major investment bank. In his new book, Dave teaches us why most of the stack we've spent decades trying to maintain is just a big, unmanageable pile of duplicative, inflexible code. He shows us how to collapse the stack and blend the logic and data each business needs to thrive, in one contextually rich, machine readable, dynamic, smart data layer. The bloated app and process layers of the stack go away, leaving a thin execution layer calling on the power of the smart data underneath. After Software Wasteland explained the problem, The Data-Centric Revolution articulates the solution. Alan Morrison, Sr. Research Fellow, New Services and Emerging Tech, PwC. From the age of punched cards to todays internet-driven systems, one thing has stayed fairly constant: software vendors and their implementers have been driving the Enterprise IT industry. This is changing. It will be hard to see initially, but its already happening in some more prescient organizations. As organizations realize they can take control of their own destiny by adopting data-centric principles, they will see their dependency on application software wither. The cost of running internal information systems will drop at least ten-fold, and the cost of integrating them will drop even more rapidly. This will decimate the \$400 billion/ year application software industry and the \$400 billion/year systems integration industry. The benefit will accrue to the buyers, and will accrue earliest to the first movers. The trajectory of this book is as follows: Chapters 1 through 3 lay the data-centric foundation. Chapter 1 introduces the data-centric movement and the prerequisites that must be in place for success (including roles and responsibilities). Chapter 2 defines data-

centric and explores a data-centric vision and approaches. Chapter 3 covers the management requirements in achieving a data-centric paradigm shift and reveals the new modeling discipline and delivery architecture. Chapters 4 through 6 explain the data-centric approach and its rewards. Chapter 4 summarizes why the data-centric approach will save incredible amounts of time and money. Chapter 5 explores various data centric approaches, and the underlying themes of flexibility and simplicity. Chapter 6 broadens the discussion of paradigm shifts and also discusses who will help you lead this data-centric approach. Chapters 7 through 10 discuss case studies and ways of organizing data. Chapters 7 and 10 discuss several case studies that have taken the data-centric approach. Chapter 8 explains linked data and semantic technologies, and Chapter 9 ontologies and knowledge graphs. Chapters 11 through 13 dig deeper into the pitfalls of the application-centric mindset and the benefits of the data-centric mindset. Chapter 11 gets to the root of the application-centric mindset: application software. Chapter 12 reveals the benefits of code reduction and Chapter 13 the benefits of the model-driven approach. Chapters 14 through 18 explain how to implement the data-centric paradigm. Chapter 14 explains how new technologies fit in with the data-centric approach. Chapters 15 and 16 cover how to get started. Chapter 17 explains the important role of governance in the data-centric approach. Chapter 18 summarizes the key takeaways.

"This book aims at identifying potential research problems and issues in the EIS such as Enterprise Resource Planning (ERP), Supply Chain Management (SCM), and Customer Relationship Management (CRM)"--Provided by publisher.

Restoring Sanity to Enterprise Information Systems

10th International Conference, BIS 2007, Poznan, Poland, April 25-27, 2007, Proceedings

Enterprise Information Systems

The Data-Centric Revolution

Pattern Enterpr Applica Arch

Enterprise Information Systems III

Technologies and Applications

This book comprises a set of papers selected from those presented at the fifth « International Conference on Enterprise Information Systems », (ICEIS'2003) held in Angers, France, from 23 to 26 April 2003. The conference was organised by École Supérieure d'Électronique de l'Ouest (ESEO) of Angers, France and the Escola Superior de Tecnologia of Setúbal, Portugal. Since its first edition in 1999, ICEIS focuses on real world applications and aims at bringing together researchers, engineers and practitioners interested in the advances and business applications of information systems. As in previous years, ICEIS'2003 held four simultaneous tracks covering different aspects of enterprise computing: Databases and Information Systems Integration, Artificial Intelligence and Decision Support

Systems, Information Systems Analysis and Specification and Software Agents and Internet Computing. Although ICEIS'2003 received 546 paper submissions from over 50 countries, only 80 were accepted as full papers and presented in 30-minutes oral presentations. With an acceptance rate of 15%, these numbers demonstrate the intention of preserving a high quality forum for future editions of this conference. From the articles accepted as long papers for the conference, only 32 were selected for inclusion in this book. Additional keynote lectures, tutorials and industrial sessions were also held during ICEIS'2003, and, for the first time this year, the 1st Doctoral Consortium on Enterprise Information Systems gave PhD students an opportunity to present their work to an international audience of experts in the field of information systems.

Continuous improvements in digitized practices have created opportunities for businesses to develop more streamlined processes. This not only leads to higher success in day-to-day production, but it increases the overall success of businesses. Enterprise Information Systems and the Digitalization of Business Functions is a key resource on the latest advances and research for a digital agenda in the business world. Highlighting multidisciplinary studies on data modeling, information systems, and customer relationship management, this publication is an ideal reference source for professionals, researchers, managers, consultants, and university students interested in emerging developments for business process management.

The purpose of the 3rd International Conference on Enterprise Information Systems (ICEIS) was to bring together researchers, engineers, and practitioners interested in the advances and business applications of information systems. The research papers published here have been carefully selected from those presented at the conference, and focus on real world applications covering four main themes: database and information systems integration; artificial intelligence and decision support systems; information systems analysis and specification; and internet computing and electronic commerce. Audience: This book will be of interest to information technology professionals, especially those working on systems integration, databases, decision support systems, or electronic commerce. It will also be of use to middle managers who need to work with information systems and require knowledge of current trends in development methods and applications.

Enterprise Integration Patterns provides an invaluable catalog of sixty-five patterns, with real-world solutions that demonstrate the formidable of messaging and help you to design effective messaging solutions for your enterprise. The authors also include examples covering a variety of different integration technologies, such as JMS, MSMQ, TIBCO ActiveEnterprise, Microsoft BizTalk, SOAP, and XSL. A case study describing a bond trading system illustrates the patterns in practice, and the book offers a look at emerging standards, as well as insights into what the future of enterprise integration might hold. This book provides a consistent vocabulary and visual notation framework to describe large-scale

integration solutions across many technologies. It also explores in detail the advantages and limitations of asynchronous messaging architectures. The authors present practical advice on designing code that connects an application to a messaging system, and provide extensive information to help you determine when to send a message, how to route it to the proper destination, and how to monitor the health of a messaging system. If you want to know how to manage, monitor, and maintain a messaging system once it is in use, get this book.

Learning from the Gulf Region

Databases and Information Systems VI

Advanced Information Systems Engineering

Enterprise Architecture Function

Modelling and Analysis of Enterprise Information Systems

19th International Conference, ICEIS 2017, Porto, Portugal, April 26–29, 2017, Revised Selected Papers

Designing Enterprise Information Systems

The rapid development of new Information Infrastructure combined with the increased user needs in specific areas of Information Technology (mostly related to Web applications) has created the need for designing new modeling techniques more innovative and targeted on specific areas of Information Systems in order to successfully model the rapidly changed environment, along with the newly introduced concepts and user requirements. Therefore, this book aims to introduce readers to a number of innovative Information modeling techniques. It is titled "Innovative Information Systems Modelling Techniques" and includes 9 chapters. The focus is on the exploration and coverage of the innovations of recently presented modeling techniques and their applicability on the Information Systems' modeling.

Discusses the technological developments, main issues, challenges, opportunities, and trends impacting every part of small to medium sized enterprises.

This book constitutes the refereed proceedings of the 21st International Conference on Advanced Information Systems Engineering, CAiSE 2009, held in Amsterdam, The Netherlands, on June 8-12, 2009. The 36 papers presented in this book together with 6 keynote papers were carefully reviewed and selected from 230 submissions. The topics covered are model driven engineering, conceptual modeling, quality and data integration, goal-oriented requirements engineering, requirements and architecture, service orientation, Web service orchestration, value-driven modeling, workflow, business process modeling, and requirements engineering. This three-volume collection, titled Enterprise Information Systems: Concepts, Methodologies, Tools and Applications, provides a complete assessment of the latest developments in enterprise information systems research, including development, design, and emerging methodologies. Experts in the field cover all aspects of enterprise resource planning (ERP), e-commerce, and organizational, social and technological implications of enterprise information systems.

Enterprise Information Systems VII

18th International Conference, ICEIS 2016, Rome, Italy, April 25–28, 2016, Revised Selected Papers

Enterprise Information Systems V

Fowler

Research and Practical Issues of Enterprise Information Systems II Volume 2

Selected Papers from the Ninth International Baltic Conference, DB & IS 2010

Innovation and Future of Enterprise Information Systems

For many years now Enterprise Information Systems have been critical in helping businesses successfully navigate the global market. The development that started with design and implementation of integrated systems has evolved to incorporate a multitude of perspectives and ideas. The Enterprise Information Systems functionality extends from principally an ERP (Enterprise Resource Planning) system to a portfolio of standard systems including CRM (Customer Relationship Management) systems and SCM (Supply Chain Management) systems. Advances in Enterprise Information Systems II is divided into seven thematic sections, each exploring a distinct topic. In “Concepts in Enterprise Information Systems” the authors present new concepts and ideas for the field. “Cases in Enterprise Information Systems” introduces studies of enterprise information systems in an organizational context. “Business Process Management” is one of the major themes within enterprise information systems and “Designing Enterprise Information Systems” discusses new approaches to the design of processes and system and also deals with how design can be taken as a specific perspective. “Enterprise Information Systems in various domains” features generic studies that contribute to advancing the practical knowledge of the field as well as towards “Global issues of Enterprise Information Systems”. Finally, in “Emerging Topics in Enterprise Information Systems”, new technologies and ideas are explored. Cloud computing in particular seems to be setting the agenda for future research in enterprise information systems. The book will be invaluable to academics and professionals interested in recent developments in the field of enterprise information systems.

The idea for this conference came from a meeting of the IFIP (International Federation for Information Processing) Technical Committee for Information Systems (TC8) in Guimares, Portugal in June 2005. Our goal is to build an IFIP forum among the different Information Systems Communities of TC8 dealing with the increasing important area of Enterprise Information Systems. In this particular meeting the committee members intensively discussed the innovative and unique characteristics of Enterprise Information Systems as scientific sub-discipline. Hence, in this meeting it was decided by the TC8 members that the IFIP TC8 First International Conference on Research and Practical Issues of Enterprise Information Systems (CONFENIS 2006) would be held in April 2006 in Vienna, Austria. Dr. Li Xu (USA) and Dr. A Min Tjoa (IFIP TC8) were assigned to propose a concept for this conference in order to establish an IFIP platform for EIS researchers and practitioners in the field to share experience, and discussing opportunities and challenges. We are very pleased therefore to have this conference organised by the help of the Austrian Computer Society (OCG). OCG supports the idea of this conference due to the urgent need of research and dissemination of new techniques in this key area. We received 180 papers from more than 30 countries for CONFENIS and the Program Committee eventually selected xx papers or extended abstracts, making an acceptance rate of xx% of submitted papers. Each paper was thoroughly reviewed by at least two qualified reviewers.

The practice of enterprise application development has benefited from the emergence of many new enabling technologies. Multi-tiered object-oriented platforms, such as Java and .NET, have become commonplace. These new tools and technologies are capable of building powerful applications, but they are not easily implemented. Common failures in enterprise applications often occur because their developers do not understand the architectural lessons that experienced object developers have learned. Patterns of Enterprise Application Architecture is written in direct response to the stiff challenges that face enterprise application developers. The author, noted object-oriented designer Martin Fowler, noticed that despite changes in technology--from Smalltalk to CORBA to Java to .NET--the same basic design ideas can be adapted and applied to solve common problems. With the help of an expert group of contributors, Martin distills over forty recurring solutions into patterns. The result is an indispensable handbook of solutions that are applicable to any enterprise application platform. This book is actually two books in one. The first section is a short tutorial on developing enterprise applications, which you can read from start to finish to understand the scope of the book's lessons. The next section, the bulk of the book, is a detailed reference to the patterns themselves. Each pattern provides usage and implementation information, as well as detailed code examples in Java or C#. The entire book is also richly illustrated with UML diagrams to further explain the concepts. Armed with this book, you will have the knowledge necessary to make important architectural decisions about building an enterprise application and the proven patterns for use when building them. The topics covered include

- Dividing an enterprise application into layers*
- The major approaches to organizing business logic*
- An in-depth treatment of mapping between objects and relational databases*
- Using Model-View-Controller to organize a Web presentation*
- Handling concurrency for data that spans multiple transactions*
- Designing distributed object interfaces*

The purpose of the 7th International Conference on Enterprise Information Systems (ICEIS) was to bring together researchers, engineers and practitioners interested in the advances and business applications of information systems. ICEIS focuses on real world applications, therefore authors were asked to highlight the benefits of Information Technology for industry and services. Papers included in the book are the best papers presented at the conference.

A Pattern Based Approach

A Pattern Language for Planning, Design and Execution

IFIP TC 8 WG 8.9 International Conference on Research and Practical Issues of Enterprise Information Systems (CONFENIS 2007), October 14-16, 2007, Beijing, China

16th International Conference, ICEIS 2014, Lisbon, Portugal, April 27-30, 2014, Revised Selected Papers

Enterprise Information Systems and the Digitalization of Business Functions

This volume constitutes the refereed proceedings of the International Conference on Digital Enterprise and Information Systems, held in London during July 20 - 22, 2011. The 70 revised full papers presented were carefully reviewed and selected. They are organized in topical sections on cryptography and data protection, embedded systems and software, information technology management, e-business applications and software, critical computing and storage, distributed and parallel applications, digital management products, image

processing, digital enterprises, XML-based languages, digital libraries, and data mining.