

## Auditing 2 Process Mining

The explosion of data analytics in the auditing profession demands a different kind of auditor. Auditing: A Practical Approach with Data Analytics prepares students for the rapidly changing demands of the auditing profession by meeting the data-driven requirements of today's workforce. Because no two audits are alike, this course uses a practical, case-based approach to help students develop professional judgement, think critically about the auditing process, and develop the decision-making skills necessary to perform a real-world audit. To further prepare students for the profession, this course integrates seamless exam review for successful completion of the CPA Exam.

This two-volume set LNCS 3760/3761 constitutes the refereed proceedings of the three confederated conferences CoopIS 2005, DOA 2005, and ODBASE 2005 held as OTM 2005 in Agia Napa, Cyprus in October/November 2005. The 89 revised full and 7 short papers presented together with 3 keynote speeches were carefully reviewed and selected from a total of 360 submissions. Corresponding with the three OTM 2005 main conferences CoopIS, DOA, and ODBASE, the papers are organized in topical sections on workflow, workflow and business processes, mining and filtering, petri nets and process management, information access and integrity, heterogeneity, semantics, querying and content delivery, Web services, agents, security, integrity and consistency, chain and collaboration management, Web services and service-oriented

architectures, multicast and fault tolerance, communication services, techniques for application hosting, mobility, security and data persistence, component middleware, java environments, peer-to-peer computing architectures, aspect oriented middleware, information integration and modeling, query processing, ontology construction, metadata, information retrieval and classification, system verification and evaluation, and active rules and Web services.

We are entering an entirely new phase of BPM – the era of “BPM Everywhere” or BPME. BPME represents the strategy for leveraging, not simply surviving but fully exploiting the wave of disruption facing every business over the next 5 years and beyond. Without question, one of the single most disruptive events in the last decade was the introduction of the smartphone. Consider for a moment how great of an impact this has had on the relationship between businesses and their customers. Not even the emergence of the Web and Internet-based “digital native” business models can compare with the level of intimacy now available with your customers. In the era of the Internet of Things where smart homes, appliances, cars, phones, virtually imaginable devices are all connected, BPM must, and will, be everywhere. As Peter Whibley discusses in “The Internet of Things Will Be Invisible,” by 2025 there are expected to be more than 26 billion or more connected devices. In the chapter “Digital Prescriptive Maintenance: Disrupting Manufacturing through IoT, Big Data, and Dynamic Case Management,” Dr. Setrag Khoshafian introduces the “4 Vs” of “thing” data, specifically

“Volume, Velocity, Variety and Value.” From monitors and remote sensors, to appliances and vehicles, to tens of billions of other “things,” connected devices are generating meaningful and informative data that would easily overwhelm any human being, but collectively they present critical context about processes and the state of operations. “Big Data” has never been so large, nor presented such an acute role within enterprises and the processes that drive them. BPME as well as traditional BPM methods can already be found at the center of this. Its role will grow exponentially. Emergent factors such as process mining (see chapter “Mining the Swarm” by Keith Swenson, et al.) will be critical for uncovering engagement patterns and the need for process management platforms to coordinate interaction and control of smart devices. It is intelligent BPM that is expanding the window of what can be automated, by enabling adaptable automation. The mobile strategies in far too many organizations seem to be the building of apps that presume that customers will use their smartphones like mini laptops. This avoids the fact that we now have a level of intimacy with our customer we've never had before. As discussed in the chapter “BPM to Go – Supporting Business Processes in a Mobile and Sensing World,” our customers are carrying around a device that offers a range of capabilities unlike any laptop. A smartphone produces volumes of meaningful data about our customers (think about the “4Vs”) and is able to interact with that customer in ways that a laptop never can. The growing ubiquity of connectivity always within reach combined with new services and

capabilities such as mobile banking is a key part of driving constantly-changing expectations. Yet digital disruption is not limited to mobile devices, and is in fact disrupting everywhere BPM is otherwise found, and why BPM everywhere is becoming the new normal.

This book constitutes the refereed proceedings of the 8th International Conference on Design Science Research in Information Systems and Technology, DESRIST 2013, held in Helsinki, Finland, in June 2013. The 24 full papers, 8 research-in-progress papers, 12 short papers, and 8 poster abstracts were carefully reviewed and selected from 93 submissions. The papers are organized in topical sections on system integration and design; meta issues; business process management and ERP; theory development; emerging themes; green IS and service management; method engineering; papers describing products and prototypes; and work-in-progress papers. This book constitutes the refereed proceedings of the 15th International Conference on Fundamental Approaches to Software Engineering, FASE 2012, held in Tallinn, Estonia, in March/April 2012, as part of ETAPS 2012, the European Joint Conferences on Theory and Practice of Software. The 33 full papers presented together with one full length invited talk were carefully reviewed and selected from 134 submissions. The papers are organized in topical sections on software architecture and components, services, verification and monitoring, intermodelling and model transformations, modelling and adaptation, product lines and feature-oriented programming,

development process, verification and synthesis, testing and maintenance, and slicing and refactoring.

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 Business Process Management 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.

This book constitutes the refereed proceedings of the 8th International Conference on Information Technology in Bio- and Medical Informatics, ITBAM 2017, held in Lyon, France, in August 2017. The 3 revised full papers and 6 poster papers presented were carefully reviewed and selected from 15 submissions. The papers address a broad range of topics in applications of information technology to biomedical engineering and

medical informatics.

This book constitutes the refereed proceedings of the 32nd International Conference on Conceptual Modeling, ER 2013, held in Hong Kong, China, in November 2013. The 23 full and 17 short papers presented were carefully reviewed and selected from 148 abstracts and 126 full papers submissions. The papers are organized in topical sections on modeling and reasoning, fundamentals of conceptual modeling, business process modeling, network modeling, data semantics, security and optimization, ontology-based modeling, searching and mining, conceptual modeling and applications, demonstration papers.

This book constitutes the refereed proceedings of ten international workshops held in Eindhoven, The Netherlands, in conjunction with the 12th International Conference on Business Process Management, BPM 2014, in September 2014. The ten workshops comprised Process-oriented Information Systems in Healthcare (ProHealth 2014), Security in Business Processes (SBP 2014), Process Model Collections: Management and Reuse (PMC-MR 2014), Business Processes in Collective Adaptive Systems (BPCAS 2014), Data- and Artifact-centric BPM (DAB 2014), Business Process Intelligence (BPI 2014), Business Process Management in the Cloud (BPMC 2014), Theory and Applications of Process Visualization (TaProViz 2014), Business Process Management and Social Software (BPMS2 2014) and Decision Mining and Modeling for Business Processes (DeMiMoP 2014). The 38 revised full and eight short papers presented were carefully reviewed and selected from 84 submissions. In addition, six short papers resulting from the Doctoral Consortium at BPM 2014 are included

in this book.

This book contains the refereed proceedings of the 12th International Conference on Business Process Modeling, Development and Support (BPMDs 2011) and the 16th International Conference on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2011), held together with the 23rd International Conference on Advanced Information Systems Engineering (CAiSE 2011) in London, UK, in June 2011. The 22 papers accepted for BPMDs were selected from 61 submissions and cover a wide spectrum of issues related to business processes development, modeling, and support. They are grouped into sections on BPMDs in practice, business process improvement, business process flexibility, declarative process models, variety of modeling paradigms, business process modeling and support systems development, and interoperability and mobility. The 16 papers accepted for EMMSAD were chosen from 31 submissions and focus on exploring, evaluating, and enhancing current information modeling methods and methodologies. They are grouped in sections on workflow and process modeling extensions, requirements analysis and information systems development, requirements evolution and information systems evolution, data modeling languages and business rules, conceptual modeling practice, and enterprise architecture. To large organizations, business intelligence (BI) promises the capability of collecting and analyzing internal and external data to generate knowledge and value, thus providing decision support at the strategic, tactical, and operational levels. BI is now impacted by the “Big Data” phenomena and the evolution of society and users. In particular, BI applications must cope with additional heterogeneous (often Web-based) sources, e.g., from social networks, blogs, competitors’, suppliers’, or distributors’ data, governmental or NGO-based analysis and

papers, or from research publications. In addition, they must be able to provide their results also on mobile devices, taking into account location-based or time-based environmental data. The lectures held at the Third European Business Intelligence Summer School (eBISS), which are presented here in an extended and refined format, cover not only established BI and BPM technologies, but extend into innovative aspects that are important in this new environment and for novel applications, e.g., pattern and process mining, business semantics, Linked Open Data, and large-scale data management and analysis. Combining papers by leading researchers in the field, this volume equips the reader with the state-of-the-art background necessary for creating the future of BI. It also provides the reader with an excellent basis and many pointers for further research in this growing field.

The digitization of healthcare has become almost ubiquitous in recent years, spreading from healthcare organizations into the homes and personal appliances of practically every citizen. Thanks to the collective efforts of health professionals, patients and care providers as well as systems developers and researchers, the entire population of Europe is able to participate in and enjoy the benefits of digitized health information. This book presents the proceedings of the 26th Medical Informatics in Europe Conference (MIE2015), held in Madrid, Spain, in May 2015. The conference brings together participants who share their latest achievements in biomedical and health Informatics, including the role of the user in digital healthcare, and provides a forum for discussion of the inherent challenges to design and adequately deploy ICT tools, the assessment of health IT interventions, the training of users and the exploitation of available information and knowledge to further the continuous and ubiquitous availability and interoperability of medical information systems. Contributions address methodologies and

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applications, success stories and lessons learned as well as an overview of on-going projects and directions for the future. The book will be of interest to all those involved in the development, delivery and consumption of health and care information.

This book constitutes the thoroughly refereed post-conference proceedings of the 11th IFIP WG 6.11 Conference on e-Business, e-Services and e-Society, I3E 2011, held in Kaunas, Lithuania, in October 2011. The 25 revised papers presented were carefully reviewed and selected from numerous submissions. They are organized in the following topical sections: e-government and e-governance, e-services, digital goods and products, e-business process modeling and re-engineering, innovative e-business models and implementation, e-health and e-education, and innovative e-business models.

This book describes process mining use cases and business impact along the value chain, from corporate to local applications, representing the state of the art in domain know-how. Providing a set of industrial case studies and best practices, it complements academic publications on the topic. Further the book reveals the challenges and failures in order to offer readers practical insights and guidance on how to avoid the pitfalls and ensure successful operational deployment. The book is divided into three parts: Part I provides an introduction to the topic from fundamental principles to key success factors, and an overview of operational use cases. As a holistic description of process mining in a business environment, this part is particularly useful for readers not yet familiar with the topic. Part II presents detailed use cases written by contributors from a variety of functions and industries. Lastly, Part III provides a brief overview of the future of process mining, both from academic and operational perspectives. Based on a solid academic foundation, process mining has received increasing interest from

operational businesses, with many companies already reaping the benefits. As the first book to present an overview of successful industrial applications, it is of particular interest to professionals who want to learn more about the possibilities and opportunities this new technology offers. It is also a valuable resource for researchers looking for empirical results when considering requirements for enhancements and further developments.

Continuous Auditing provides academics and practitioners with a compilation of select continuous auditing design science research, and it provides readers with an understanding of the underlying theoretical concepts of a continuous audit, ideas on how continuous audit can be applied in practice, and what has and has not worked in research.

This book constitutes the refereed proceedings of the 33rd International Conference on Applications and Theory of Petri Nets and Concurrency, PETRI NETS 2012, held in Hamburg, Germany, in June 2012. The 18 regular papers and 3 tool papers presented were carefully reviewed and selected from 55 submissions. The book also contains 2 invited talks. All current issues on research and development in the area of Petri nets and related models of concurrent systems are addressed.

This book constitutes the refereed proceedings of the 25th International Conference on Advanced Information Systems Engineering, CAiSE 2013, held in Valencia, Spain, in June 2013. The 44 revised full papers were carefully reviewed and selected from 162 submissions. The contributions have been grouped into the following topical sections: services; awareness; business process execution; products; business process modelling; modelling languages and meta models; requirements engineering 1;

enterprise architecture; information systems evolution; mining and predicting; data warehouses and business intelligence; requirements engineering 2; knowledge and know-how; information systems quality; and human factors.

LNBIP 99 and LNBIP 100 together constitute the thoroughly refereed proceedings of 12 international workshops held in Clermont-Ferrand, France, in conjunction with the 9th International Conference on Business Process Management, BPM 2011, in August 2011. The 12 workshops focused on Business Process Design (BPD 2011), Business Process Intelligence (BPI 2011), Business Process Management and Social Software (BPMS2 2011), Cross-Enterprise Collaboration (CEC 2011), Empirical Research in Business Process Management (ER-BPM 2011), Event-Driven Business Process Management (edBPM 2011), Process Model Collections (PMC 2011), Process-Aware Logistics Systems (PALS 2011), Process-Oriented Systems in Healthcare (ProHealth 2011), Reuse in Business Process Management (rBPM 2011), Traceability and Compliance of Semi-Structured Processes (TC4SP 2011), and Workflow Security Audit and Certification (WfSAC 2011). In addition, the proceedings also include the Process Mining Manifesto (as an Open Access Paper), which has been jointly developed by more than 70 scientists, consultants, software vendors, and end-users. LNBIP 100 contains the revised and extended papers from PMC 2011, PALS 2011, ProHealth 2011, rBPM 2011, TC4SP 2011, and WfSAC 2011.

This volume includes extended and revised versions of a set of selected papers from

the International Conference on Electric and Electronics (EEIC 2011) , held on June 20-22 , 2011, which is jointly organized by Nanchang University, Springer, and IEEE IAS Nanchang Chapter. The objective of EEIC 2011 Volume 4 is to provide a major interdisciplinary forum for the presentation of new approaches from Communication Systems and Information Technology, to foster integration of the latest developments in scientific research. 137 related topic papers were selected into this volume. All the papers were reviewed by 2 program committee members and selected by the volume editor Prof. Ming Ma. We hope every participant can have a good opportunity to exchange their research ideas and results and to discuss the state of the art in the areas of the Communication Systems and Information Technology.

This book constitutes the refereed proceedings of the 20th International Conference on Business Information Systems, BIS 2017, held in Poznań, Poland, in June 2017. Big Data Analytics helps to understand and enhance enterprises by linking many fields of information technology and business. This year's conference theme was: Big Data Analytics for Business and Public Administration. The 24 full papers presented in this volume were carefully reviewed and selected from 72 submissions. They were organized in topical sections named: big and smart data; business and enterprise modeling; ICT project management; process management; smart infrastructure; and applications.

On behalf of the NDT 2010 conference, the Program Committee and Charles University

in Prague, Czech Republic, we welcome you to the proceedings of the Second International Conference on 'Networked Digital Technologies' (NDT 2010). The NDT 2010 conference explored new advances in digital and Web technology applications. It brought together researchers from various areas of computer and information sciences who addressed both theoretical and applied aspects of Web technology and Internet applications. We hope that the discussions and exchange of ideas that took place will contribute to advancements in the technology in the near future. The conference received 216 papers, out of which 85 were accepted, resulting in an acceptance rate of 39%. These accepted papers are authored by researchers from 34 countries covering many significant areas of Web applications. Each paper was evaluated by a minimum of two reviewers. Finally, we believe that the proceedings document the best research in the studied areas. We express our thanks to the Charles University in Prague, Springer, the authors and the organizers of the conference.

This book constitutes the thoroughly refereed post-conference proceedings of the 6th International Conference on Mobile, Secure and Programmable Networking, held in Paris, France, in October 2020. The 16 full papers presented in this volume were carefully reviewed and selected from 31 submissions. They discuss new trends in networking infrastructures, security, services and applications while focusing on virtualization and cloud computing for networks, network programming, software defined networks (SDN) and their security.

This volume was published in honor of Stefania Gnesi's 65th birthday. The Festschrift volume contains 32 papers written by close collaborators and friends of Stefania and was presented to her on October 8, 2019 one-day colloquium held in Porto, Portugal. The Festschrift consists of eight sections, seven of which reflect the main research areas to which Stefania has contributed. Following a survey of Stefania's legacy in research and a homage by her thesis supervisor, these seven sections are ordered according to Stefania's life cycle in research, from software engineering to formal methods and tools, and back: Software Engineering; Formal Methods and Tools; Requirements Engineering; Natural Language Processing; Software Product Lines; Formal Verification; and Applications.

After a brief presentation of the state of the art of process-mining techniques, Andrea Burratin proposes different scenarios for the deployment of process-mining projects, and in particular a characterization of companies in terms of their process awareness. The approaches proposed in this book belong to two different computational paradigms: first to classic "batch process mining," and second to more recent "online process mining." The book encompasses a revised version of the author's PhD thesis, which won the "Best Process Mining Dissertation Award" in 2014, awarded by the IEEE Task Force on Process Mining.

This book constitutes the refereed post-proceedings of six international workshops held in conjunction with the Third International Conference on Business Process Management, BPM

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2005, in September 2005. The 41 revised full papers presented were carefully reviewed and selected. Among the issues addressed are fundamental process modeling, Web service choreography and orchestration, business process reference models, and business processes and services.

This book constitutes the proceedings of the 10th International Conference on Business Process Management, BPM 2012, held in Tallinn, Estonia, in September 2012. The 17 regular papers and 7 short papers included in this volume were carefully reviewed and selected from 126 submissions. The book also features two keynote lectures which were given at the conference. The papers are organized in topical sections named: process quality; conformance and compliance; BPM applications; process model analysis; BPM and the cloud; requirements and performance; process mining; and refactoring and optimization.

This book contains the refereed proceedings of the 16th International Conference on Business Process Modeling, Development and Support, BPMDS 2015, and the 20th International Conference on Exploring Modeling Methods for Systems Analysis and Design, EMMSAD 2015, held together with the 27th International Conference on Advanced Information Systems Engineering (CAiSE 2015) in Stockholm, Sweden, in June 2015. The 17 full papers accepted for BPMDS were selected from 43 submissions and cover a wide spectrum of issues related to business process development, modeling, and support. They are grouped into topical sections on enabling value creation, human-centric paradigms, mining for processes, declarative approaches, understanding and sharing, quality and security issues, and new areas for BPMDS. The 12 full and three short papers accepted for EMMSAD were chosen from 33 submissions and focus on exploring, evaluating, and enhancing modeling methods and

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methodologies for the analysis and design of information systems, enterprises, and business processes. They are grouped into topical sections on fundamental issues in modeling, requirements and regulations, enterprise and software ecosystem modeling, information and process model quality, meta-modeling and domain-specific modeling and model composition, modeling of architecture and design, and novel applications of modeling.

This book constitutes the proceedings of the 18th International Conference on Service-Oriented Computing, ICSOC 2020, which was planned to take place in Dubai, UAE, during December 14-17, 2020. Due to the COVID-19 pandemic the conference was held online. The 23 full, 16 short, and 3 industry papers included in this volume were carefully reviewed and selected from 137 submissions. They were organized in topical sections named: microservices; Internet of Things; services at the edge; machine learning for service oriented computing; smart data and smart services; service oriented technology trends; industry papers. This book constitutes the proceedings of the 5th Enterprise Engineering Working Conference, EEWC 2015, held in Prague, Czech Republic, during May 15–19, 2015. EEWC aims at addressing the challenges that modern and complex enterprises face in a rapidly changing world. The participants of the working conference share a belief that dealing with these challenges requires rigorous and scientific solutions, focusing on the design and engineering of enterprises. The goal of EEWC is to stimulate interaction between the different stakeholders, scientists as well as practitioners, interested in making enterprise engineering a reality. The 10 papers included in this book were presented at EEWC after being carefully reviewed and selected out of 29 submissions. The topics of the presented papers allowed for active participation in interesting discussions and exchange of ideas and stimulated future

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cooperation among the participants. This made EEWC a real "working conference" contributing to the further development of enterprise engineering as a mature discipline. Topics covered include: enterprise engineering and DEMO; business process management, simulation, and analysis; and complexity, transformation, and modeling.

This book constitutes the refereed proceedings of the 4th International Conference on Business Process Management, BPM 2006. The book presents 20 revised full papers, 5 industrial papers, and 15 short papers together with an invited paper and the abstract of an invited talk. The papers are organized in topical sections on monitoring and mining, service composition, process models and languages, dynamic process management, Web service composition, and applied business process management.

Designed to facilitate the use of audit data analytics (ADAs) in the financial statement audit, this title was developed by leading experts across the profession and academia. The guide defines audit data analytics as "the science and art of discovering and analyzing patterns, identifying anomalies, and extracting other useful information in data underlying or related to the subject matter of an audit through analysis, modeling, and visualization for planning or performing the audit." Simply put, ADAs can be used to perform a variety of procedures to gather audit evidence. Each chapter focuses on an audit area and includes step-by-step guidance illustrating how ADAs can be used throughout the financial statement audit.

Suggested considerations for assessing the reliability of data are also included in a separate appendix.

This book constitutes the thoroughly refereed proceedings of the 2011 ICSOC Workshops consisting of 5 scientific satellite events, organized in 4 tracks: workshop track (WESOA 2011;

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NFPSLAM-SOC 2011), PhD symposium track, demonstration track, and industry track; held in conjunction with the 2011 International Conference on Service-Oriented Computing (ICSOC), in Paphos, Greece, December 2011. The 39 revised papers presented together with 2 introductory descriptions address topics such as software engineering services; the management of service level agreements; Web services and service composition; general or domain-specific challenges of service-oriented computing and its transition towards cloud computing; architecture and modeling of services; workflow management; performance analysis as well as crowdsourcing for improving service processes and for knowledge discovery.

This is the second edition of Wil van der Aalst's seminal book on process mining, which now discusses the field also in the broader context of data science and big data approaches. It includes several additions and updates, e.g. on inductive mining techniques, the notion of alignments, a considerably expanded section on software tools and a completely new chapter of process mining in the large. It is self-contained, while at the same time covering the entire process-mining spectrum from process discovery to predictive analytics. After a general introduction to data science and process mining in Part I, Part II provides the basics of business process modeling and data mining necessary to understand the remainder of the book. Next, Part III focuses on process discovery as the most important process mining task, while Part IV moves beyond discovering the control flow of processes, highlighting conformance checking, and organizational and time perspectives. Part V offers a guide to successfully applying

process mining in practice, including an introduction to the widely used open-source tool ProM and several commercial products. Lastly, Part VI takes a step back, reflecting on the material presented and the key open challenges. Overall, this book provides a comprehensive overview of the state of the art in process mining. It is intended for business process analysts, business consultants, process managers, graduate students, and BPM researchers.

What are the possibilities for process mining in hospitals? In this book the authors provide an answer to this question by presenting a healthcare reference model that outlines all the different classes of data that are potentially available for process mining in healthcare and the relationships between them. Subsequently, based on this reference model, they explain the application opportunities for process mining in this domain and discuss the various kinds of analyses that can be performed. They focus on organizational healthcare processes rather than medical treatment processes. The combination of event data and process mining techniques allows them to analyze the operational processes within a hospital based on facts, thus providing a solid basis for managing and improving processes within hospitals. To this end, they also explicitly elaborate on data quality issues that are relevant for the data aspects of the healthcare reference model. This book mainly targets advanced professionals involved in areas related to business process management, business intelligence, data mining, and business process redesign for healthcare systems as well as graduate students

specializing in healthcare information systems and process analysis.

This book constitutes the refereed proceedings of the 13th International Conference on Evaluation of Novel Approaches to Software Engineering, ENASE 2018, held in Funchal, Madeira, Portugal, in March 2018. The 17 revised full papers and 5 revised short papers presented were carefully reviewed and selected from 95 submissions. The papers are organized in topical sections on service science and business information systems and software engineering.

This book constitutes the proceedings of the BPM Forum of the 19th International Conference on Business Process Management, BPM 2021, which will take place in Rome, Italy, in September 2021. The BPM Forum offers innovative research papers characterized by their high potential of stimulating interesting discussion and scientific debate, although without yet reaching the same rigor as the papers accepted for the main conference. In this sense, the BPM Forum papers are characterized by novel ideas about emergent BPM topics. The 16 papers presented in this volume were carefully reviewed and selected from a total of 123 submissions to the main conference. They cover all areas of business process management, from process definition to variability, execution, visualization, monitoring, mining, and optimization.

This book constitutes revised selected papers from the International Workshops held at the Second International Conference on Process Mining, ICPM 2020, which took place during October 4-9, 2020. The conference was planned to take place in Padua, Italy,

but had to be held online due to the COVID-19 pandemic. The conference focuses on the area of process mining research and practice, including theory, algorithmic challenges, and applications. The co-located workshops provided a forum for novel research ideas. The 29 papers included in this volume were carefully reviewed and selected from 59 submissions. They stem from the following workshops: 1st International Workshop on Event Data and Behavioral Analytics (EDBA) 1st International Workshop on Leveraging Machine Learning in Process Mining (ML4PM) 1st International Workshop on Streaming Analytics for Process Mining (SA4PM'20) 5th International Workshop on Process Querying, Manipulation, and Intelligence (PQMI) 3rd International Workshop on Process-Oriented Data Science for Healthcare (PODS4H) 1st International Workshop on Trust and Privacy in Process Analytics (TPPA)

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