The DevOps Handbook: How To Create World Class Agility, Reliability, And Security In Technology Organizations

A practical guide to making the best use of the OpenShift container platform based on the real-life experiences, practices, and culture within Red Hat Open Innovation Labs Key FeaturesLearn how modern software companies deliver business outcomes that matter by focusing on DevOps culture and practicesAdapt Open Innovation Labs culture and foundational practices from the Open Practice LibraryImplement a metrics-driven approach to application, platform, and product, understanding what to measure and how to learn and pivotBook Description DevOps Culture and Practice with OpenShift features many different real-world practices - some people-related, some process-related, some technology-related - to facilitate successful DevOps, and in turn OpenShift, adoption within your organization. It introduces many DevOps concepts and tools to connect culture and practice through a continuous loop of discovery, pivots, and delivery underpinned by a foundation of collaboration and software engineering. Containers and container-centric application lifecycle management are now an industry standard, and OpenShift has a leading position in a flourishing market of enterprise Kubernetes-based product offerings. DevOps Culture and Practice with OpenShift provides a roadmap for building empowered product teams within your organization. This guide brings together lean, agile, design thinking, DevOps, culture, facilitation, and hands-on technical enablement all in one book. Through a combination of real-world stories, a practical case study, facilitation guides, and technical implementation details, DevOps Culture and Practice with OpenShift provides tools and techniques to build a DevOps culture within your organization on Red Hat's OpenShift Container Platform. What you will learnImplement successful DevOps practices and in turn OpenShift within your organizationDeal with segregation of duties in a continuous delivery worldUnderstand automation and its significance through an application-centric viewManage continuous deployment strategies, such as A/B, rolling, canary, and blue-greenLeverage OpenShift's Jenkins capability to execute continuous integration pipelinesManage and separate configuration from static runtime softwareMaster communication and collaboration enabling delivery of superior software products at scale through continuous discovery and continuous deliveryWho this book is for This book is for anyone with an interest in DevOps practices with OpenShift or other Kubernetes platforms. This DevOps book gives software architects, developers, and infra-ops engineers a practical understanding of OpenShift, how to use it efficiently for the effective deployment of application architectures, and how to collaborate with users and stakeholders to deliver business-impacting outcomes.

Software affects everything in our lives.Imagine that software could be constantly updated without our involvement! No need to figure out hardware specifications. Nothing to interrupt our digital activities. No waiting for lengthy downloads and reboots. What if it all just happened in the background, and we could simply enjoy the benefits? Liquid Software explores a future in which developers code high-quality applications that securely flow to end-users with zero downtime. The authors bring insights from their more than 50 years of collective experience in building software in modern development environments. They explain that what sounds like Software Utopia is possible and practical! We're at the dawn of the next great leap forward in computing - the achievement of continuous software updates. The Liquid Software revolution has begun!

Automating the Continuous Deployment Pipeline with Containerized MicroservicesAbout This Book First principles of devops, Ansible, Docker, Kubernetes, microservices* Architect your software in a better and more efficient way with microservices packed as immutable containers* Practical guide describing an extremely modern and advanced devops toolchain that can be improved continuouslyWho This Book Is ForIf you are an intermediate-level developer who wants to master the whole microservices development and deployment lifecycle using some of the latest and greatest practices and tools, this is the book for you. Familiarity with the basics of Devops and Continuous Deployment will be useful.What You Will Learn * Get to grips with the fundamentals of Devops* Architect efficient software in a better and more efficient way with the help of microservices* Use Docker, Kubernetes, Ansible, Ubuntu, Docker Swarm and more* Implement fast, reliable and continuous deployments with zero-downtime and ability to roll-back* Learn about centralized logging and monitoring of your cluster* Design self-healing systems capable of recovery from both hardware and software failuresIn DetailBuilding a complete modern devops toolchain requires not only the whole microservices development and a complete deployment lifecycle, but also the latest and greatest practices and tools. Victor Farcic argues from first principles how to build a devops toolchain. This book shows you how to chain together Docker, Kubernetes, Ansible, Ubuntu, and other tools to build the complete devops toolkit.Style and approach This book follows a unique, hands-on approach familiarizing you to the Devops 2.0 toolkit in a very practical manner. Although there will be a lot of theory, you won't be able to complete this book by reading it in a metro on a way to work. You'll need to be in front of your computer and get your hands dirty.*

Scale and maintain outstanding performance in your AWS-based infrastructure using DevOps principles Key FeaturesImplement continuous integration and continuous deployment pipelines on AWSGain insight from an expert who has worked with Silicon Valley's most high-profile companiesImplement DevOps principles to take full advantage of the AWS stack and servicesBook Description The DevOps movement has transformed the way modern tech companies work. Amazon Web Services (AWS), which has been at the forefront of the cloud computing revolution, has also been a key contributor to the DevOps movement, creating a huge range of managed services that help you implement DevOps principles. Effective DevOps with AWS, Second Edition will help you to understand how the most successful tech start-ups launch and scale their services on AWS, and will teach you how you can do the same. This book explains how to treat infrastructure as code, meaning you can bring resources online and offline as easily as you control your software. You will also build a continuous integration and continuous deployment pipeline to keep your app up to date. Once you have gotten to grips with all this, we'll move on to how to scale your applications to offer maximum performance to users even when traffic spikes, by using the latest technologies, such as containers. In addition to this, you'll get insights into monitoring and alerting, so you can make sure your users have the best experience when using your service. In the concluding chapters, we'll cover inbuilt AWS tools such as CodeDeploy and CloudFormation, which are used by many AWS administrators to perform DevOps. By the end of this book, you'll have learned how to ensure the security of your platform and data, using the latest and most prominent AWS tools. What you will learnImplement automatic AWS instance provisioning using CloudFormationDeploy your application on a provisioned infrastructure with AnsibleManage infrastructure using TerraformBuild and deploy a CI/CD pipeline with Automated Testing on AWSUnderstand the container journey for a CI/CD pipeline using AWS ECSMonitor and secure your AWS environmentWho this book is for Effective DevOps with AWS is for you if you are a developer, DevOps engineer, or you work in a team which wants to build and use AWS for software infrastructure. Basic computer science knowledge is required to get the most out of this book.

A Guide to Adopting DevOps in a Multi-Speed IT Enterprise
Design and Deploy Production-Ready Software
Pioneering the Future of High-Performing Organizations
Deliver continuous business value through people, processes, and technology
What Not to Do in Cybersecurity
Seeking SRE
Release It!

Operations Anti-Patterns, DevOps Solutions shows how to implement DevOps techniques in the kind of imperfect environments most developers work in. Part technology tutorial, part reference manual, and part psychology handbook, this practical guide shows you realistic ways to bring DevOps to your team when you don't have the flexibility to make sweeping changes in organizational structure. Summary Operations Anti-Patterns, DevOps Solutions shows how to implement DevOps techniques in the kind of imperfect environments most developers work in. Part technology tutorial, part reference manual, and part psychology handbook, this practical guide shows you realistic ways to bring DevOps to your team when you don't have the flexibility to make sweeping changes in organizational structure. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology To some extent, all organizations—even yours—suffer from poor development practices, garbled communications, and outdated legacy systems. The good news is DevOps can help you improve your processes. First, however, you'll need to recognize the core issues holding you back. This book empowers you to deliver DevOps with limited resources while navigating the office politics and entrenched mindsets that are all too common in actual workplaces. About the book Operations Anti-Patterns, DevOps Solutions offers clear steps for transforming development and communication. Using jargon-free language, this book describes incremental techniques that pay off immediately. Streamline your workflow, manage unplanned time, and build operational metrics. Whatever your issues, this book holds the keys to organizational success. What's inside Turn failure into opportunity Drive change through culture Break down knowledge silos Settle middle management turf wars About the reader For team leaders and managers. About the author Jeffery D. Smith has been in the technology industry for over 15 years. He has managed DevOps transformations at the ad-tech firm Centro and the online ordering platform Grubhub. Table of Contents 1 The DevOps ingredients 2 The paternalist syndrome 3 Operational blindness 4 Data instead of information 5 Quality as a condiment 6 Alert fatigue 7 The empty toolbox 8 Off-hour deployments 9 Wasting a perfectly good incident 10 Information hoarding: Only Brent knows 11 Culture by decree 12 Too many yardsticks

For decades, technology leaders have struggled to balance agility, reliability, and security, and the consequences of failure have never been greater. The effective management of technology is critical for business competitiveness. High-performing organizations are 2.5 times more likely to exceed profitability, market share, and productivity goals. The DevOps Handbook shows leaders how to create the cultural norms and the technical practices necessary to maximize organizational learning, increase employee satisfaction, and win in the marketplace.

Digital Risk Management is a subject filled with question marks---related to cybersecurity, it's a maze of obscure definitions, standards, compliance rules, and incrementally developed technologies to delight and confuse. Leaders have to integrate security into their teams and organizations to create an on-going learning environment. Without a coherent framework for putting it all together, it's easy to get lost in claims and jargon. This simple guide explains the big picture of how to assess vulnerabilities and risks and produce actionable policies, that meet external standards and compliance guidelines. It's aimed at anyone who seeks answers to these questions. Without technicalities, it explains the concepts to develop readers' intuitions about the challenges and the threats faced by security planners and reluctant participants.

Success on the web is measured by usage and growth. Web-based companies live or die by the ability to scale their infrastructure to accommodate increasing demand. This book is a hands-on and practical guide to planning for such growth, with many techniques and considerations to help you plan, deploy, and manage web application infrastructure. The Art of Capacity Planning is written by the manager of data operations for the world-famous photo-sharing site Flickr.com, now owned by Yahoo! John Allspaw combines personal anecdotes from many phases of Flickr's growth with insights from his colleagues in many other industries to give you solid guidelines for measuring your growth, predicting trends, and making cost-effective preparations. Topics include: Evaluating tools for measurement and deployment Capacity analysis and prediction for storage, database, and application servers Designing architectures to easily add and measure capacity Handling sudden spikes Predicting exponential and explosive growth How cloud services such as EC2 can fit into a capacity strategy In this book, Allspaw draws on years of valuable experience, starting from the days when Flickr was relatively small and had to deal with the typical growth pains and cost/performance trade-offs of a typical company with a Web presence. The advice he offers in The Art of Capacity Planning will not only help you prepare for explosive growth, it will save you tons of grief.

Beyond The Phoenix Project
Reliable Software Releases through Build, Test, and Deployment Automation (Adobe Reader)
How to Create World-Class Agility, Reliability, & Security in Technology Organizations
DevOps and SRE Practices for Web Services, Volume 2
Effective DevOps
The Science of Lean Software and DevOps: Building and Scaling High Performing Technology Organizations

Winner of the Shingo Publication Award Accelerate your organization to win in the marketplace. How can we apply technology to drive business value? For years, we've been told that the performance of software delivery teams doesn't matter—that it can't provide a competitive advantage to our companies. Through four years of groundbreaking research to include data collected from the State of DevOps reports conducted with Puppet, Dr. Nicole Forsgren, Jez Humble, and Gene Kim set out to find a way to measure software delivery performance—and what drives it—using rigorous statistical methods. This book presents both the findings and the science behind that research, making the information accessible for readers to apply in their own organizations. Readers will discover how to measure the performance of their teams, and what capabilities they should invest in to drive higher performance. This book is ideal for management at every level.

Winner of the 2011 Jolt Excellence Award! Getting software released to users is often a painful, risky, and time-consuming process. This groundbreaking new book sets out the principles and technical practices that enable rapid, incremental delivery of high quality, valuable new functionality to users. Through automation of the build, deployment, and testing process, and improved collaboration between developers, testers, and operations, delivery teams can get changes released in a matter of hours— sometimes even minutes–no matter what the size of a project or the complexity of its code base. Jez Humble and David Farley begin by presenting the foundations of a rapid, reliable, low-risk delivery process. Next, they introduce the "deployment pipeline," an automated process for managing all changes, from check-in to release. Finally, they discuss the "ecosystem" needed to support continuous delivery, from infrastructure, data and configuration management to governance. The authors introduce state-of-the-art techniques, including automated infrastructure management and data migration, and the use of virtualization. For each, they review key issues, identify best practices, and demonstrate how to mitigate risks. Coverage includes • Automating all facets of building, integrating, testing, and deploying software • Implementing deployment pipelines at team and organizational levels • Improving collaboration between developers, testers, and operations • Developing features incrementally on large and distributed teams • Implementing an effective configuration management strategy • Automating acceptance testing, from analysis to implementation • Testing capacity and other non-functional requirements • Implementing continuous deployment and zero-downtime releases • Managing infrastructure, data, components and dependencies • Navigating risk management, compliance, and auditing Whether you're a developer, systems administrator, tester, or manager, this book will help your organization move from idea to release faster than ever—so you can deliver value to your business rapidly and reliably.

Develop faster with DevOps DevOps embraces a culture of unifying the creation and distribution of technology in a way that allows for faster release cycles and more resource-efficient product updating. DevOps For Dummies provides a guidebook for those on the development or operations side in need of a primer on this way of working. Inside, DevOps evangelist Emily Freeman provides a roadmap for adopting the management and technology tools, as well as the culture changes, needed to dive head-first into DevOps. Identify your organization's needs Create a DevOps framework Change your organizational structure Manage projects in the DevOps world DevOps For Dummies is essential reading for developers and operations professionals in the early stages of DevOps adoption.

This is a companion transcript of the audio series, Beyond The Phoenix Project, intended to be used for reference and to enable further research of cited material, and not as a standalone work. In the audio series, Gene Kim and John Willis present a nine-part discussion that includes an oral history of the DevOps movement, as well as discussions around pivotal figures and philosophies that DevOps draws upon, from Goldratt to Deming; from Lean to Safety Culture to Learning Organizations.The book is a great way for listeners to take an even deeper dive into topics relevant to DevOps and leading technology organizations.

Effective DevOps with AWS
The Practice of Cloud System Administration
Accelerate
DevOps for the Modern Enterprise
A Complete Guide To DevOps Best Practices (Including How You Can Create World-Class Agility, Reliability, And Security In Technology Organizations With DevOps)
The DevOps Engineer's Career Guide
Organizing Business and Technology Teams for Fast Flow

DevOps is a fundamental shift in how leading edge companies are starting to manage their software and IT work. Businesses need to move more quickly than ever before, and large software organizations are applying these DevOps principles to develop new software faster than anyone previously thought possible. DevOps started in small organizations and in large organizations that had or created architectures that enabled small teams to independently develop, qualify, and deploy code. The impact on productivity is so dramatic that larger organizations with tightly coupled architectures are realizing they either need to embrace DevOps or be left behind. The biggest challenge is that they can't just empower small teams to work independently because their legacy architectures require coordinating the development, qualification, and deployment of code across hundreds of people. They need a DevOps approach that not only addresses their unique challenges, but also helps them reach an organization-wide agreement on where to start and how to scale DevOps. That is where Starting and Scaling DevOps in the Enterprise comes in. Starting and Scaling DevOps in the Enterprise is a quick, easy-to-read guide that helps structure those improvements by providing a framework that large organizations can use to understand DevOps principles in the context of their current development processes and gain alignment across the organization for successful implementations. The book illustrates how to analyze your current development and delivery processes to ensure you gain positive momentum by implementing the DevOps practices that will have the greatest immediate impact on the productivity of your organization, with the goal of achieving continuous improvement over time.

DevOps for Developers delivers a practical, thorough introduction to approaches, processes and tools to foster collaboration between software development and operations. Efforts of Agile software development often end at the transition phase from development to operations. This book covers the delivery of software, this means "the last mile", with lean practices for shipping the software to production and making it available to the end users, together with the integration of operations with earlier project phases (elaboration, construction, transition). DevOps for Developers describes how to streamline the software delivery process and improve the cycle time (that is the time from inception to delivery). It will enable you to deliver software faster, in better quality and more aligned with individual requirements and basic conditions. And above all, work that is aligned with the "DevOps" approach makes even more fun! Provides patterns and toolchains to integrate software development and operations Delivers an one-stop shop for kick-starting with DevOps Provides guidance how to streamline the software delivery process

In Team Topologies DevOps consultants Matthew Skelton and Manuel Pais share secrets of successful team patterns and interactions to help readers choose and evolve the right team patterns for their organization, making sure to keep the software healthy and optimize value streams. Team Topologies will help readers discover: • Team patterns used by successful organizations. • Common team patterns to avoid with modern software systems. • When and why to use different team patterns • How to evolve teams effectively. • How to split software and align to teams.

The DevOps HandbookHow to Create World-Class Agility, Reliability, and Security in Technology OrganizationsIT Revolution
Learning DevOps
Building a Culture of Collaboration, Affinity, and Tooling at Scale
Implement continuous delivery and integration in the AWS environment, 2nd Edition
Non-Programmer's Guide
The Art of Capacity Planning
The DevOps Handbook, Second Edition
Implementing ITIL in 4 Practical and Auditable Steps

Summary, Analysis & Review of Gene Kim's, Jez Humble's, Patrick Debois's, & John Willis's The DevOps Handbook by Instaread Preview: The DevOps Handbook: How to Create World-Class Agility, Reliability, & Security in Technology Organizations is a manual for technology companies looking to improve their ability to deliver high-value products to consumers. In the 1980s, Toyota revolutionized manufacturing with its application of the Lean production philosophy. Today, DevOps seeks to apply the principles of Lean manufacturing to the technology industry. To do so, DevOps unites the two traditionally clashing bodies of the corporate IT department: Development and Operations. In traditional IT departments, the Development group builds products and then hands them off to Operations to launch them and keep them up and running. This can lead to tension because products may be untested in real-world conditions when Development builds them, which leaves Operations to clean up the mess while trying simultaneously to keep the product afloat for customers after launch. Instead, DevOps seeks to share responsibilities across cross-functional teams. In this... PLEASE NOTE: This is a Summary, Analysis & Review of the book and NOT the original book. Inside this Summary, Analysis & Review of Gene Kim's, Jez Humble's, Patrick Debois's, & John Willis's The DevOps Handbook by Instaread · Overview of the Book · Important People · Key Takeaways · Analysis of Key Takeaways About the Author With Instaread, you can get the key takeaways and analysis of a book in 15 minutes. We read every chapter, identify the key takeaways and analyze them for your convenience. Visit our website at instaread.co.

A single dramatic software failure can cost a company millions of dollars - but can be avoided with simple changes to design and architecture. This new edition of the best-selling industry standard shows you how to create systems that run longer, with fewer failures, and recover better when bad things happen. New coverage includes DevOps, microservices, and cloud-native architecture. Stability antipatterns have grown to include systemic problems in large-scale systems. This is a must-have pragmatic guide to engineering for production systems. If you're a software developer, and you don't want to get alerts every night for the rest of your life, help is here. With a combination of case studies about huge losses - lost revenue, lost reputation, lost time, lost opportunity - and practical, down-to-earth advice that was all gained through painful experience, this book helps you avoid the pitfalls that cost companies millions of dollars in downtime and reputation. Eighty percent of project life-cycle cost is in production, yet few books address this topic. This updated edition deals with the production of today's systems - larger, more complex, and heavily virtualized - and includes information on chaos engineering, the discipline of applying randomness and deliberate stress to reveal systematic problems. Build systems that survive the real world, avoid downtime, implement zero-downtime upgrades and continuous delivery, and make cloud-native applications resilient. Examine ways to architect, design, and build software - particularly distributed systems - that stands up to the typhoon winds of a flash mob, a Slashdotting, or a link on Reddit. Take a hard look at software that failed the test and find ways to make sure your software survives. To skip the pain and get the experience...get this book.

The Continuous Delivery and SRE movements are here to stay and grow, its time you to ride the wave! This book goes in detail about DevOps Culture, Microservices Architecture, How to automate deployment using Kubernetes and How Google's SRE and DevOps philosophies overlap. Overall it is a complete package for any application development stakeholder. This book can be used by a beginner, Technology Consultant, Business Consultant and Project Manager and any member of the project team trying to figure out SRE & CD. The structure of the book is such that it answers the most asked questions about DevOps, Microservices, Kubernetes and SRE. It also covers the best and the latest case studies with benefits. Therefore, it is expected that after going through this book, you can discuss the topic with any stakeholder and take your agenda ahead as per your role. Here is your chance to dive into the CD & SRE role and know what it takes to be and implement best practices. The Continuous Delivery and SRE movements are here to stay and grow, its time you to ride the wave! So, don't wait and take action!

****Over a half-million sold! The sequel, The Unicorn Project, is coming Nov 26*** "Every person involved in a failed IT project should be forced to read this book."—TIM O'REILLY, Founder & CEO of O'Reilly Media "The Phoenix Project is a must read for business and IT executives who are struggling with the growing complexity of IT."—JIM WHITEHURST, President and CEO, Red Hat, Inc. Five years after this sleeper hit took on the world of IT and flipped it on it's head, the 5th Anniversary Edition of The Phoenix Project continues to guide IT in the DevOps revolution. In this newly updated and expanded edition of the bestselling The Phoenix Project, co-author Gene Kim includes a new afterword and a deeper delve into the Three Ways as described in The DevOps Handbook. Bill, an IT manager at Parts Unlimited, has been tasked with taking on a project critical to the future of the business, code named Phoenix Project. But the project is massively over budget and behind schedule. The CEO demands Bill must fix the mess in ninety days or else Bill's entire department will be outsourced. With the help of a prospective board member and his mysterious philosophy of The Three Ways, Bill starts to see that IT work has more in common with a manufacturing plant work than he ever imagined. With the clock ticking, Bill must organize work flow streamline interdepartmental communications, and effectively serve the other business functions at Parts Unlimited. In a fast-paced and entertaining style, three luminaries of the DevOps movement deliver a story that anyone who works in IT will recognize. Readers will not only learn how to improve their own IT organizations, they'll never view IT the same way again. "This book is a gripping read that captures brilliantly the dilemmas that face companies which depend on IT, and offers real-world solutions."—JEZ HUMBLE, Co-author of Continuous Delivery, Lean Enterprise, Accelerate, and The DevOps Handbook ———— "I'm delighted at how The Phoenix Project has reshaped so many conversations in technology. My goal in writing The Unicorn Project was to explore and reveal the necessary but invisible structures required to make developers (and all engineers) productive, and reveal the devastating effects of technical debt and complexity. I hope this book can create common ground for technology and business leaders to leave the past behind, and co-create a better future together."—Gene Kim, November 2019*

A Handbook for Entry- Level Professionals to Get Into Continuous Delivery Roles for Agile Software Development
DevOps For Dummies
The DevOps Adoption Playbook
Site Reliability Engineering
Conversations About Running Production Systems at Scale
Scaling Web Resources
The Phoenix Project

Harness the power of DevOps to boost your skill set and make your IT organization perform better About This Book Get to know the background of DevOps so you understand the collaboration between different aspects of an IT organization and a software developer Improve your organization's performance to ensure smooth production of software and services Deploy top-quality software and ensure software maintenance and release management with this practical guide Who This Book Is For This book is aimed at developers and system administrators who wish to take on larger responsibilities and understand how the infrastructure that builds today's enterprises works. This book is also great for operations personnel who would like to better support developers. You do not need to have any previous knowledge of DevOps. What You Will Learn Appreciate the merits of DevOps and continuous delivery and see how DevOps supports the agile process Understand how all the systems fit together to form a larger whole Set up and familiarize yourself with all the tools you need to be efficient with DevOps Design an application that is suitable for continuous deployment systems with Devops in mind Store and manage your code effectively using different options such as Git, Gerrit, and Gitlab Configure a job to build a sample CRUD application Test the code using automated regression testing with Jenkins Selenium Deploy your code using tools such as Puppet, Ansible, Palletops, Chef, and Vagrant Monitor the health of your code with Nagios, Munin, and Graphite Explore the workings of Trac—a tool used for issue tracking In Detail DevOps is a practical field that focuses on delivering business value as efficiently as possible. DevOps encompasses all the flows from code through testing environments to production environments. It stresses the cooperation between different roles, and how they can work together more closely, as the roots of the word imply—Development and Operations. After a quick refresher to DevOps and continuous delivery, we quickly move on to looking at how DevOps affects architecture. You'll create a sample enterprise Java application that you'll continue to work with through the remaining chapters. Following this, we explore various code storage and build server options. You will then learn how to perform code testing with a few tools and deploy your test successfully. Next, you will learn how to monitor code for any anomalies and make sure it's running properly. Finally, you will discover how to handle logs and keep track of the issues that affect processes Style and approach This book is primarily a technical guide to DevOps with practical examples suitable for people who like to learn by implementing concrete working code. It starts out with background information and gradually delves deeper into technical subjects.

Summary, Analysis & Review of Gene Kim's, Jez Humble's, Patrick Debois's, & John Willis's The DevOps Handbook by Instaread Preview: The DevOps Handbook: How to Create World-Class Agility, Reliability, & Security in Technology Organizations is a manual for technology companies looking to improve their ability to deliver high-value products to consumers. In the 1980s, Toyota revolutionized manufacturing with its application of the Lean production philosophy. Today, DevOps seeks to apply the principles of Lean manufacturing to the technology industry. To do so, DevOps unites the two traditionally clashing bodies of the corporate IT department: Development and Operations. In traditional IT departments, the Development group builds products and then hands them off to Operations to launch them and keep them up and running. This can lead to tension because products may be untested in real-world conditions when Development builds them, which leaves Operations to clean up the mess while trying simultaneously to keep the product afloat for customers after launch. Instead, DevOps seeks to share responsibilities across cross-functional teams. In this… PLEASE NOTE: This is a Summary, Analysis & Review of the book and NOT the original book. Inside this Summary, Analysis & Review of Gene Kim's, Jez Humble's, Patrick Debois's, & John Willis's The DevOps Handbook by Instaread · Overview of the Book · Important People · Key Takeaways · Analysis of Key Takeaways About the Author With Instaread, you can get the key takeaways and analysis of a book in 15 minutes. We read every chapter, identify the key takeaways and analyze them for your convenience. Visit our website at instaread.co.

Organizations big and small have started to realize just how crucial system and application reliability is to their business. They've also learned just how difficult it is to maintain that reliability while iterating at the speed demanded by the marketplace. Site Reliability Engineering (SRE) is a proven approach to this challenge. SRE is a large and rich topic to discuss. Google led the way with Site Reliability Engineering, the wildly successful O'Reilly book that described Google's creation of the discipline and the implementation that's allowed them to operate at a planetary scale. Inspired by that earlier work, this book explores a very different part of the SRE space. The more than two dozen chapters in Seeking SRE bring you into some of the important conversations going on in the SRE world right now. Listen as engineers and other leaders in the field discuss: Different ways of implementing SRE and SRE principles in a wide variety of settings How SRE relates to other approaches such as DevOps Specialties on the cutting edge that will soon be commonplace in SRE Best practices and technologies that make practicing SRE easier The important but rarely explored human side of SRE David N. Blank-Edelman is the book's curator and editor.

Well, in the last four months, I have been involved in the recruitment process of various DevOps related jobs in my current project. I have come across multiple Entry Level and Mid-Level career professionals inquisitive about expectations of the role and how their earlier experience would contribute to the DevOps role.

How to Create World-class Agility, Reliability, and Security in Technology Organizations
DevOps Culture and Practice with OpenShift
The DevOps Handbook
Leading the Transformation
A Novel about IT, DevOps, and Helping Your Business Win
Summary, Analysis & Review of Gene Kim's, Jez Humble's, Patrick Debois's, & John Willis's The DevOps Handbook by Instaread
Practical DevOps

Many organizations are facing the uphill battle of modernizing their legacy IT infrastructure. Most have evolved over the years by taking lessons from traditional or legacy manufacturing: creating a production process that puts the emphasis on the process instead of the people performing the tasks, allowing the organization to treat people like resources to try to achieve high-quality outcomes. But those practices and ideas are failing modern IT, where collaboration and creativeness are required to achieve high-performing, high-quality success. Mirco Hering, a thought leader in managing IT within legacy organizations, lays out a roadmap to success for IT managers, showing them how to create the right ecosystem, how to empower people to bring their best to work every day, and how to put the right technology in the driver's seat to propel their organization to success. But just having the right methods and tools will not magically transform an organization; the cultural change that is the hardest is also the most impactful. Using principles from Agile, Lean, and DevOps as well as first-hand examples from the enterprise world, Hering addresses the different challenges that legacy organizations face as they transform into modern IT departments.

Summary Securing DevOps explores how the techniques of DevOps and security should be applied together to make cloud services safer. This introductory book reviews the latest practices used in securing web applications and their infrastructure and teaches you techniques to integrate security directly into your product. You'll also learn the core concepts of DevOps, such as continuous integration, continuous delivery, and infrastructure as a service. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology An application running in the cloud can benefit from incredible efficiencies, but they come with unique security threats too. A DevOps team's highest priority is understanding those risks and hardening the system against them. About the Book Securing DevOps teaches you the essential techniques to secure your cloud services. Using compelling case studies, it shows you how to build security into automated testing, continuous delivery, and other core DevOps processes. This experience-rich book is filled with mission-critical strategies to protect web applications against attacks, deter fraud attempts, and make your services safer when operating at scale. You'll also learn to identify, assess, and secure the unique vulnerabilities posed by cloud deployments and automation tools commonly used in modern infrastructures. What's inside An approach to continuous security Implementing test-driven security in DevOps Security techniques for cloud services Watching for fraud and responding to incidents Security testing and risk assessment About the Reader Readers should be comfortable with Linux and standard DevOps practices like CI, CD, and unit testing. About the Author Julien Vehent is a security architect and DevOps advocate. He leads the Firefox Operations Security team at Mozilla, and is responsible for the security of Firefox's high-traffic cloud services and public websites. Table of Contents Securing DevOps PART 1 - Case study: applying layers of security to a simple DevOps pipeline Building a barebones DevOps pipeline Security layer 1: protecting web applications Security layer 2: protecting cloud infrastructures Security layer 3: securing communications Security layer 4: securing the delivery pipeline PART 2 - Watching for anomalies and protecting services against attacks Collecting and storing logs Analyzing logs for fraud and attacks Detecting intrusions The Caribbean breach: a case study in incident response PART 3 - Maturing DevOps security Assessing risks Testing security Continuous security

Some companies think that adopting devops means bringing in specialists or a host of new tools. With this practical guide, you'll learn why devops is a professional and cultural movement that calls for change from inside your organization. Authors Ryn Daniels and Jennifer Davis provide several approaches for improving collaboration within teams, creating affinity among teams, promoting efficient tool usage in your company, and scaling up what works throughout your organization's inflection points. Devops stresses iterative efforts to break down information silos, monitor relationships, and repair misunderstandings that arise between and within teams in your organization. By applying the actionable strategies in this book, you can make sustainable changes in your environment regardless of your level within your organization. Explore the foundations of devops and learn the four pillars of effective devops Encourage collaboration to help individuals work together and build durable and long-lasting relationships Create affinity among teams while balancing differing goals or metrics Accelerate cultural direction by selecting tools and workflows that complement your organization Troubleshoot common problems and misunderstandings that can arise throughout the organizational lifecycle Learn from case studies from organizations and individuals to help inform your own devops journey

Have you been looking for a way to boost your skills and become a master in DevOps for your business or career in software development but lack an excellent, high-quality guide to assist you get there? And are you looking for a guide that is simple, assuring and easy to follow? If you've answered YES, keep reading... You Are About To Discover The Ins And Outs Of Dev-Ops, Including How To Leverage Its Power To Your Advantage In Your Business Or Career! It goes without saying that DevOps is one of the greatest inventions in software development. It came to satisfy a need to get away from the traditional software design for efficiency, collaboration and productivity in development processes, and by extension to boost business growth. Did you know that businesses that adopt DevOps enjoy up to 60% more revenue rates and profit than their reticent counterparts? Unfortunately, great as it is, DevOps remains one of the most misunderstood concepts- even by tutors across the world! Similarly, for someone who's just getting into the software development scene or someone wh0 has drowned in the "Waterfall" methodology a couple of times before, it may seem like something a little complex or one that requires some skill, or lots of effort and time to master. If you can relate, you must have wondered: What's DevOps all about, and is there a way to learn it quickly? What does DevOps entail? How exactly would I benefit from learning DevOps? How and where do I get started? Is DevOps agile? How does it work? So if such questions have been keeping you from making the next important step in your career or business with DevOps, then this simple, clear and straightforward guide is here for you. With it, you'll learn: What DevOps is and why you need it The features of DevOps architecture The potential benefits and risks of using DevOps What you need to know about the DevOps lifecycle The ins and outs of the DevOps architecture The workflow and principles of DevOps The DevOps tools you need to know and use How DevOps automation works Who DevOps engineers are, and the roles they play The methodologies and pipelines of DevOps you need to familiarize yourself with The DevOps Amazon Web Services The tools and tutorials for DevOps, including their features and benefits How to install GIT on Mac, Linux and Windows ...And much more! Do you prefer practical guides that you can implement as you go (not ones that are heavy on theory- that require taking loads of caffeine to complete)? Do you want a beginners' book that is exciting to follow and well-structured for quick comprehension? Then don't let this one slip away. Even if this is your first time actually wanting to learn DevOps, this book will hold you by the hand until you feel confident about it! Don't wait... Scroll up and click Buy Now With 1-Click or Buy Now to get started!

The complete guide to accelerate collaboration with Jenkins, Kubernetes, Terraform and Azure DevOps

DevOps for Developers

A Radical Enterprise

Start and Scaling Devops in the Enterprise

The DevOps 2. 0 Toolkit

Applying Agile and DevOps Principles at Scale

Securing DevOps

The Phoenix Project wowed over a half-million readers. Now comes the Wall Street Journal Bestselling The Unicorn Project! "The Unicorn Project is amazing, and I loved it 100 times more than The Phoenix Project…"—FERNANDO CORNAGO, Senior Director Platform Engineering, Adidas "Gene Kim does a masterful job of showing how … the efforts of many create lasting business advantages for all."—DR. STEVEN SPEAR, author of The High-Velocity Edge, Sr. Lecturer at MIT, and principal of HVE LLC. "The Unicorn Project is so clever, so good, so crazy enlightening!"—CORNELIA DAVIS, Vice President Of Technology at Pivotal Software, Inc., Author of Cloud Native Patterns This highly anticipated follow-up to the bestselling title The Phoenix Project takes another look at Parts Unlimited, this time from the perspective of software development. In The Unicorn Project, we follow Maxine, a senior lead developer and architect, as she is exiled to the Phoenix Project, to the horror of her friends and colleagues, as punishment for contributing to a payroll outage. She tries to survive in what feels like a heartless and uncaring bureaucracy and to work within a system where no one can get anything done without endless committees, paperwork, and approvals. One day, she is approached by a ragtag bunch of misfits who say they want to overthrow the existing order, to liberate developers, to bring joy back to technology work, and to enable the business to win in a time of digital disruption. To her surprise, she finds herself drawn ever further into this movement, eventually becoming one of the leaders of the Rebellion, which puts her in the crosshairs of some familiar and very dangerous enemies. The Age of Software is here, and another mass extinction event looms—this is a story about rebel developers and business leaders working together, racing against time to innovate, survive, and thrive in a time of unprecedented uncertainty...and opportunity. "The Unicorn Project provides insanely useful insights on how to improve your technology business."—DOMINICA DEGRANDIS, author of Making Work Visible and Director of Digital Transformation at Tasktop ——— "My goal in writing The Unicorn Project was to explore and reveal the necessary but invisible structures required to make developers (and all engineers) productive, and reveal the devastating effects of technical debt and complexity. I hope this book can create common ground for technology and business leaders to leave the past behind, and co-create a better future together."—Gene Kim, November 2019

Simplify your DevOps roles with DevOps tools and techniques Key FeaturesLearn to utilize business resources effectively to increase productivity and collaborationLeverage the ultimate open source DevOps tools to achieve continuous integration and continuous delivery (CI/CD)Ensure faster time-to-market by reducing overall lead time and deployment downtimeBook Description The implementation of DevOps processes requires the efficient use of various tools, and the choice of these tools is crucial for the sustainability of projects and collaboration between development (Dev) and operations (Ops). This book presents the different patterns and tools that you can use to provision and configure an infrastructure in the cloud. You'll begin by understanding DevOps culture, the application of DevOps in cloud infrastructure, provisioning with Terraform, configuration with Ansible, and image building with Packer. You'll then be taken through source code versioning with Git and the construction of a DevOps CI/CD pipeline using Jenkins, GitLab CI, and Azure Pipelines. This DevOps handbook will also guide you in containerizing and deploying your applications with Docker and Kubernetes. You'll learn how to reduce deployment downtime with blue-green deployment and the feature flags technique, and study DevOps practices for open source projects. Finally, you'll grasp some best practices for reducing the overall application lead time to ensure faster time to market. By the end of this book, you'll have built a solid foundation in DevOps, and developed the skills necessary to enhance a traditional software delivery process using modern software delivery tools and techniques What you will learnBecome well versed with DevOps culture and its practicesUse Terraform and Packer for cloud infrastructure provisioningImplement Ansible for infrastructure configurationUse basic Git commands and understand the Git flow processBuild a DevOps pipeline with Jenkins, Azure Pipelines, and GitLab CIContainerize your applications with Docker and KubernetesCheck application quality with SonarQube and PostmanProtect DevOps processes and applications using DevSecOps toolsWho this book is for If you are a developer or a system administrator interested in understanding continuous integration, continuous delivery, and containerization with DevOps tools and techniques, this book is for you.

Have we entered the age of NoOps infrastructures? Hardly. Old-style system administrators may be disappearing in the face of automation and cloud computing, but operations have become more significant than ever. As this O'Reilly Radar Report explains, we're moving into a more complex arrangement known as "DevOps." Mike Loukides, O'Reilly's VP of Content Strategy, provides an incisive look into this new world of operations, where IT specialists are becoming part of the development team. In an environment with thousands of servers, these specialists now write the code that maintains the infrastructure. Even applications that run in the cloud have to be resilient and fault tolerant, need to be monitored, and must adjust to huge swings in load. That was underscored by Amazon's EBS outage last year. From the discussions at O'Reilly's Velocity Conference, it's evident that many operations specialists are quickly adapting to the DevOps reality. But as a whole, the industry has just scratched the surface. This report tells you why.

"There's an incredible amount of depth and thinking in the practices described here, and it's impressive to see it all in one place." —Win Treese, coauthor of Designing Systems for Internet Commerce The Practice of Cloud System Administration, Volume 2, focuses on "distributed" or "cloud" computing and brings a DevOps/SRE sensibility to the practice of system administration. Unsatisfied with books that cover either design or operations in isolation, the authors created this authoritative reference centered on a comprehensive approach. Case studies and examples from Google, Etsy, Twitter, Facebook, Netflix, Amazon, and other industry giants are explained in practical ways that are useful to all enterprises. The new companion to the best-selling first volume, The Practice of System and Network Administration, Second Edition, this guide offers expert coverage of the following and many other crucial topics: Designing and building modern web and distributed systems Fundamentals of large system design Understand the new software engineering implications of cloud administration Make systems that are resilient to failure and grow and scale dynamically Implement DevOps principles and cultural changes IaaS/PaaS/SaaS and virtual platform selection Operating and running systems using the latest DevOps/SRE strategies Upgrade production systems with zero down-time What and how to automate; how to decide what not to automate On-call best practices that improve uptime Why distributed systems require fundamentally different system administration techniques Identify and resolve resiliency problems before they surprise you Assessing and evaluating your team's operational effectiveness Manage the scientific process of continuous improvement A forty-page, pain-free assessment system you can start using today

Summary. Analysis & Review of the Devops Handbook

How to Create World-Class Agility, Reliability, and Security in Technology Organizations

DevOps For Beginners

Continuous Delivery and Site Reliability Engineering (SRE) Handbook

Continuous Delivery

How to Create World-Class Speed, Reliability, and Security in Technology Organizations

The Origins and Evolution Of DevOps (Official Transcript of The Audio Series)

The traditional world of work is in crisis. Today companies have a choice to make. Either they continue down the failure path of business as usual, with its hierarchy of domination and coercion, or they choose a paradigm that has proven superior business performance. In the new book from Matt K. Parker, technology thought leader and organizational architect, he breaks down the four imperatives necessary for businesses to transform into radically collaborative organizations that are able to create and sustain super-engaged workforces with super-competitive results. Discover the radical shift to partnership and equality, and the economic superiority that follows—get radical and out engage, out innovate, and outperform the competition in the new age of knowledge work with A Radical Enterprise.

Achieve streamlined, rapid production with enterprise-level DevOps Awarded DevOps 2017 Book of the Year, The DevOps Adoption Playbook provides practical, actionable, real-world guidance on implementing DevOps at enterprise scale. Author Sanjeev Sharma heads the DevOps practice for IBM; in this book, he provides unique guidance and insight on implementing DevOps at large organizations. Most DevOps literature is aimed at startups, but enterprises have unique needs, capabilities, limitations, and challenges; "DevOps for startups" doesn't work at this scale, but the DevOps paradigm can revolutionize enterprise IT. Deliver high-value applications and systems with velocity and agility by adopting the necessary practices, automation tools, and organizational and cultural changes that lead to innovation through rapid experimentation. Speed is an advantage in the face of competition, but it must never come at the expense of quality; DevOps allows your organization to keep both by intersecting development, quality assurance, and operations. Enterprise-level DevOps comes with its own set of challenges, but this book shows you just how easily they are overcome. With a slight shift in perspective, your organization can stay ahead of the competition while keeping costs, risks, and quality under control. Grasp the full extent of the DevOps impact on IT organizations Achieve high-value innovation and optimization with low cost and risk Exceed traditional business goals with higher product release efficiency Implement DevOps in large-scale enterprise IT environments DevOps has been one of IT's hottest trends for the past decade, and plenty of success stories testify to its effectiveness in organizations of any size, industry, or level of IT maturity, all around the world. The DevOps Adoption Playbook shows you how to get your organization on board so you can slip production into the fast lane and innovate your way to the top.

This award-winning and bestselling business handbook for digital transformation is now fully updated and expanded with the latest research and new case studies! Over the last five years, The DevOps Handbook has been the definitive guide for taking the successes laid out in the bestselling The Phoenix Project and applying them in any organization. Now, with this fully updated and expanded edition, it's time to take DevOps out of the IT department and apply it across the full business. Technology is now at the core of every company, no matter the business model or product. The theories and practices laid out in The DevOps Handbook are tools to be used by anyone from across the organization to create joy and succeed in the marketplace. The second edition features fifteen new case studies, including stories from adidas, American Airlines, Fannie Mae, Target, and the US Air Force. In addition, renowned researcher and coauthor of Accelerate, Nicole Forsgren, PhD, provides her insights through new and updated material and research. With over 100 pages of new content throughout the book, this expanded edition is a must read for anyone who works with technology.

This concise book offers 'four steps to control an IT environment' that can be mapped 'to any maturity model'. From the table of contents: ITIL processes common to the High Performers; Creat a change request tracking system; The Spectrum of Change; Helpful tips when preparing for an audit; Generate the DSL approval process; Metrics and how to use them.

What is DevOps?

Winning Practices to Transform Legacy IT Organizations

The Unicorn Project

Security in the Cloud

A Novel about Developers, Digital Disruption, and Thriving in the Age of Data

The Visible Ops Handbook

Liquid Software

Leading the Transformation is executive guide, providing a clear framework for improving development and delivery. Instead of the traditional Agile and DevOps approaches that focus on improving the effectiveness of teams, this book targets the coordination of work across teams in large organizations—an improvement that executives are uniquely positioned to lead.

The overwhelming majority of a software system's lifespan is spent in use, not in design or implementation. So, why does conventional wisdom insist that software engineers focus primarily on the design and development of large-scale computing systems? In this collection of essays and articles, key members of Google's Site Reliability Team explain how and why their commitment to the entire lifecycle has enabled the company to successfully build, deploy, monitor, and maintain some of the largest software systems in the world. You'll learn the principles and practices that enable Google engineers to make systems more scalable, reliable, and efficient—lessons directly applicable to your organization. This book is divided into four sections: Introduction—Learn what site reliability engineering is and why it differs from conventional IT industry practices Principles—Examine the patterns, behaviors, and areas of concern that influence the work of a site reliability engineer (SRE) Practices—Understand the theory and practice of an SRE's day-to-day work: building and operating large distributed computing systems Management—Explore Google's best practices for training, communication, and meetings that your organization can use

Bill has 90 days to fix a behind-schedule IT project, or his entire department will be outsourced. Fortunately, he has the help of a prospective board member, whose "Three Ways" philosophy might just save the day.

Increase profitability, elevate work culture, and exceed productivity goals through DevOps practices. More than ever, the effective management of technology is critical for business competitiveness. For decades, technology leaders have struggled to balance agility, reliability, and security. The consequences of failure have never been greater—whether it's the healthcare.gov debacle, cardholder data breaches, or missing the boat with Big Data in the cloud. And yet, high performers using DevOps principles, such as Google, Amazon, Facebook, Etsy, and Netflix, are routinely and reliably deploying code into production hundreds, or even thousands, of times per day. Following in the footsteps of The Phoenix Project, The DevOps Handbook shows leaders how to replicate these incredible outcomes, by showing how to integrate Product Management, Development, QA, IT Operations, and Information Security to elevate your company and win in the marketplace.

Promising Digital Risk Management

Operations Anti-Patterns, DevOps Solutions

Team Topologies

How Google Runs Production Systems

How to Achieve Trusted Continuous Updates in the Devops World