TOP DEVOPS BOOKS TO READ TODAY



DevOps is a Software Development Lifecycle (SDLC) methodology that has encouraged organizations, IT shops, and executives to rethink their approach toward software development, organizational culture, and IT investments. There's no one way to embrace DevOps, and there may be as many variations of the SDLC methodology as the organizations implementing them.

Luckily, there are dozens of top-notch resources that can help your company follow a systematic, effective route towards DevOps adoption. In no particular order, here are the definitive DevOps books you should be reading, including theoretical, technical, and even fictional perspectives (that's right—a DevOps novel).

(This article is part of our DevOps Guide. Use the right-hand menu to navigate.)

Accelerate: The Science of Lean Software and DevOps

The Book



The authors have spent years researching how to measure software delivery performance, and this book presents their findings. This book has lots of great research, research methodologies, and reports. It is clearly written from an academic POV, with immediate real-world applications.

This book won the Shingo Publication Award which recognizes thought leadership. According to Thomas A. Limoncelli, co-author of *The Practice of Cloud System Administration*, “This is the kind of foresight that CEOs, CFOs, and CIOs desperately need if their company is going to survive in this new software-centric world. Anyone that doesn't read this book will be replaced by someone that has."

Who it’s for

Software developers, change managers, and C-level leaders

The Authors

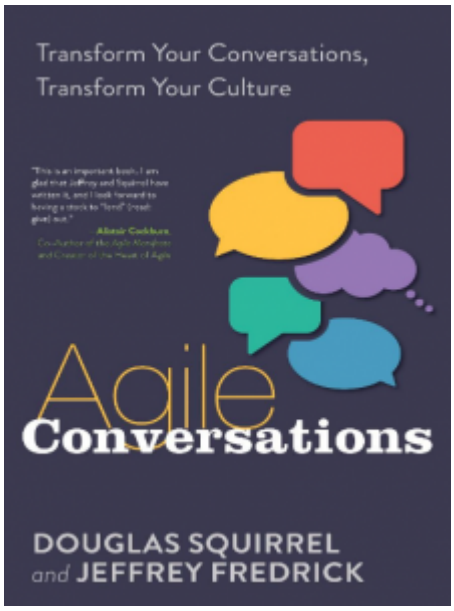
Dr. Nicole Forsgren is the VP of Research & Strategy at GitHub and the author of the Shingo Publication Award-winning book Accelerate. She’s best known as lead investigator on the largest DevOps studies to date.

Jez Humble is co-author of a number of books, including *Continuous Delivery* and *The DevOps Handbook*. He works at Google Cloud as a technology advocate and teaches at UC Berkeley.

Gene Kim is a multiple award-winning CTO, researcher and author, and has been studying high-performing technology organizations since 1999. He has written six books, several of which appear on this list. He is the founder and organizer of the DevOps Enterprise Summit.

Agile Conversations: Transform Your Conversations, Transform Your Culture

The Book



A management-level book, *Agile Conversations* approaches organizational development at the conversational level. It shows how changing the conversation of an organization delivers better results. They define five conversational styles meant to help teams build trust, alleviate fear, answer the "whys," define commitments, and hold everyone accountable.

Who it's for

Managers and leaders

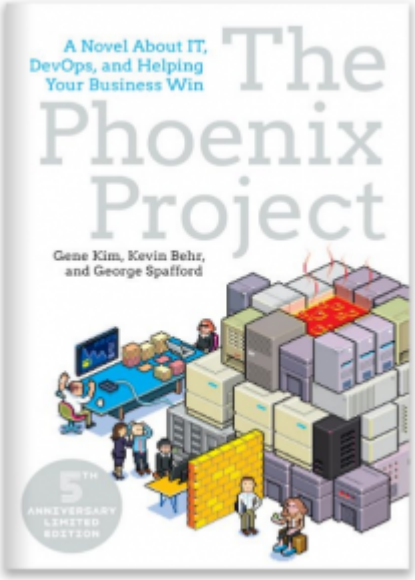
The Authors

Douglas Squirrel has led software teams for 20 years. He has grown software teams as CTO in startups and consulted product improvement at 60+ organizations around the world.

Jeffrey Fredrick is an internationally recognized expert in software development with over 25 years' experience. Previous roles include VP of Product Management, VP of Engineering, and Chief Evangelist.

The Phoenix Project: A Novel About IT, DevOps, and Helping Your Business Win

The Book



The Phoenix Project is regarded as a must-read staple of the DevOps world. While literature in the domain of enterprise IT is not always an interesting read, this book takes a different approach, presenting DevOps through a fictional story about a DevOps implementation. The book explores three different ways to connect Dev and Ops segments and emphasizes the principle of continuous improvement in optimizing SDLC processes.

The book is not entirely technical in nature and highlights the key principles around organizational culture, risk taking approach and collaboration between disparate teams—key concepts that are often overlooked in technical documents despite the inherent importance toward DevOps success.

(Read our very own review of The Phoenix Project.)

Who it's for

Particularly useful for IT professionals and executives looking for an inspiring explanation on the DevOps processes and practices

The Authors

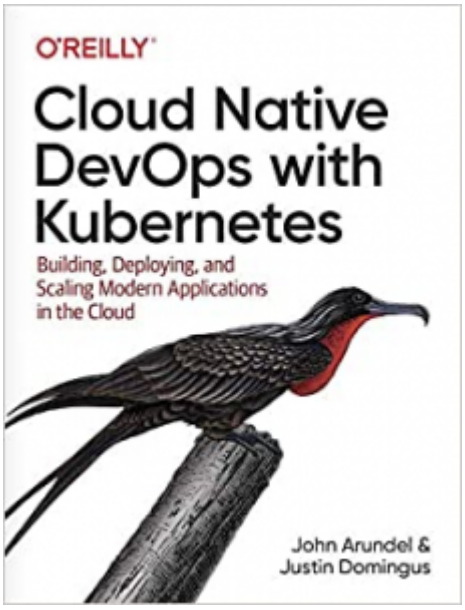
Kevin Behr blends his 30 years of IT management experience with his skills as a communicator, collaborator and synthesist to deliver powerful solutions to everyday business problems. Kevin is the author of seven IT management books and speaks regularly on various IT and management topics.

George Spafford is a VP analyst for Gartner, covering DevOps, DevSecOps, site reliability engineering (SRE), technical change, and release management. His publications include hundreds of articles and numerous books on IT management, as well as co-authorship of *The Phoenix Project*, *The Visible Ops Handbook*, and *Visible Ops Security*.

Gene Kim, above, also co-authored.

Cloud Native DevOps With Kubernetes

The Book



A technical, hands-on book that gets you started with a brief introduction to Docker containers and, then, diving into Kubernetes. This books includes a GitHub repository so readers can follow along. Its authors clearly walk you through each step to deploy a container and explain what actually happens in the K8s orchestration. They go in-depth with K8s development from the details of the yaml file to customizing the CLI so working with K8s is as delightful as possible. The book is easy to follow, thanks to the education and teaching backgrounds of both the authors.

Who it's for

Developers and beginners in Kubernetes

The Authors

John Arundel is a consultant and trainer with over 30 years of experience in the computer industry. He works with many companies around the world consulting and teaching Golang, cloud native infrastructure, Kubernetes, and Puppet.

Justin Domingues is a DevOps engineer at the Allen Institute. There's not much information online about him, but his voice and contribution to the book were clear, thoughtful, and appeared to come from a wide knowledge base as thoughts and concerns were brought forward in different matters.

The DevOps 2.0 Toolkit: Automating the Continuous Deployment Pipeline with Containerized Microservices

The Book



Another hands-on book exploring the different realms of DevOps. The author's information is very valuable and delivers a wide array of concepts. This book covers the breadth of DevOps, not the depth. Through building CI/CD pipelines, the author reveals a design philosophy around its construction.

There are some complaints about the author's mastery of the English language, but this is a tech book, not a piece of prose, so it's not a real problem.

Who it's for

Developers and newbies seeking to understand a breadth of concepts

The Author

Viktor Farcic is a Principal Software Delivery Strategist and Developer Advocate at CloudBees, a member of the Google Developer Experts and Docker Captains groups, and published author.

Cloud Native Patterns: Designing Change-Tolerant Software

The Book



This technical book digs into design patterns. Writing good code is ideal for software because it lets software get updated faster and cheaper as the times change. An example is designing containers where they don't have to save state because containers are impermanent—there's a conflict of interest. Cloud Native Patterns explores many designs and gets into the nitty-gritty of what makes cloud native applications work. The book is heralded for its detailed, no-fluff writing.

Who it's for

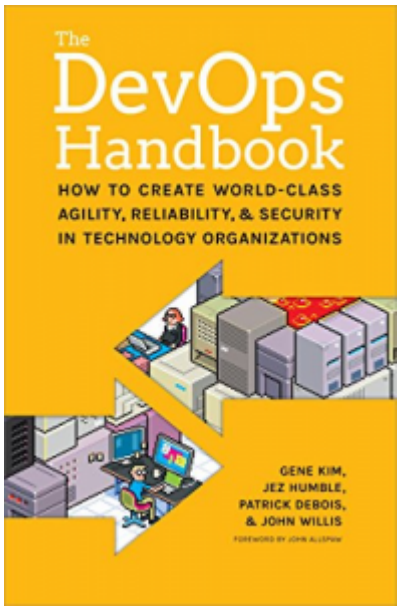
Hands-on developers who want detailed, specific answers

The Author

Cornelia Davis is CTO at Weaveworks. She has worked internally and externally, at conferences and lectures, to help people develop and execute on their cloud platform strategies.

The DevOps Handbook: How to Create World-Class Agility, Reliability, and Security in Technology Organizations

The Book



One of the most popular DevOps books, and a follow-up to *The Phoenix Project*, *The DevOps Handbook* describes exactly how organizations are realizing DevOps principles in their regular SDLC routines—from a manager perspective. The book contains 40 case studies from a variety of complex enterprises, including Target, Google, Facebook and Etsy, among others. The book provides actionable guidance by exploring a variety of How-To's associated the application of DevOps principles.

The books is based on over 25,000 data points collected over a 5+ year period before it was published in 2016, providing an exhaustive analysis on when and why to start DevOps, all the way to accelerating DevOps flows and learning from the implementation practices.

Who it's for

ideal for a variety of technical and non-technical audience pursuing DevOps adoption, including team and change managers and leaders

The Authors

Patrick Debois coined the word DevOps and organized the first DevOps Day.

John Willis has worked in IT management for more than 35 years. He was VP of two companies, one sold to Dell and another sold to Docker. He is the author of six IBM Redbooks on enterprise systems management.

The other authors are Gene Kim and Jez Humble, above.

The DevOps Adoption Playbook: A Guide to Adopting DevOps in a Multi-Speed IT Enterprise

The Book



While most books offer general advice on adopting the DevOps methodology, *The DevOps Adoption Playbook* provides insights on identifying DevOps challenges unique to your specific organization and aligning them with your business goals. Author Sanjeev Sharma outlines actionable guidance for organizations to execute DevOps principles based on their own unique circumstances. As a result, the book helps organizations use various elements of DevOps to address challenges in large-scale and multi-speed IT infrastructure environments.

The guidelines are based on proven case studies and data points and are connected with the world of sports to enable an interesting, thought provoking and highly informative read for DevOps organizations. The book is also comprehensive, elaborating on a range of aspects associated with DevOps, especially in complex real-world SDLC projects.

Who it's for

Anyone seeking a less technical approach to DevOps. Even though the book is presented as a playbook, the author connects logical arguments to easily consumable analogies, while also injecting slight humor to maintain reader interest.

The Author

Sanjeev Sharma is an internationally known DevOps and Cloud Transformation thought leader, technology executive, and published author. As an IBM Distinguished Engineer, Sanjeev is recognized at the highest levels of IBM's exclusive core of technical leaders.

Building Microservices: Designing Fine-Grained Systems

The Book



Microservices architecture allows DevOps teams to deploy individual app functionality as modular and decentralized components communicating with each other over the network. As a result, each service function can be isolated, tested, updated, and deployed independently from the wider complex application. This gives DevOps teams the agility to adopt continuous delivery and deployment practices.

In the book *Building Microservices*, author Sam Newman discusses the concept from a technology perspective as well as an overview of operations and culture of software development. The book ranks among the top books in the computer hardware, enterprise applications, and software design categories on Amazon.

Who it's for

IT shops, system architects, and admins looking to transition from traditional architecture design practice to a microservices-based architecture

The Author

Sam Newman is an independent consultant and author. After 12 years at ThoughtWorks, he now shares his knowledge across the industry. He developed the Lego XP Game with Andy Yates to teach the basics of Agile, and he has authored *Monolith to Microservice* as well as *Building Microservices*.

Infrastructure as Code: Managing Servers in the Cloud

The Book



Automation is a key element of an effective DevOps strategy. To enable automation, organizations need to simplify ITOps tasks such as infrastructure configurations, updates, provisions and maintenance. The growing server sprawl can add unnecessary bottlenecks to the DevOps performance of an organization, which is why progressive IT shops are encouraged to manage their server resources as a code.

In this book, Kief Morris identifies the challenges associated with this transition and elaborates on the tools and services to manage the infrastructure as code.

Who it's for

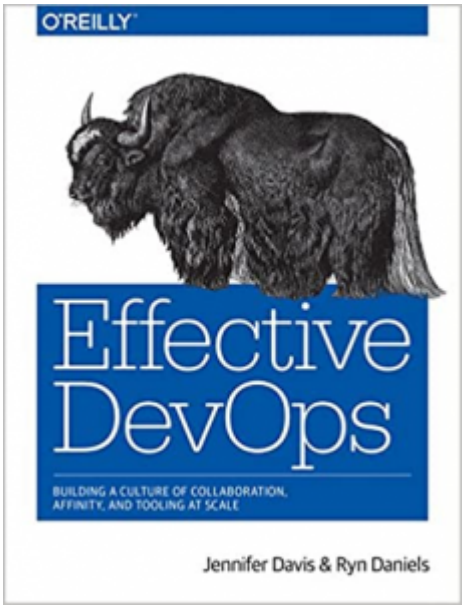
IT professionals looking for specific design patterns and best practices to deliver effective DevOps transformation in a dynamic infrastructure environment

The Author

Kief Morris has been designing, building, and running automated IT server infrastructure for nearly 20 years, having started out with shell scripts and Perl, moving on to CFengine, Puppet, Chef, and Ansible among other technologies as they've emerged. He is a consultant for ThoughtWorks, helping clients with ambitious missions take advantage of cloud, infrastructure, and Continuous Delivery.

Effective DevOps: Building a Culture of Collaboration, Affinity, and Tooling at Scale

The Book



This book offers a broader look at how to manage company culture under the DevOps framework. The book highlights the importance of what it calls *blameless culture*: "One of the differentiating factors between a group and a team is the presence of trust."

Who it's for

Managerial types looking to understand how DevOps fits into the big picture

The Authors

Ryn Daniels is a Senior Site Reliability Engineer at Terraform Cloud, Hashicorp, and an international keynote speaker. She is known for a great article on DevOps culture.

Jennifer Davis is another experienced systems engineer and speaker. She is an organizer for the Silicon Valley event, DevOps Days. Her other books are *Collaborating in DevOps Culture* and the forthcoming *Modern System Administration*.

Reading about DevOps

By no means exhaustive, this list leaves room for literature that dives deeper into both the technical and cultural aspects of DevOps. For more on this topic, check out the BMC DevOps Blog or these articles:

- DevOps Influencers: 11 DevOps Experts to Follow
- DevOps vs Agile: A Complete Introduction
- DevOps Guide, with 30+ articles