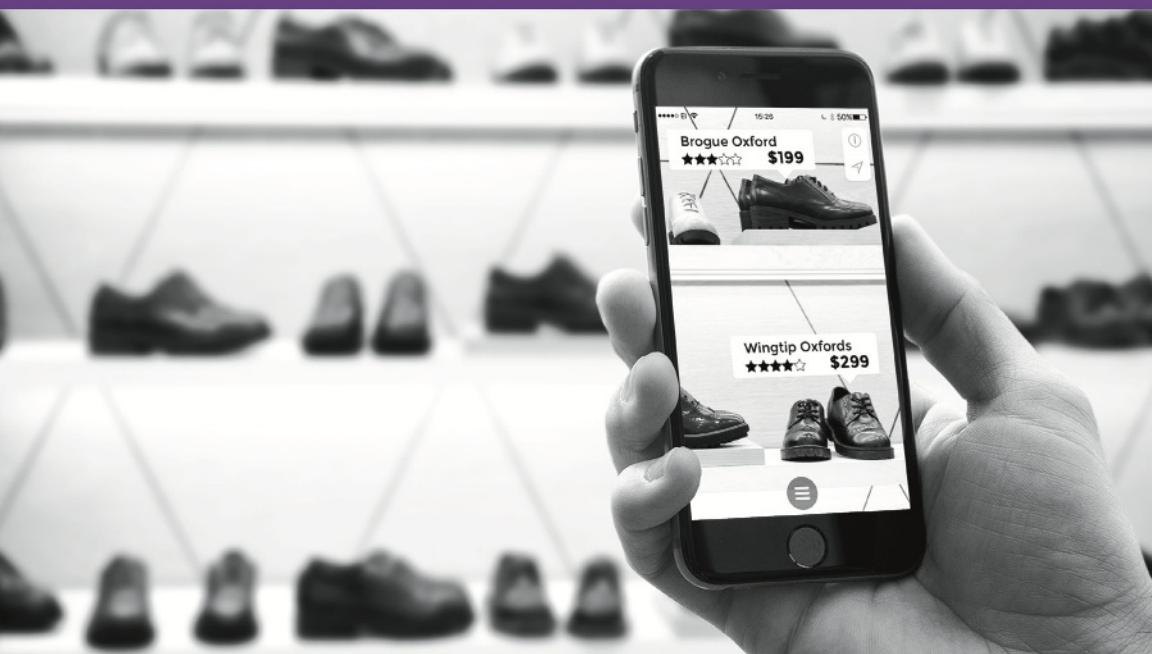


APIs for Modern Commerce

Enable Rich Customer Experiences Everywhere



Kelly Goetsch



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APIs for Modern Commerce

*Enable Rich Customer
Experiences Everywhere*

Kelly Goetsch

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APIs for Modern Commerce

by Kelly Goetsch

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Editor: Brian Foster

Production Editor: Justin Billing

Copyeditor: Gillian McGarvey

Proofreader: Amanda Kersey

Interior Designer: David Futato

Cover Designer: Karen Montgomery

Illustrator: Rebecca Demarest

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Foreword

We live in a connected world where virtually every aspect of our lives is choreographed by technology. Our mobile devices interface with the Internet of Things to monitor our health and provide real-time weather updates, which in turn connects us with friends to compete against during morning runs or share information with through crowdsourced weather networks. Businesses then access this information to deliver more relevant offers, such as the perfect pair of running shoes based on wear and weather conditions. Finally, companies may share this information across their ecosystems to better inform supply chain decisions.

These interactions are enabled by application programming interfaces (APIs), which have become the fabric of modern communication and a business currency so powerful they are reshaping the business world. Fundamentally, an API is an interface. In the same way that most applications have user interfaces to support human interactions, APIs are the interface that applications expose to facilitate interactions with other applications. APIs have existed since the first computer programs were developed, but the original APIs were rigid and required strict adherence to proprietary programming structures. In the early 2000s, web-connected APIs, including Amazon's Store API, eBay, and Salesforce, transformed the landscape and created a new network of open web APIs that anyone could consume. Since then, APIs have evolved from rigid interfaces to flexible and declarative platforms, establishing the modern bedrock of application development and integration.

At Adobe, we believe that the key to thriving in today's hyper-competitive landscape is being agile and differentiating through world-class experiences. As business velocity accelerates, the forces of creative destruction, disruptive innovation, and continuous change are reshaping every industry. APIs allow you to respond to these forces with agility, enabling brands to connect legacy systems and modern web applications with customers, partners, business ecosystems, and the internet in meaningful ways that unlock new value. They also accelerate innovation, making it easier to deliver new capabilities, amplify them by tapping into a network of complementary services, and expose those capabilities as omnichannel services.

As customers embrace an increasing number of omnichannel and mobile technologies, customer journeys are fractured into hundreds of real-time, intent-driven micro-moments. Each moment represents an opportunity to contextually engage customers and solve their problems as they move through their shopping journey. APIs provide the foundation for supporting these experiences, enabling customers to seamlessly access real-time information such as local store inventory, personalized offers, and updates on service requests. Customers are now able to enjoy frictionless experiences that connect with them in the moment, personally and contextually, rather than forcing them to interact based on how backend systems and processes are designed. The API-first approach provides the foundation for the experience-led business wave, with over **89% of companies expecting to compete on the basis of customer experience**. This establishes deeper customer relationships, improves business performance, and establishes a more durable strategic advantage.

APIs for Modern Commerce provides the foundation you need to take action. The book will introduce you to the power of web APIs and will provide a framework for creating easily consumable APIs. Mr. Goetsch guides you through each phase of the process. Starting with modeling APIs, you will learn how to define and model stateless, easy-to-call APIs that are easy to integrate and extend. The building and deploying chapters cover best practices for how to build APIs and manage them through their life cycle. Finally, the APIs are consumed and extended to create an agile operating model.

This book will provide you with a clear understanding of what it takes to design, deploy, and extend your commerce environment with an API-first approach. Through the use of real-world examples

and proven best practices, you will learn both the technical and business principles necessary to embark upon your own API transformation.

— *Errol Denger, Adobe,*
Director of Commerce Strategy
October 8, 2017

About the Author

Kelly Goetsch is Chief Product Officer at commercetools, where he oversees product management, development, and ops. He came to commercetools from Oracle, where he led product management for its microservices initiatives. Kelly previously held senior-level product development and go-to-market responsibilities for key Oracle cloud products representing billions of dollars of revenue for Oracle. Prior to Oracle, he was a senior architect at ATG (acquired by Oracle), where he was instrumental to 31 large-scale ATG implementations. In his last years at ATG, he oversaw all of Walmart's implementations of ATG around the world.

Kelly has expertise in commerce, microservices, and distributed computing, having spoken and published extensively on these topics. He is the author of two books—*Microservices for Modern Commerce: Dramatically Increase Development Velocity by Applying Microservices to Commerce* (O'Reilly) and *E-Commerce in the Cloud: Bringing Elasticity to E-Commerce* (O'Reilly).

He holds a bachelor's degree in entrepreneurship and a master's degree in management information systems, both from the University of Illinois at Chicago. He holds three patents, including one key to distributed computing.