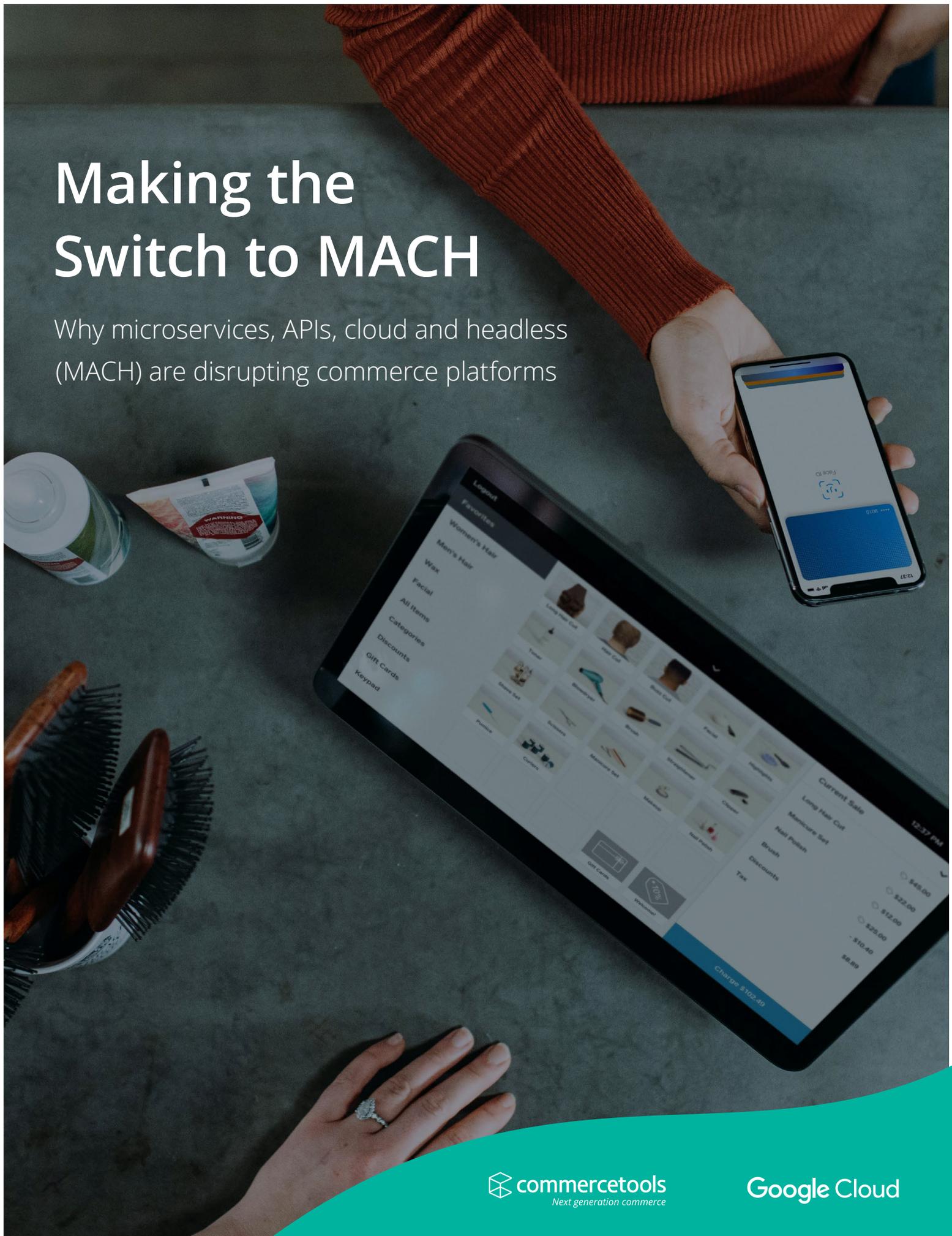


Making the Switch to MACH

Why microservices, APIs, cloud and headless (MACH) are disrupting commerce platforms



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There are plenty of companies today that find themselves held back by legacy eCommerce platforms that can't meet their current requirements, let alone their future demands. Outdated technologies can make commerce exponentially more challenging, especially as many more and different kinds of devices—from refrigerators to VR headsets—start showing up virtually everywhere.

Some companies try the band-aid approach, bolting add-ons to existing systems, hoping they can still keep up with fast-changing marketplaces. The reality is that approach is not only inefficient, it's also unsustainable and ignores the latest methodologies and best development practices.

With customers becoming increasingly demanding—while being swamped with choices and a growing number of touchpoints for making purchases—competing will only get tougher. Add in globalization and the need to differentiate your company beyond product and price is critical to your success.

But standing out from the crowd takes personalization, smooth customer interactions and unique features that make shopping easier—essentially enhancing the overall customer experience. If your company is going to compete and win you need the building blocks that let you quickly, easily and cost-effectively build your own, unique commerce experience that will better position you to capture more revenue and market share.

FLEXIBILITY, SPEED START WITH MACH

MACH stands for microservices-based, API-first, cloud-native and headless. A MACH architecture gives you a flexible framework to build features and functions that meet your exact business needs. It's highly scalable and customizable. Compared to today's typical enterprise suite—once considered the “safe” choice but now unable to keep up with the increasing business demands of a modern, connected world—commerce built with a MACH architecture is more agile, more nimble and always up to date.

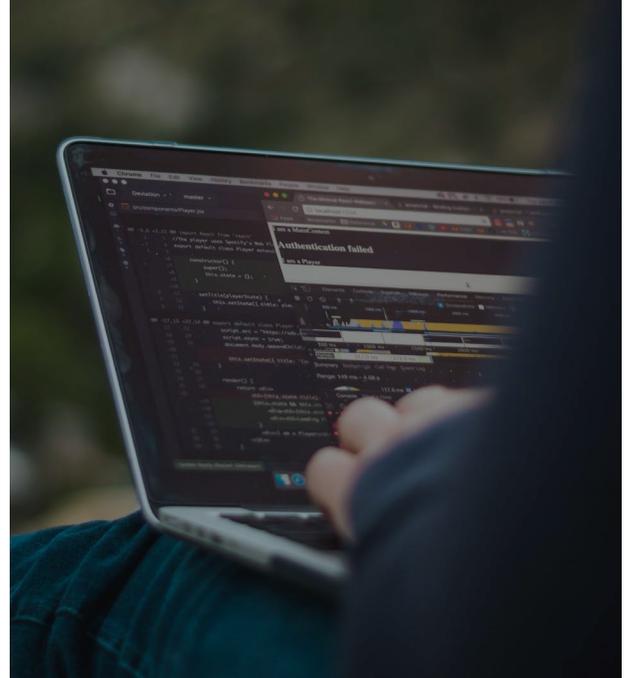
HEADLESS: INCREASE AGILITY AND A SINGLE SOURCE OF TRUTH

A headless platform decouples the front end of your commerce infrastructure from the back end, opening the door for teams to work independently without impacting each other. That's agility you just can't get from legacy systems. Headless also makes it easy to pull the information you need and deploy it on a new front—to support new devices, for example—so you can quickly adapt to any changes the future throws your way.

One of the most valuable features of a headless platform is that it serves as a single source of truth—a repository for all product, customer, shipping, pricing and related data. Most important, a headless architecture gives you the freedom to build whatever you can envision to enrich your customer experience and deliver seamless shopping across all digital touchpoints.

MICROSERVICES MADE EASY

A microservices-based commerce platform gives you the flexibility to pick and choose where to focus your teams' efforts. And, because each microservice is deployed independently, developing, testing and maintaining it is much, much easier. Compare that to the traditional, monolithic eCommerce platforms that severely limited your options in the past.



Choose a commerce platform where many of the services and functions you want are already built in, so it's easy to immediately deploy them with minimal effort. It should also be easy to create new services and functions that serve your exact business requirements when you need them. A headless, API-first solution makes all that possible.

WHY API-FIRST MATTERS

An API-first approach makes a difference for commerce in so many ways. First, using APIs lets you easily call on the data you need. Even better, APIs make it simple to bridge different systems together—a CRM and CMS, for example.

It's also important to choose a platform that supports GraphQL. With GraphQL, you can include a complete description of the data in your API and empower the client to ask for exactly what it needs and nothing more. That makes the payload much smaller, increasing speed, performance and productivity. commercetools' flexible, API-first approach makes it easy to integrate connected cars, smart home applications, chatbots and whatever else you can imagine.

CLOUD-NATIVE FOR SPEED AND FLEXIBILITY

By choosing a cloud-native commerce platform, not only are your applications hosted in the cloud, they're also developed in the cloud. Every step—from development to testing to microservices deployment—lets you take advantage of the cloud's distributed, flexible capabilities. Just as important, a cloud-native platform gives you faster access to information, faster reaction time and unlimited scalability.

GOOGLE CLOUD PLATFORM: SECURITY AND SCALABILITY

commercetools became a Google Cloud Platform (GCP) partner because GCP supports a huge number of features for commerce platforms. GCP includes Google Kubernetes Engine (GKE), a secured and managed Kubernetes service with four-way auto-scaling and multi-cluster support. GKE lets you start quickly with single-click clusters and leverage a high-availability control plane, including multi-zonal and regional clusters.

GKE eliminates operational overhead with auto-repair, auto-upgrade and release channels. It's also secure by default, including vulnerability scanning of container images and data encryption, and integrated cloud monitoring with infrastructure-, application- and Kubernetes-specific views.

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GCP offers BigQuery, a serverless, highly scalable and cost-effective multi-cloud data warehouse designed for business agility. BigQuery lets you analyze petabytes of data at blazingly fast speeds with zero operational overhead. With BigQuery, you can also run analytics at scale with a lower TCO than warehouse alternatives and democratize insights with a trusted, more secure platform that scales with your needs. The results? Insights across clouds with a flexible, multi-cloud analytics solution.

GCP also gives you access to AI Platform so you can create your artificial intelligence (AI) applications once, then run them easily on both GCP and on-premises. AI Platform also includes an integrated toolchain that helps you build your own machine learning applications. Combining GCP and commercetools gives you an unmatched platform that makes it possible for you to create exciting, new commerce services and functions at an unlimited scale.

Even better, commercetools' machine learning team leverages both BigQuery and AI Platform to create smarter workflows for our customers so they can manage their product and commerce data more efficiently. That saves a huge amount of time and money when it comes to deploying and maintaining their experience.

COMMERCE TOOLS: THE WORLD'S MOST FLEXIBLE COMMERCE PLATFORM

commercetools was the first headless commerce platform—ever. As the pioneer in its field, the commercetools platform was designed with supporting both current and future methods for conducting commerce in mind. That makes commercetools the choice of forward-thinking businesses that want a high-performing, easily maintainable solution that is continuously at its prime. The commercetools platform is cloud-native and, of course, incredibly scalable, giving you more flexibility than any other platform. It's that simple.



COMMERCE BUILDING BLOCKS SPEED UP INNOVATION

commercetools' modern APIs are the modular building blocks that truly set the platform apart from competitive offerings. These building blocks give you a solid foundation for quickly creating new, customized microservices that are at the core of digital commerce, providing the glue that connects applications and things.

commercetools' future-ready commerce APIs also give you the flexibility to create new experiences for every digital touchpoint, using ready-made building blocks that include more than 300 commerce APIs that you can consume individually. And, commercetools' APIs make it easy for you to create or supplement your own infrastructure, iterate fast and run new business models on a global scale.

MERCHANT CENTER: THE POWERFUL, INTUITIVE BUSINESS USER INTERFACE

The commercetools Merchant Center helps you oversee your most critical data and processes while keeping up with changing market conditions. With an intuitive user interface, Merchant Center lets you manage product data, orders and customer data for all retail channels. It also includes a variety of other valuable functions—including configurable forms and batch processing—to help you get your daily work done quickly and easily.

Merchant Center features advanced product information management (PIM) built-in, so there's no installation or integration needed. You just log into the commercetools' web app and take control of your catalog data, add new attributes, bulk edit variants, employ machine learning-based data quality validation and maintain all of your retail channels.

You can also manage all of your customers' data in one simple interface with Merchant Center. From customer profiles to customer segmentation to order management Merchant Center gives your customer service representatives the tools they need to deliver exceptional service levels. And managing discounts has never been easier with Merchant Center. Our industry-leading promotion builder interface lets you easily model complex product and cart-level discounts and coupon codes. If you can imagine it, our discount engine can support it. Rules can even be exported in a friendly, text-based format so templated discounts can be created quickly.

[Learn more about Merchant Center.](#)

FIND THE PERFECT PARTNER AT THE INTEGRATION MARKETPLACE

There is a vast partner network of third-party extensions and integrations for the commercetools platform to be found in our Integration Marketplace. The Integration Marketplace gives you easy access to a huge number of best-of-breed applications, ranging from modern storefronts, content management systems and fraud prevention, to payment processing, automation and AI tools. commercetools collaborates closely with our partners to assure each integration meets our high standards for quality.

An available Accelerator Program that leverages the choices found in Integration Marketplace pairs commercetools' customers with the right partners to help you get new business models up and running fast. Start with a basic storefront to kick off an MVP and capture revenue. Then easily add features and functionality as you scale up after launch.

Making it simple to connect these third-party solutions with commerce using high-quality integrations and extensions is invaluable because it saves you development time and costs. Ultimately, working with commercetools and our partners makes it possible for you to deliver a superior, seamless experience every day.

[Learn more about Integration Marketplace.](#)

THE MACH ALLIANCE: SHIFTING THE PARADIGM

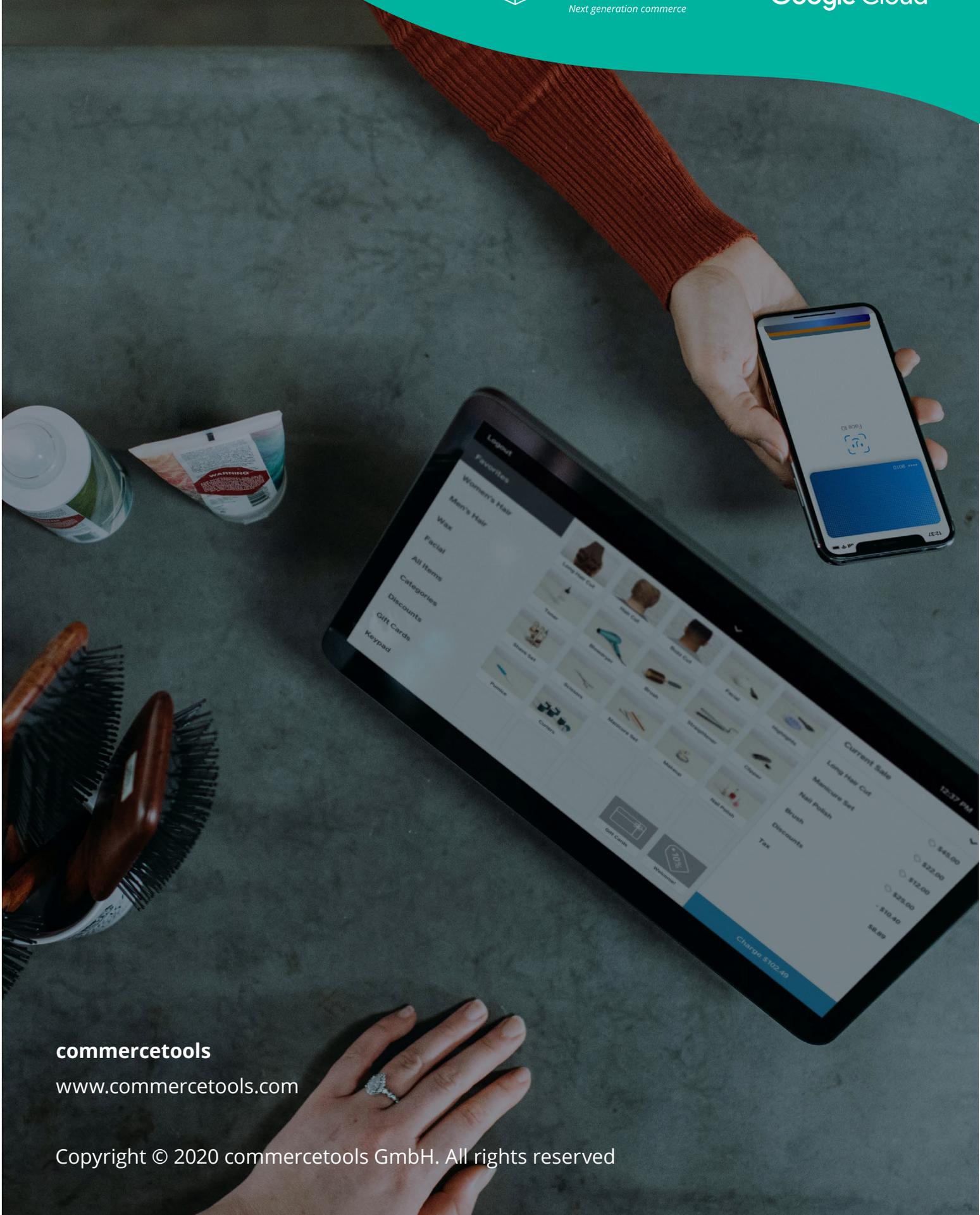
commercetools is a founding member of the MACH Alliance, an organization that presents and advocates for an open and best-of-breed enterprise technology ecosystem. The MACH ecosystem has proven to be agile, nimble and always up to date. MACH technologies support a composable enterprise in which every component is pluggable, scalable, replaceable and can be continuously improved to meet evolving business requirements through agile development. By future-proofing enterprise technology and propelling current and future digital experiences, MACH helps businesses get an edge over the competition and stay ahead of the technology curve as we enter an era when enterprise suites are no longer "the safer choice," but are instead the bottleneck that will slow you down

[Visit the MACH Alliance website.](#)



Try the World's Leading Commerce Platform for Free

Want to learn exactly how commercetools can add value to your company? [Get our risk-free, fully functional, 60-day trial](#) so you can be ready for whatever the future of commerce brings.



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