

CASE STUDY

Freedom To Deliver

How Dawn Foods went from paper processing to a MACH-enabled, eCommerce powerhouse with the help of commercetools and Contentstack.



Executive Summary

Challenge:

- Dawn Foods needed to deliver new features, functionalities, and capabilities to their customers using best-fit tools

Solution:

MACH approach for a robust interchangeable, and future-proof architecture:

- commercetools for an integrated eCommerce engine with APIs and microservices
- Contentstack's headless content management system (CMS)

Results:

- From 'no-code' to a built out eCommerce solution in 22 weeks
- Transitioned over 50% of their customers to online buyers
- Reduced content publishing time by 80%
- Published 6 major releases in the first 6 months post-launch



Overview

Dawn Foods recently turned an impressive 100 years old.

Starting as a local donut shop in Jackson, Michigan in 1920, they now operate as a B2B food manufacturer and distributor to bakeries of all sizes in 100+ countries. Until mid-2019, they had no digital commerce platform.

Orders were a mix of phone calls, in-person visits, and faxes. In the past, this worked perfectly fine, but as more digitally savvy customers began asking for digital ordering, this prompted Dawn Foods to look closely at their sales and inventory management processes.

Feeling that traditional B2B eCommerce sites do not provide an ideal user experience, they wanted a solution that would give their customers a similar experience to what they have with B2C eCommerce. All while having the flexibility and agility to adapt and change their systems to better meet the diverse needs of their global customers – and better understand, and improve, their own processes.

This meant developing a platform that was easy to work with (as teams had limited experience working with digital tools) and that let their users have full control over their ordering process.

Ultimately, they chose a MACH solution.

The Solution

Introducing MACH – the future of eCommerce

Unlike traditional ‘all-in-one’ solutions, which are constrained by their complexity and pre-defined processes and templates, MACH provides a robust, interchangeable, and future-proof architecture that is Microservices-based, API-first, Cloud-native SaaS, and Headless.

Connecting scalable, pluggable, and replaceable best-of-breed tools to function as one solution, MACH allows businesses to change their experience as needed, at their own pace, with no risk to their overall system.

For any business looking to create a personalized customer experience, quickly introduce new channels, features, or products; improve processes; ensure higher quality outcomes; innovate; go multichannel; have multiple teams work in parallel; and not be constrained by a one size fits all approach, MACH is an ideal fit.

Especially for eCommerce businesses wanting non-stop growth.

Even for those not ready to fully replace their legacy system, MACH enables existing architectures to be broken down into smaller, more modular, and easier to work with parts.

The MACH philosophy

A MACH approach is quickly becoming the standard to enable eCommerce operators to work with a truly multi-tenant Software as a Service (SaaS), API-first commerce platform.

MACH combines state-of-the-art technology and processes to enable fast, stable, and secure production and releases. All to meet rapidly changing consumer needs and demands.

What isn't MACH?

When evaluating a software solution and the discussion involves system prerequisites, which version of operating system they use, what web-based PVP script version is running, if something is a service or not, or which query is required to gather data from the database, it is not a MACH solution.



Breaking down MACH



Microservices – the building blocks of MACH

Often compared to LEGO bricks, microservices are small, standalone, and independently running applications. Each can be developed, deployed, and scaled without impacting the others.

This is an improvement over traditional monoliths where coding changes or added features can disrupt the entire application. A microservice can be quickly upgraded, changed, or removed; whereas, as complexity grows within a monolith structure, changes can become extremely challenging, if not impossible.

Microservices enable you to break down various functions, such as Payments, Shipping, or Search, without having to share any data between them. They are autonomous bricks that can be connected by application programming interfaces (APIs).

Software complexity is reduced, there is no single point of failure, you have the right tool for the right task, and can improve time to market. This lets teams efficiently manage, develop, and deploy each service.



APIs – the glue that connects MACH

Microservices need to communicate with one another to bring value and rely on APIs to do so. Whether between other microservices, web sites, databases, various devices, or applications, a well-defined API lets everything to 'speak' with each other.

In a MACH architecture, the APIs are the code that lets microservices quickly and correctly structure and send data between themselves, your front-end (the user interface) and back-end (i.e., database), and any other connected applications.

It's an essential component for any business that wants the flexibility to react and the foundation to scale.



Cloud – the home of your MACH

By utilizing a scalable, on-demand hosting platform, such as Amazon Web Services (AWS), Google Cloud, or Microsoft Azure, a MACH solution can be developed without an in-house, proprietary data center.

Today, the cloud isn't just about hosting or storing data. It provides auto-scaling, resources on-demand, application development, data analysis, and much more.

Choosing a cloud-native SaaS solution allows businesses to take full advantage of cloud capabilities. SaaS vendors manage the hardware and software (including security), which means you save money by quickly scaling, upgrading, and deploying solutions without having to maintain on-premise hardware and software.

These vendors provide their solution “as a service”, meaning that updates and new features are available immediately, so businesses can say goodbye to versioning and long upgrade projects.

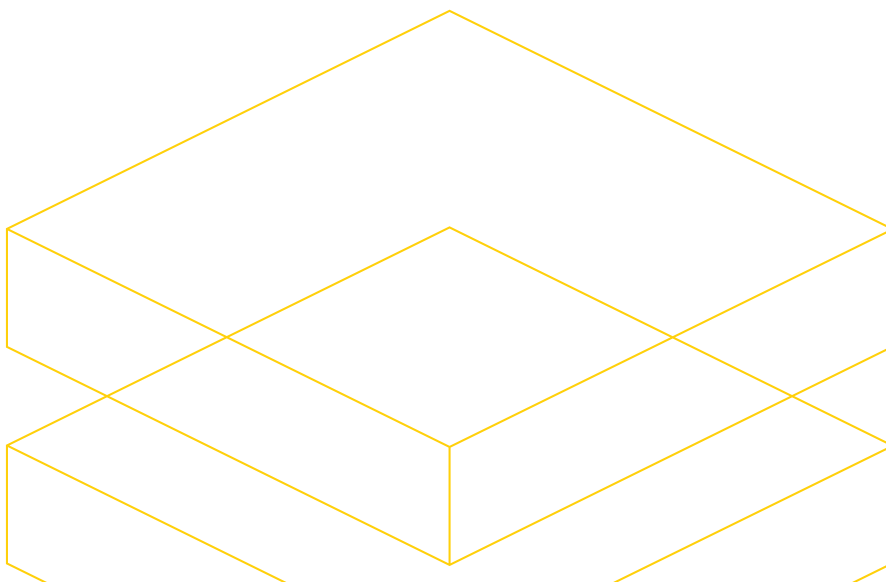


Headless – the true flexibility of MACH

A headless solution dramatically changes how content is delivered.

In a monolithic **structure**, the back-end logic and front-end presentation is tightly integrated. This means that a Content Management System (CMS) stores content in a way that locks content to a specific channel, like web or mobile, or even a specific template within that channel. This leads to a lot of copy and pasting for marketers and a lot of tedious work for front-end developers.

Headless separates (decouples) the front-end from the back-end. Communication is then done through APIs. This means content can be shared across different front-ends – smartphones, IoT devices, apps, and more. Teams can quickly spin up or build out different customer touchpoints while the underlying content stays safe.



The journey

Developing qualitative services

Dawn Foods chose a MACH approach to ensure they could quickly deliver new features, functionalities, and capabilities to their customers using best-fit tools that made life easier for both IT and business teams.

But they had to start from zero.

Assessing what to achieve

Dawn Foods was looking for a technology solution that would help the sales team transition from operational supervision to fully enabled business advisors.

Part of this planning meant moving to a self-service model, where the customer can easily check what they need and directly place an order, like a B2C shop, while still retaining the service and advice of a B2B relationship.

Microservices were seen as the ideal fit because they enable greater flexibility and control in how solutions are defined, developed, and delivered. Additionally, Dawn Foods was drawn to a MACH architecture because it enabled them, without much experience, to build and test their solution without extensive costs.

As a global business with no eCommerce footprint, Dawn Foods had some interesting challenges:

- Begin aligning business models across different regions
- Develop a standard business model before developing their eCommerce solution
- Educating and preparing teams to manage organizational change

After spending six months researching dozens of eCommerce platforms, they focused on using an API-driven solution. This meant finding the right partners.

The team

After a rigorous selection process, commercetools was chosen to provide an eCommerce engine with APIs and microservices that could integrate into a variety of systems, including a Product Information Management system (PIM) and Contentstack's headless content management system (CMS). Dawn Foods' cart and checkout process were all built using commercetools solutions.

By using commercetools and Contentstack, both headless solutions, Dawn Foods is able to launch and change different customer-facing touchpoints without having to update code in their commerce engine or create new, channel-specific content.

The result

Within 22 weeks, Dawn Foods went from 'no code' to a fully built-out eCommerce solution. A few weeks after going live, they had already made 12 deployments of various microservices, and within **6 months post-launch**, had published 6 major releases.

Positive customer feedback and increased orders quickly followed. Even during the roll-out phase, over half of their customers had registered as online buyers. These newly eCommerce customers were ordering their normal products and including new products they had never purchased before.

Dawn Foods soon saw that once a customer placed more than one digital order, they tended to become permanent online buyers. Positively, sales representatives reported deeper relationships with their customers.

As well as being convenient for customers, the new solution has been easy for teams to work with. Teams are able to update content 80% faster than before and, in some cases, content that took them a week to update in their old system was published in less than an hour.

“To think that my team is managing all the content without needing technical skills whatsoever is astonishing,” says Gireesh Sahukar, Vice President of Digital at Dawn Foods. “They can create the content, publish it, review it, and make sure it is propagated to different environments across our stack without needing developers or anyone from the operations teams to be involved. That is pretty close to magical.”

The future

Moving forward, with the help of commercetools and Contentstack, Dawn Foods is looking beyond online ordering and wants to introduce further innovation and insights by using their website to deliver research, analytics, trends, and information to customers.

With MACH, they have the freedom to deliver all of this, and much more.

With the joint solution of commercetools’ headless commerce platform and Contentstack’s headless CMS:

- Gone from ‘no-code’ to a fully built out eCommerce solution in 22 weeks
- Transitioned over 50% of their customers to online buyers
- Reduced the time it takes to publish content by 80%
- Published 6 major releases in the first 6 months post-launch

The MACH technological foundation of commercetools and Contentstack frames future business success:

- Provides a highly flexible, easy-to-use content and commerce solution to blend engaging stories with modern shopping.
- Combines APIs and microservices to quickly connect your existing, and future, technology investments
- Enables amazing digital shopping experiences to span across the entire customer lifecycle
- Leverages cloud-based and SaaS technologies so customers always benefit from the latest technology, ending upgrades for good



About commercetools

commercetools is the world's leading platform for next-generation B2C and B2B commerce. To break the market out of being restrained by legacy suites, commercetools invented a headless, API-first, multi-tenant SaaS commerce platform that is cloud-native and uses flexible microservices. Using modern development building blocks in a true cloud platform provided by commercetools, customers can deliver the best commerce experiences across every touchpoint on a large scale.

commercetools has offices across the US, Europe, and Asia Pacific, with headquarters in Germany. Since 2010, commercetools software has been implemented by Fortune 500 companies across industries, from retail to manufacturing and from telecommunications to fashion.

About Contentstack

Contentstack® – the pioneering Agile Content Management System – empowers marketers and developers to collaborate around content like never before. Together, they can orchestrate superior customer journeys and deliver dynamic digital experiences across channels, audiences, brands and regions. Companies such as Chase, Express, Mattel, McDonald's, Mitsubishi, Holiday Inn, Icelandair, Riot Games, Sephora and Shell trust Contentstack to power their most critical content experiences. Famous for its Care Without Compromise™, Contentstack has the industry's highest customer satisfaction.

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