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Think Locally, Build Globally

How Drupal Can Power A Headless
Omni-Channel Web Platform

February 2023



AGENDA

- 01 Who - Introduction
- 02 What - Is a Headless Omni-Channel Web Platform
- 03 When - Do I need such a solution
- 04 Where - Has this been used before
- 05 Why - Is it so effective
- 06 How - Do I get started

Who...

- ★ Am I?
- ★ Is this talk for?



PRESENTER

John Picozzi

Solutions Architect

I believe strongly in contributing to the Drupal community and supporting open source in any way I can.

I'm the organizer of the Drupal Providence Meetup, an Acquia-certified Site Builder, a co-host on Talking Drupal, and a co-organizer of the New England Drupal Camp. Throughout my career I have crafted Drupal solutions for many organizations like CVS Caremark, Leica Geosystems, Blue Cross Blue Shield, Marriott International, Rhode Island School of Design, and Getty Images.



Who Is This Talk For?

Anyone who needs to build a web platform.



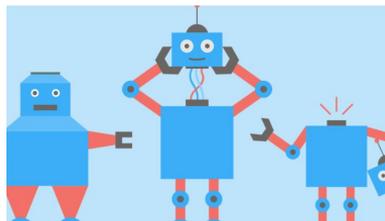
What...

- ★ Is a headless omni-channel web-platform?
- ★ can these systems consist of?

Is it a website?

Definition: A set of related web pages located under a single domain name, typically produced by a single person or organization. A single connection point to your users/customers.

Let's Break it Down!



Headless / Headless CMS

Headless software is software capable of working on a device **without a graphical user interface**.

A **headless Content Management System**, or headless CMS, is a back end-only web content management system that acts **primarily as a content repository**. A headless CMS makes content accessible via an API for display on any device, **without a built-in front end or presentation layer**.



Omni-Channel

A high-quality customer experiences that occur **within and between contact channels** like websites, email, in-store kiosks, and more.



Web Platform

A Web Platform is a **Web 2.0 concept that goes beyond simply editing your website** through a CMS and delivers you a full online communications and management system. A Web Platform **brings together many different tools** all through the central system.



What is it!?

A platform or system that **combines many tools** to effectively and efficiently **streamline customer experience and personalization** through **multiple touch points & methods**



Design System

A design system is a set of standards to manage design at scale by reducing redundancy while creating a shared language and visual consistency across different pages and channels.

CMS

A content management system is computer software used to manage the creation and modification of digital content.

3rd Party Tools

Third-party tools and APIs can consist of anything from JS widget drop ins to integration with Search services.

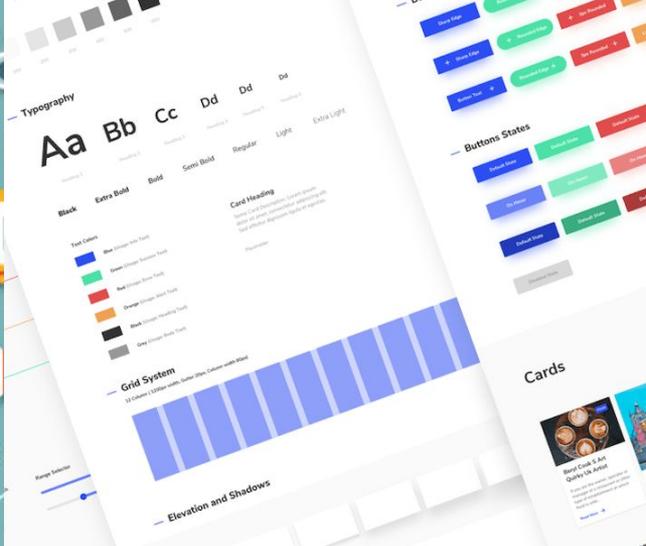
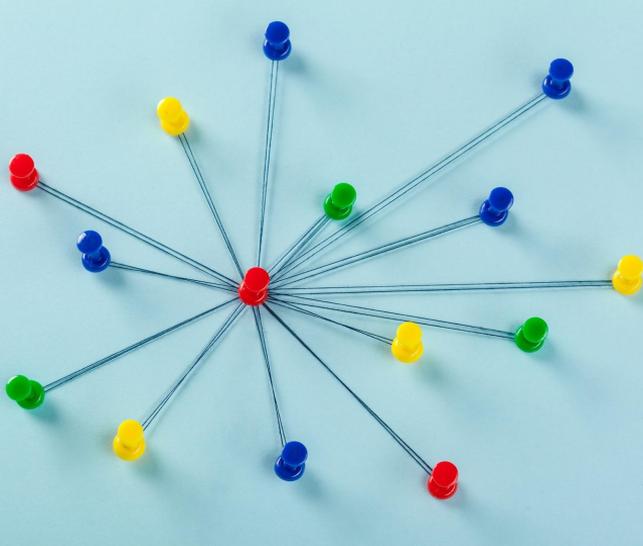
PIM / CRM / Etc

Product Information & Customer Relationship management systems help organizations administer customers or products, typically using data analysis to study large amounts of information.

When...

- ★ Does an Omni-channel web platform make sense?
- ★ Does an omni-channel web platform NOT make sense?





Multiple Brands, Units, or Branches

An omni-channel web platform make sense If you have multiple brands, units, schools, or branches that need a central set of tools and/or governance.

Multiple Outlets for Information

An omni-channel web platform make sense if you have multiple outlets for the information on the platform and If you want or need a publish once display everywhere architecture.

Design System or 3rd Party Integration

An omni-channel web platform can help implement a standard design system or a commonly used 3rd party integration for multiple systems or units.

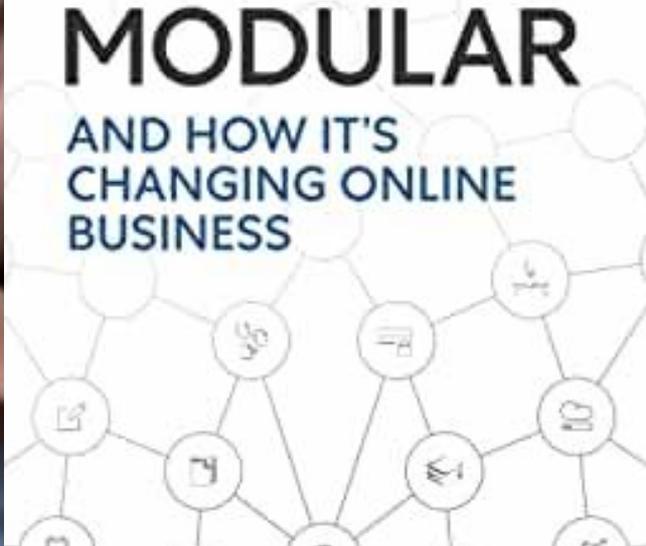
When It Doesn't Make Sense?

- Single use website
- Documentation site
- No need for growth or improvement

Where...

★ Is this used today?





Global Pharma Company

A large Pharmaceutical company needed a web platform to support its 100+ unique U.S. brand websites. By using Drupal as a content management & layout tool, coupled with a new component based design system, they were able to quickly bring sites to market while both reducing the amount of maintenance and giving each site control of it's look and feel.

Commerce Sites

Many companies that sell online have multiple points of sale and potentially have multiple product management and customer management systems. Taking a headless approach allows for integration with those systems and using that data in any way needed on the front end.

Modular: The Web's New Architecture

The internet is crowded. Over the last decade, a new generation of technologies have emerged letting teams create experiences that stand out, increase conversions, and change with their customers.



Why...

★ Is this working for them?



Cost Savings

Reduced maintenance and development costs, coupled with better organizational spending is a real win.



More Effective Testing

The ability to test once and use everywhere allows for more effective and faster testing



Faster Time to Market

Existing platforms see sites coming online faster and being built easier.



Reduce Tech Debt

The ability to share features, functionality, and components reduces long term technical debt



Better Governance

Implementation of a web platform can lead to better web governance. Reducing issues and supporting faster time to market



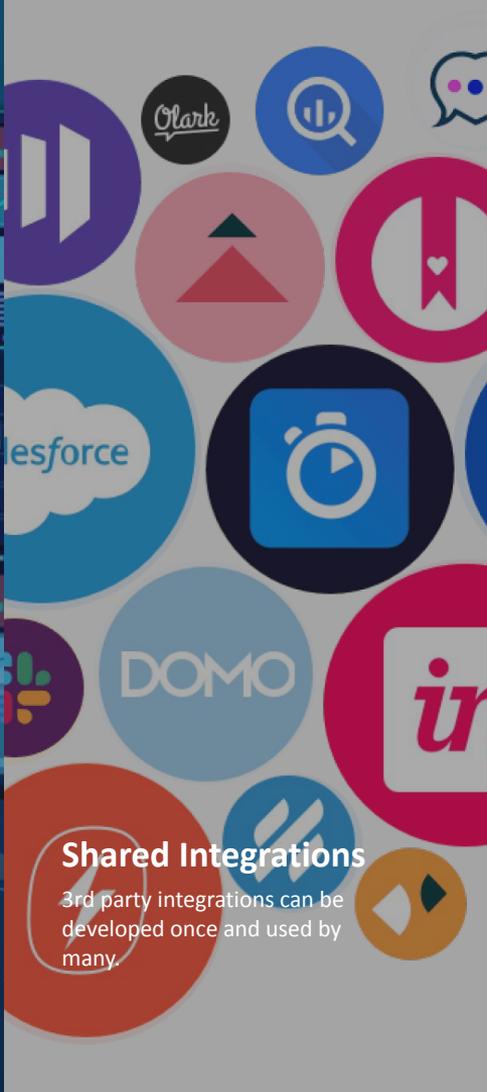
Component Reuse

Component reuse supports faster time to market and allows budget to be spent on platform improvements instead of reinventing the wheel.



Shared Features

Shared features reduce the amount of duplication of effort and allow for budgets to go further.



Shared Integrations

3rd party integrations can be developed once and used by many.

How...

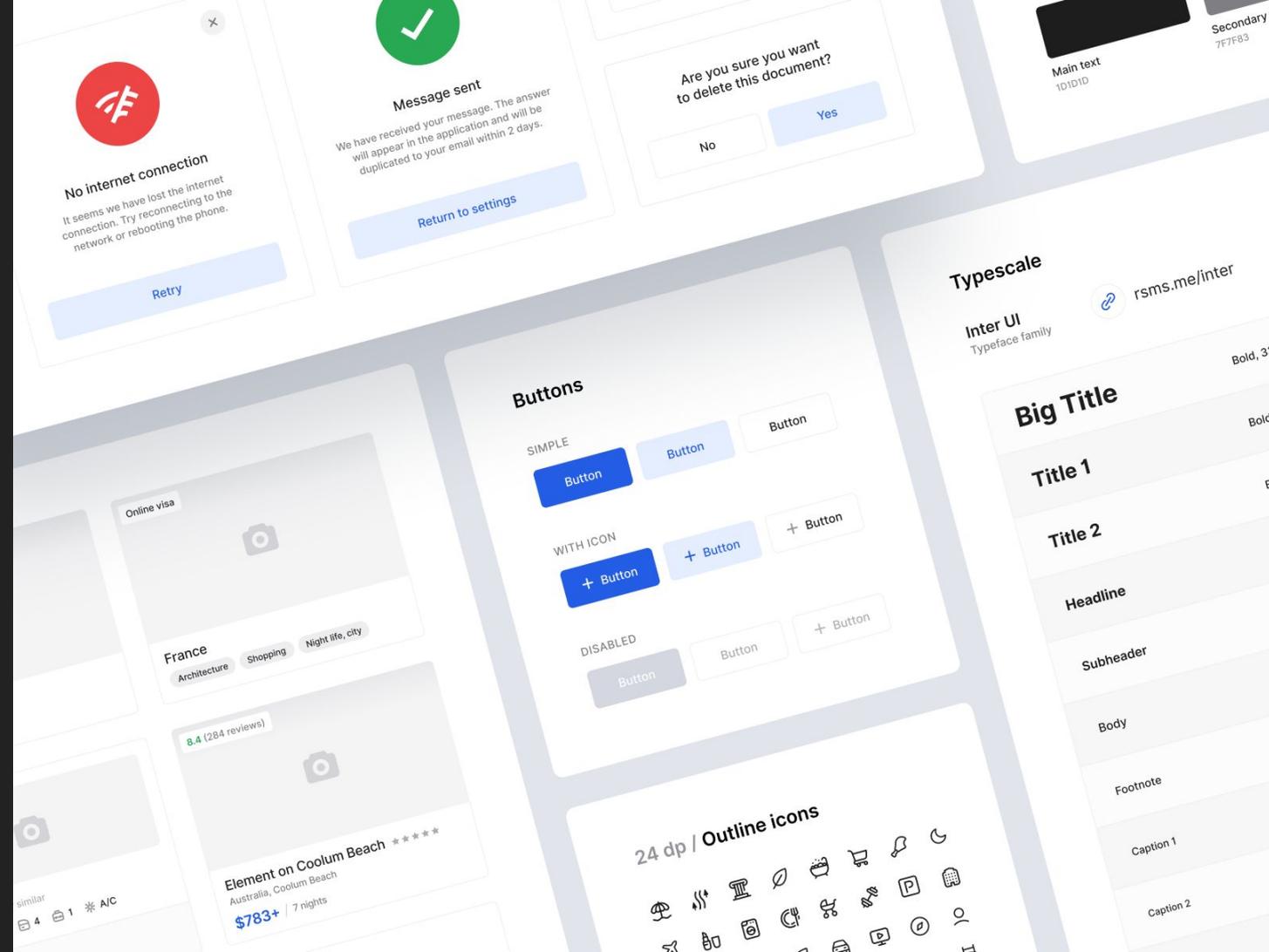
★ Many ways can you build a platform?



How

A Design System

A Design system is a set of interconnected patterns and shared practices coherently organized. Design systems aid in digital product design and development of products such as applications or websites. - [Wikipedia](#)



How

Drupal

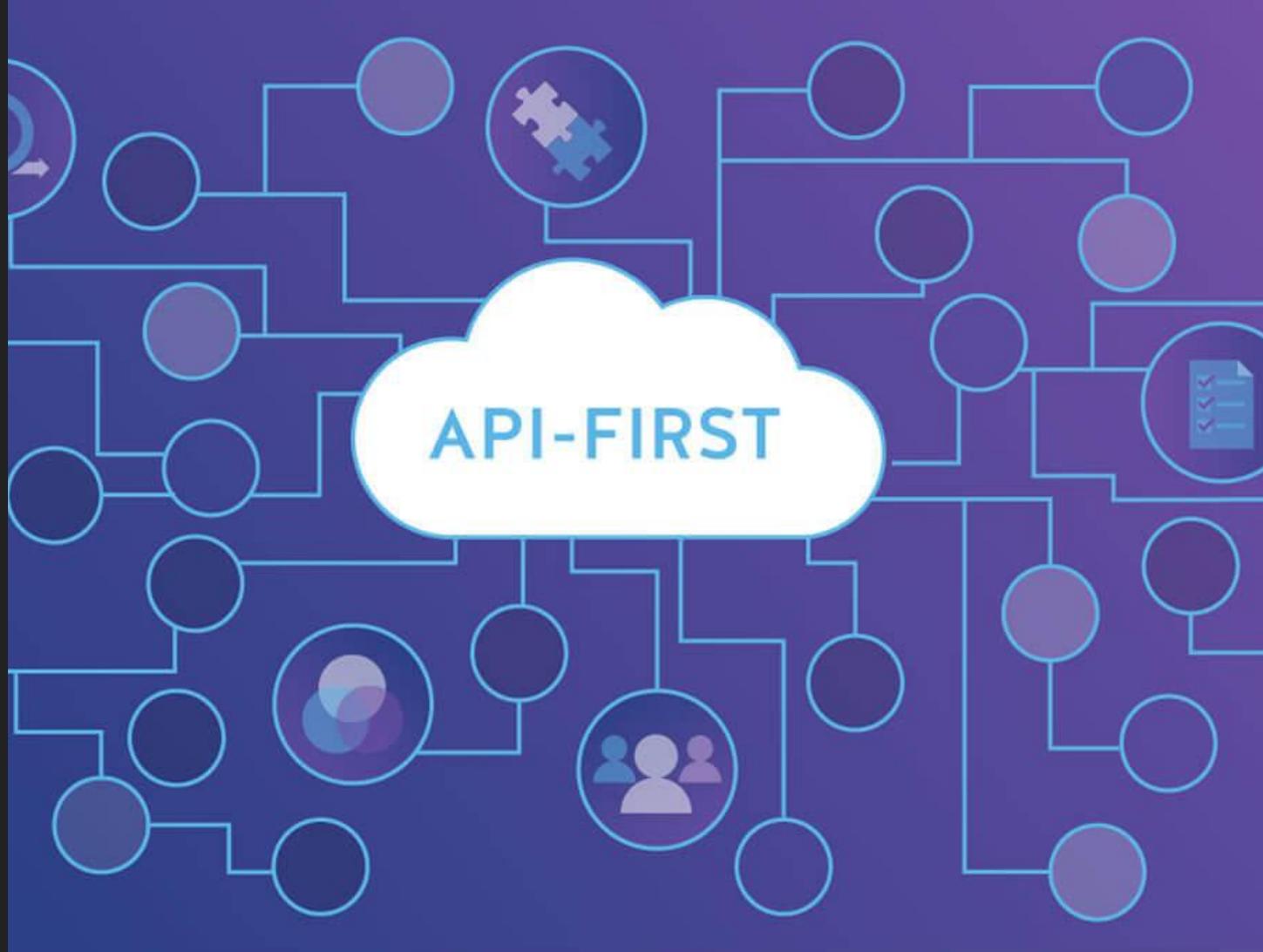
Consider Drupal the glue or a traffic cop in a headless web platform architecture. Drupal also makes for a great content layout tool if you enable layout builder.

Drupal™

How

API First / Headless

An API-first approach means that for your platform, your APIs are treated as “first-class citizens.” That everything about your platform revolves around the idea that the end product will be consumed by multiple front ends, and that APIs will be imperative to this process



How

Governance

Governance is an organization's structure of staff and the technical systems, policies and procedures to maintain and manage a website. Website governance applies to both Internet and Intranet sites

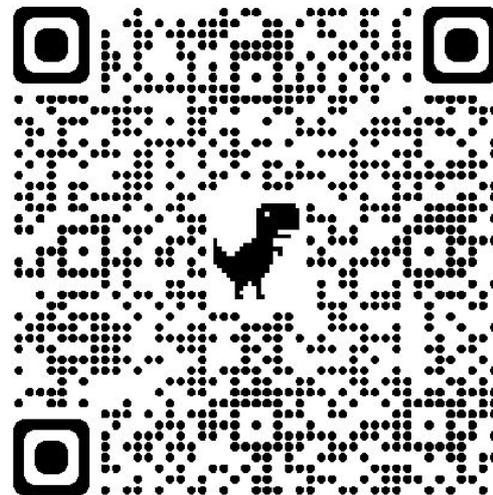
- *Wikipedia*





Helpful Resources

<https://picozzi.com/fldc2023>



Thank you!

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