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The Marketer's Guide to

# ATOMIC DESIGN

a faster way to build and manage your digital brand

## ATOMIC DESIGN

Atomic design is a hot topic in the worlds of digital design, branding, and content strategy. In fact, it was even listed as one of the hottest digital trends of 2017 by design magazine and other notable publications. But what is it and why is it so important?

Atomic design is the practice of standardizing designs from their smallest parts up to create consistency. It unifies the appearances of digital platforms by ensuring that everything is built according to the same set of guidelines. An atomic design library gives marketers a structured system that guides every design decision, ensures visual consistency across the platform, and guarantees that an organization's digital identity is fully unified across touchpoints.

Consider all of the work that goes into building a large digital platform. Atomic design is the practice of creating a design system to form the building blocks for that platform. Rather than building everything from singular visual elements, atomic design uses these building blocks to ensure a consistent structure and interface. With atomic design, the littlest details combine in infinitely variable ways, working in concert with larger components to create a cohesive, beautiful experience.

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#### **About Us**

FFW is a digital agency focused on creating digital experience platforms that ensure our clients' success, always moving forward at the speed of digital innovation.

For over 15 years, the world's largest brands have relied on us to build accessible, creative,

and user-friendly digital solutions that deliver results. We are more than 420 people across

11 countries, with a track record of over 1,000 digital solutions delivered since 2000.

Learn more at:









### An overview of atomic design

Atomic design, also referred to as component-based design, actually means two things. Atomic design as a series of principles is a methodology for creating design systems. Rather than designing big items in a top-down way, atomic design begins with taking a holistic view of an organization's needs, constructing an ideal design concept, breaking that concept down to its smallest principles, and building back up from there.

Additionally, atomic design is also sometimes used to refer to the pattern library that is compiled through an atomic design process. An atomic library provides content authors with a series of components that can be used to construct pages and content. In an atomic library, each component has been tested piece by piece, and every item has been checked against its in context in larger templates to refine the design. This is what preserves visual integrity in a platform, and helps organizations standardize their branding across all of their digital touchpoints.

The phrase 'atomic design' was coined by Brad Frost, a designer and developer based out of Pittsburgh. In his book, Atomic Design, Frost unified numerous similar design methodologies into the overarching paradigm that he termed atomic design. On his site, he says of the concept:

In searching for inspiration and parallels, I kept coming back to chemistry. The thought is that all matter (whether solid, liquid, gas, simple, complex, etc) is comprised of atoms. Those atomic units bond together to form molecules, which in turn combine into more complex organisms to ultimately create all matter in our universe.

Similarly, interfaces are made up of smaller components. This means we can break entire interfaces down into fundamental building blocks and work up from there. That's the basic gist of atomic design.

Effectively, atomic design provides a framework for constructing an ecosystem. This ecosystem in turn guides the behavior of pages by providing base-level components and guidelines that can be combined and organized in different ways to deliver increasingly complex structures. Rather than designing pages one-off, atomic design means that a single set of patterns underpins the entire project, leading to greater visual consistency and evolutionary growth. Atoms and smaller elements allow organizations to create larger systems more effectively and consistently, and helps platforms to experience organic growth based on need, rather than trying to define an entire design system upfront.

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#### How does atomic design work?

At its core, atomic design is the philosophy of combining known and robustly defined small elements in a structured way to make larger elements. Eventually, those elements combine all the way up into pages that are full of useful, functional content.

In his book Atomic Design, Frost lays out the five distinct levels of atomic design:



**Atoms** represent individual design principles or basic HTML elements. This might be a button, header text, or other items that, in the words of Frost, "can't be broken down any further without ceasing to be functional."

**Molecules** are the ways that atoms are combined. A molecule might be a form paired with a button, or another reusable component that may appear multiple times across the site. When multiple molecules are combined, they form an **organism**, which is a more complex part of the UI interface. An example of an organism might be a content grid, a menu, or a footer.

A **template** is just what it sounds like: a grouping of organisms that is reused on pages across the site. Templates allow a modular approach to content structuring, and can help define a useful responsive design. Lastly comes a **page**, which is a combination of templates that are populated with real content. On the page, all of the different levels of design come together into a finished product.

Ultimately, atomic design combines smaller elements in thoughtful, intentional ways to provide a structured system that guides every design decision made on a site. It provides consistency across use of color, fonts, spacing, layouts, images, and more, and provides true visual unification to a site. This is especially valuable when looking to maintain brand integrity and visual consistency across multiple devices, orientations, and screen sizes via a single unified, responsive design.

#### Why invest in atomic design?

When you build a site around an atomic design, you're getting more than an updated look. Atomic design helps provide organizations with stronger brand integrity, and provides a better web experience to your target audiences. Here are four reasons why.



#### It will give you better control over your branding

An atomic design isn't a one-off rebrand: it's a new way of doing things that will last. After all, it's more than just a design-- it's a full system for displaying content. That means that when it comes to appearances, questions of individual taste are off the table, since everything is constructed according to predetermined standards. Atomic design enforces overarching principles to make sure that your brand is represented as cohesively as possible, no matter what type of content it is, or when content is created.

## It empowers content authors to quickly create new pages without technical help

A good atomic design goes beyond guidelines, and provides the tools content editors need to do their jobs. A site built atomically provides the ability to easily spin-up new pages that draw on elements, organisms, and templates from a stored component library. Content authors are easily able to build new pages that are 100% compliant with their organization's branding guidelines. Pages built with an atomic approach not only come together more quickly, but they also offer the kind of informational clarity that leads to more engaging experiences and more conversions. Site visitors also experience a more consistent and unified experience that is reinforced at every touchpoint – reducing "layout fatigue" and lost user efficiency caused by learning and deciphering visual design variations on each new screen that they access.



#### It makes sites easier to maintain and extend

Sites that are built according to the principles of atomic design are easier to maintain long-term. Atomic design actually reduces the size of a site's codebase, given that atoms and molecules are constantly being reused across organisms, templates, and pages. An atomic codebase will be easier for a team to maintain, and a site built of atomic components will need fewer visual updates over time, even as the site may be extended with whole new sections of content. This allows content authors, designers and developers to focus on the net-new and unique design and content attributes of each new screen – rather than having to deal with the "basic plumbing" every time.

### It makes responsive design and accessibility easier

Any atomic design worth its salt will be built in a way to maximize usability, with responsive layouts and components that are all designed to be accessibility compliant. This doesn't just mean that there's one site for desktop and another for mobile: it means that the information on your site will scale, reorder itself, and remain useful as the size of browser windows change.

Atomic Design ensures that your most important content remains optimally readable by everyone, regardless of what sort of device they're using to access your site, or the level of their accessibility challenge.

#### Getting started with atomic design

Atomic design is an excellent choice for any organization interested in offering a beautiful, consistent, easy-to-use digital platform experiences. Whether you're a big brand with very strict visual guidelines, or a boutique group interested in dazzling your users, atomic design is an ideal choice for long-term success. It requires a little more upfront planning and design thinking – but the result is a better, faster and more beautiful content experience once the platform launches.

For anyone interested in pursuing an atomic design for their organization, a great place to start is to audit both your existing digital brand guidelines and the architecture of your web properties. Mapping what you have and where your gaps or inconsistencies are is an important first step in building an understanding of your organization's digital strengths and weaknesses.

Once you have an inventory of your content and design elements, you can then begin breaking everything down into modular components and develop an atomic strategy that works for you. You'll need to identify the key stakeholders on this project, and should focus on working with a spectrum of content authors, information architects, digital design experts and marketers to make sure that your atomic design suits your organization's specific needs.

For help with stakeholder management, for assistance with a discovery project, or to completely gain the expertise of an experienced atomic design team, contact FFW. Our design staff is here to help you understand the process behind building and implementing an atomic design for your organization.