

NET-A-PORTER saves development time with Google's Polymer Library

Launched in June 2000, NET-A-PORTER is a global leader in online luxury fashion, featuring collections from over 350 of the world's most sought-after designers.

Behind the company's online storefront, the company's engineering team works hard to deliver and maintain net-a-porter.com and its network of websites and apps, which includes two fashion magazines and a social network.

When thinking about their web properties, the NET-A-PORTER engineers see each page on a site not as a page, but as a collection of components. A product page, for example, might include a pricing component that indicates savings during a sale, a carousel component with links to related products, an interactive component showcasing complete outfits that feature products, a dropdown component for adding a product to a wishlist, and more.

A component-based approach

In early 2016, the NET-A-PORTER engineering team decided to evaluate how the company could take components and apply them to the way they write code for their web properties. Because of the many pages and sub-properties that fall under NET-A-PORTER — and the different teams that manage those pages — the engineers knew it didn't make sense to start from scratch with a new technology that would require getting rid of their existing stack. An ideal solution would let them layer on new components and add to pages as additional components were created. Components would need to be able to communicate with different backend services independently, and would also need to surface structured data about the product to web crawlers.

Tests and success with Polymer

After evaluating a number of solutions, NET-A-PORTER chose to test Google's [Polymer](#) library. An initial experiment with Polymer was completed so quickly and successfully that the NET-A-PORTER engineers decided to move forward and introduce Polymer into the organization's overall website development planning almost immediately.

Robin Glen and Matthew Green, engineers on the team, shared, "Polymer was easy to integrate into our system and get up and running in no time at all. The fact that we have such a large website with so many different aspects means it's easy for us to have inconsistencies. Polymer allows us to create complete and complex web applications that are scalable and maintainable."

Goals

Implement component-based design on NET-A-PORTER's online properties

Approach

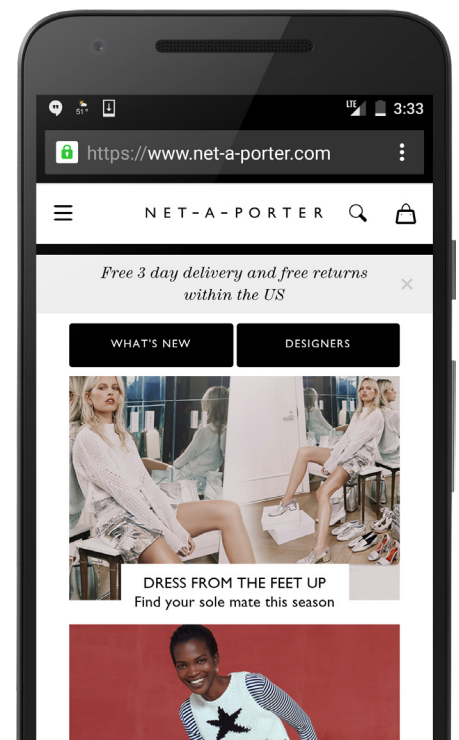
Create components using Google's Polymer library

Results

Saved development time

Standardized code on NET-A-PORTER's online properties

Improved SEO performance through use of structured data





This is just the beginning of our Polymer journey. We are currently improving the delivery and maintainability of existing components, while working towards expanding the use of Polymer to more NET-A-PORTER pages.

Robin Glen, Engineer,
NET-A-PORTER

Code standardization was easy as well, because Polymer is based on web components browser standards. Glen continues, “Building using web standards keeps our code close to the platform. This makes it easier to learn how to use and build new components, ensuring performance will continually get better as browsers improve, and letting us plan for the long-term. Because it’s based on the W3C standard, we are confident in building on the platform. Soon even the need for polyfills will broadly go away.”

And there were SEO benefits, too. Glen says that the “components effectively surface detailed structured data about products to search engines. Testing this structured data is now directly part of our team’s continuous integration scheme.”

By making the up-front investment in designing and building components, the NET-A-PORTER team is seeing dramatic long-term efficiency gains: New pages and features are simpler and faster to create and launch, and it’s easier to integrate stakeholder feedback and design tweaks into the engineering process.



Built for Speed

Polymer 1.0 replaces the shadow DOM polyfill with a lightweight shim, uses a new, faster data-binding system, and significantly reduces code size.



For Modern Browsers

Polymer is built from the ground up for modern browsers, using the latest web platform APIs. Polyfills provide support on evergreen browsers for APIs that aren't universal yet.



Using Web Components

Polymer leverages web components, a new set of standards designed to provide reusable components for the web.

The future of Polymer

The team is thrilled with how Polymer has enabled its web development. Glen says, “As soon as we saw how we could reuse components by putting them together in different ways, we got excited. We started to wonder if there were further ways in which we could exploit components within the business.”

Glen feels there is much more to explore with Polymer. He says, “This is just the beginning of our Polymer journey. We are currently improving the delivery and maintainability of existing components, while working towards expanding the use of Polymer to more NET-A-PORTER pages. We are working towards documenting our approach with a publicly available NET-A-PORTER component style guide. Polymer has also been very useful for internal tooling. We recently built a set of graphing components and re-platformed our entire monitoring service to use Polymer.