In 2011, John Webber founded Carved in Elkhart, Indiana, to use computer-controlled machine tooling to make best-in-class phone cases. The first product was a skin made from wood veneer that customers could stick on the back of their phone. The company now offers a full line of cases, wallets, phone batteries, and more via their e-commerce website.

Their responsive, e-commerce website, built in-house in 2016, was only "50% responsive," Webber says. About 90 to 95 percent of their sales come through the site, half from mobile users. "Increasing mobile speed has been a top priority, as we know that performance is central to capturing, engaging, and creating loyal customers," Webber adds. "Over the years, we experienced a surge in mobile traffic, but the conversions just weren't keeping up."

Solution

Carved found the performance they needed with Accelerated Mobile Pages (AMP) and a Progressive Web App (PWA). Working with agency WompMobile, they used AMP and PWA together to create a superior mobile experience. They first built AMP pages for acquisition channels and measured the impact of greater speed. Seeing strong return on investment (ROI), they reused those AMP pages as part of a fully-featured PWA. By starting with just AMP—ultra-fast landing pages discovered in acquisition channels—they could first prove the theory that faster page-loads correlate to better user engagement. From there, they could stay fast by delivering AMP pages in the PWA app-shell for a fully-integrated experience, from discovery all the way through checkout.

Progressive Web AMPs load instantly, are extremely stable and smooth, and keep the customer's attention. Using a service worker—a script that intercepts network requests and provides caching and offline access—creates an additional set of powerful features. To understand the impact of the new mobile site, the WompMobile team ran a two-month A/B test that sent half of Carved's traffic to the Progressive Web AMP, and the other half to their former responsive site.

Results

The Progressive Web AMP dominated the standard responsive site, creating tangible, real-world business gains for Carved. Most importantly, the e-commerce conversion rate was 75% higher. The average page load speed was 37% faster, and the bounce rate was 33% lower. The exit rate dipped 38%, while session duration was 47% longer and viewers visited 63% more pages per session.

"The addition of a PWA ignited our mobile experience—and, for the first time, we're measuring conversions that keep up with those on our desktop site," Webber says. "Our PWA has become a windfall and is giving our desktop site a run for its money."

Seeing the strong impact of Progressive Web AMP for Carved, WompMobile wants to apply the lessons learned to help other clients. Their technology platform makes it easy to convert any web page to AMP, while retaining the rich, e-commerce functionality, and to quickly integrate PWA components, including the manifest, service worker and app-shell. They also monitor and measure the health and success of a project, which they can typically deploy in 6 weeks.

"Carved always has been a mobile-first company—we were founded to make phone cases, after all," Webber says. "We're excited that the performance of our new Progressive Web AMP meets the expectations of today's on-the-go shopper—users that expect speed and usability. Finally, for the first time, we're measuring conversions that keep up with desktop!"

Learn more about the Accelerated Mobile Pages Project and building your first AMP HTML file at: www.ampproject.org