

7 website development trends for 2021

These are the 7 most important trends to look for in web development for 2021.



The rise of No code and Low code

No code - practice that uses special platforms to develop software through graphical interfaces rather than through programming languages.

Low code - practice similar to no code but that offers more under-the-hood capabilities and requires more technical knowledge.

Why it's important for brands

- › On average, a company spends \$3.61 per line of code, a cost these practices can slash
- › It's cheaper to train employees in low code platforms
- › Building software with low code reduces the steps in the software development process from 16 to only 7.

Brands using No Code/Low Code:

- › Cornell University uses low code to update its virtual learning environments
- › The city of Oakland built a new human resource management application with 5 developers, one manager, and a low code platform
- › Geisinger Health System turned to low code to rapidly deploy applications that reassigned employees and provided those in need with financial assistance

Increase in Voice User Interface (VUI) availability



Voice User Interfaces (VUI) - primary or supplementary visual, auditory, and tactile interfaces that allow for voice interaction between users and devices or platforms.

Why it's important for brands

- › 22% of U.S. smart speaker owners have bought something using their devices.
- › 76% of smart speaker owners increased their use of voice assistants over the last year.

Brands already using it

- › Johnny Walker - offers to choose label according to personal preferences, buy products, learn more about whiskey, or go through a guided tasting, via Alexa.
- › Nestlé - provides recipes with the required ingredients and utensils, supported by an in-browser visual guide, all activated through Alexa.

The eruption of AI across web development



AI as UX - mostly seen in chatbots equipped with sophisticated natural language processing (NLP) systems to establish human-like conversations.

AI as an informant - AI-powered analytic tools gather data in real-time about how a website performs and provides insights on how to improve it.

AI as a designer - artificial design intelligence (ADI) tools capable of designing a whole website, based on collected data.

Why it's important for brands

- ▶ Current AI technology can boost business productivity by up to 40%.
- ▶ When AI is present, 49% of consumers are willing to shop more frequently while 34% will spend more money.
- ▶ 45% of end-users prefer chatbots as the primary mode of communication for customer service inquiries.

Brands already using it

- ▶ Google - Google Docs use AI for its Explore feature and the grammar checker in Docs, and to autogenerate formulas in Sheets.
- ▶ Microsoft - its Captionbot.ai platform uses AI and machine learning to automatically generate captions for uploaded photos.
- ▶ Deep Cognition - Deep Learning Studio Cloud is an AI-based solution that helps in designing deep learning models in an easy way.

The popularization of Progressive Web Pages

PWAs - web apps that use modern web capabilities to provide an experience that's closer to that of a mobile app.

Why it's important for brands

- › Users regularly use only about 9 apps per day.
- › PWAs generate a 52% average increase in conversions.
- › PWAs produce a 68% increase in mobile traffic.

Brands already using it

- › Twitter - default mobile web experience that loads pages instantly and lowers data use.
- › Pinterest - the mobile version is a PWA that provides a faster experience, increased ad clickthroughs, and higher user engagement.
- › Forbes -- the mobile site is a PWA that pushes notifications and gives the chance to add the site to home screens.

Increased presence of Augmented Reality



Augmented Reality - technology that provides a composite view by combining a computer-generated image superimposed on the user's real world view.

Why it's important for brands

- › 73% of mobile AR users reported high or very high satisfaction with mobile AR experiences.
- › Sales of AR/VR headsets are forecast to be worth 9.7 billion U.S. dollars in 2020.
- › 50% of customers would be more likely to shop at a retailer that uses augmented reality.

Brands already using it

- › IKEA - provides the mobile device's camera with the ability to visualize how virtual IKEA items would look in any given space.
- › Coca-Cola - offers support for its B2B business by giving the opportunity to view how coolers would fit in retail stores.
- › Zara- included models and product demonstrations in stores that animate models when viewed through the Zara AR app.



API-first development as a favorite

API-first development - development strategy in which developers first work on an API to later build the product (website, mobile app, SaaS platform) on top., ensuring easy integration with the larger digital ecosystem.

Why it's important for brands

- › Significant boost to Developer Experience (DX), which positively impacts productivity
- › Speeds up the development process because APIs are modular and reusable.
- › Increases a product's adaptability and makes it easier for outside applications to embed its services.

Brands using API-first development:

- › Amazon was a pioneer in API-first development, pushing for it since 2015
- › Oracle bought Apiary, whose APIFlow solution provides the framework and tools for developing APIs with this approach
- › Shopify claims to be an "API-first" company since its inception

Serverless architecture as a web standard

Serverless architecture - cloud computing model in which a cloud vendor provides machine resources on demand, taking care of the servers and the infrastructure on which developers build and run apps and services

Why it's important for brands

- › Scalable on demand including all necessary resources (compute, storage, networking, and language execution environments).
- › Dramatic reductions in infrastructure and operational costs as companies don't have to house servers or pay for idle resources.
- › Quick development and deployment as developers focus on business logic since they can forget about infrastructure provisioning, management, and scaling.

Brands using serverless architecture:

- › Lego migrated its ecommerce platform to AWS Lambda.
- › Autodesk went serverless in the AWS Cloud to reduce account-creation time by 99%
- › Netflix uses AWS for nearly all its computing and storage needs, including databases, analytics, recommendation engines, video transcoding, and more

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