Web Development Trends & Technologies in 2021

Web development is the backbone of business' success.



Karnataka, Bengaluru, Feb 8, 2021 (Issuewire.com) - Web development in 2021 has evolved towards speed that is instant access, minimal as in clutter-free and engaging as in relevant, information-rich, and built with current technologies up-to-date and trending in 2021.

Websites developed with these goals will propel your business ahead of the competition and win business in the marketplace. The process of web development is applicable in many business domains such as eCommerce, custom web applications for healthcare, EdTech, retail, logistics, etc.

Web development is the backbone of every business's success, be it a start-up or well established. Capturing the attention of the visitor at once and keeping him engaged and interested in our offering is accomplished with an efficient website development company that applies techniques and good design and UI&UX.

The new and exciting web development trends & technologies that have emerged in 2021 follows:

- Progressive Web App (PWA)
- Artificial intelligence
- Chatbots
- Internet of Thing (IoT)
- Accelerated Mobile Pages (AMP)
- Single Page Applications (SPAs)
- Voice Commerce

Progressive Web Apps

PWA is an advanced web development technology built with HTML, CSS & JavaScript. Developed to work on platforms that use standards-compliant browsers in both desktop and mobile browsers. As in

most cross-platform solutions, the goal of PWA is to assist web development teams to build cross-platform apps easily than they would with native apps.

PWA is more advanced with offline mode, responsive web, interactive web, and provides an app-like experience for users. Progressive <u>Web App development</u> is built on HTML, CSS, and JavaScript web technologies to deliver a superior user experience in web applications.

The offline features in PWAs are popular such as Google Maps. Offline maps can be accessed without an internet connection, sought after features such as this can be incorporated in the web application by simply storing static files into the browser cache.

And adding business logic for the app to pull static files on demand.

Artificial Intelligence

Artificial intelligence is certainly not new to 2021.

Development teams the world over work to integrating solutions with AI. Algorithms for machine learning - a subsidiary of AI provides solutions for businesses with automation and predictive approaches.

Three approaches to turn websites intelligent are: Supervised learning – one, algorithms learn from data on a website under human tutoring, and deliver effective interaction with users.

Two - Unsupervised learning – An AI model integrated with the website analyzes real-time data, processes, and delivers intelligent responses to user requests.

Three - Reinforced learning improvises information from the website. The reinforced learning approach will assess the user problem and provide solutions specific to the user. Reinforced learning demands a higher level of AI personalization.

Chatbots

A Chatbot is a software application that uses natural language programming and creates human to human interactions. Chatbots are particularly useful in after-sales support for service providing banks and companies.

Chatbots merge cognitive intelligence and voice recognition technologies. The innovation and development of Chatbots are somewhat underrated until now.

A brilliant form of cognitive computing model, bot's aggregate data from users through a series of questions. Analyze this data, and smartly come up with product solutions. E.g.: for assistance in banking issues, the bank's chatbot will request information through leading questions and understand the issue.

The bot will then resolve the issue on its own or escalate the issue to a human higher authority. Very many issues are resolved at the chatbot's end. Instant solutions through chatbots are a major boost to excellent customer service the world over.

Internet of Thing (IoT)

The Internet of things (IoT) is the network of physical objects — "things"—that are embedded with

sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the Internet.

Internet of Things or IoT has seen phenomenal growth over the years. IoT has impacted most business domains very quickly in the past few years such as industrial automation, home automation, and healthcare tracking device.

IoT is the present and the future of web development for web tools to track data from IoT-based smart devices.

The IoT market growth expected to exceed \$1.6 Trillion by 2022, mainly driven by growth in the development of web tools for fitness bands, smartwatches, and many other smart devices built on innovative IoT-based smart technology. IoT-based web development solutions greatly enhance business processes for organizations.

IoT technology demands the use of serverless technologies. Deployment of cloud technologies lowers loads on servers making it possible to render speedier loading websites and apps.

Accelerated Mobile Pages (AMP)

Accelerated Mobile Pages are optimized for mobile web browsing and intended to help webpages load faster.

Accelerated Mobile Pages completely differ from your average PWAs. AMP's provide a higher user experience within basic features. The primary feature of AMP is the speed, fast loading website pages developed through plugins.

The AMP framework consists of three components: AMP HTML, which is standard HTML markup with web components; AMP JavaScript, which manages resource loading; and AMP caches, which serve and validate AMP pages.

AMP plugins are popular for enabling a great user interface without complex coding. AMP is a readable web page that makes the mobile-friendly experience a reality.

Single Page Applications (SPAs)

A single-page application (SPA) is a web application that interacts with the user by dynamically rewriting the current web page with new data from the web server, instead of the default method of the browser loading entire new pages. The goal is faster transitions that make the website feel more like a native app.

As the API (Application Programming Interface) technology gets more advanced, SPAs grow stronger. Single Page Applications are quite attractive as they provide instant feedback to a user than slow loading websites.

From Facebook to Google Drive, SPAs find their application across the technology giants. SPAs provide a faster web experience for users with interactive features.

Voice Commerce

Voice commerce reduces users' dependence on hardware and allows us to use voice commands to search and purchase products online.

Ease of use is the attraction for voice commerce, a device with a voice assistant and your voice is all you need to browse, choose and make a purchase. Voice commerce allows you to multitask – shop while you are cooking or cleaning or even while you are driving.

Smart speakers have propelled e-commerce to great heights through the integration of speech recognition and cognitive intelligence. Voice commerce-driven sales are set to reach a remarkable \$40 billion by 2022. Integrating voice commerce is a major web development opportunity.

Conclusion

Your website is the face of your business, always-on, competing with all the other websites in the domain, providing information 24/7.

With over 1.75b websites active throughout the world businesses fiercely compete to stay out of the clutter engage and impress visitors.

Web development trends and technologies are highly advanced in 2021 with much more development expected in the near future. Client businesses, as well as web development teams, align goals with current trends and techniques to stay relevant and ahead in the game.



Media Contact

VistasadIndia

info@vistasadindia.com

+91 80 4128 8546

Source: vistasadindia

See on IssueWire