**What is Backend Development?**

Backend Development refers to the server-side development of the web application. It is the part of the application where the server and database reside and the logics is build to perform operations. It includes the main features and functionalities of the application on the server. Programming languages for the backend are mainly Node. JS (for JavaScript), Django (for Python), Spring (Java), etc.

What are the advantages of using Node JS?

A [User Survey on Node.js](https://nodejs.org/en/user-survey-report/) highlights its positive impact on the business primarily because of increased developer productivity and reduced costs. The possibility of Javascript for both front-end and back-end programming is at the core of Node.js advantages. Here’s more:

**1. Robustness**

Backend development with Node.js offers multiple advantages over full-stack JavaScript development. These essential benefits include speed, better efficiency, improved productivity, code sharing, easy knowledge transfer, and many free resources and tools.

On top of it, it is a part of the MEAN stack (MongoDB, Express.js, Angular, and Node.js) which are today the most crucial part of web development.

**2. Fast-processing**

You can count on Node.js to be fast, reliable, and safe. Google Chrome’s V8 Javascript engine powers Node.js. The V8 library is written in C++ and compiles the JS functions into machine code in no time.

Check yourself how fast the V8 is[here](https://v8.dev/blog/10-years). Another reason which makes Node.js fast is its suitability with the micro-service architecture.

**3. Easy learning curve**

For a long time now, Java script has been a popular choice for front-end development. However, since Node.js is based on Javascript, it is easier for designers and front-end developers to grasp and use it for the backend. As a result, it requires less effort and saves time learning server-side programming.

**4. Large active community**

Another key benefit of using Node.js is its sizable active community that you can find on[GitHub](https://github.com/nodejs) or Stackoverflow. Being an open-source project, tons of Javascript developers contribute to the growth of this environment.

Node.js is governed by the [OpenJS Foundation](https://foundation.nodejs.org/" \t "_blank) that supports its enhancements. Also, you have access to a lot of reusable code for your mobile or web application development project. You can also review codes and find answers if you get stuck in these communities.

**5. Better ecosystem**

The npm registry in Node.js offers thousands of free code packages for you to reuse. The npm ecosystem is open to all and free of cost. This plays a vital role in advancing technology and makes the Node.js ecosystem rich.

**6. Easy & Fast Scalability for Modern Apps**

The true advantage of the Node.js environment is scalability, better than any other backend platform. Node.js allows developers to scale their applications both vertically and horizontally.

Since each node in Node.js works around an event, multiple nodes can run simultaneously and communicate independently. On top of it, you can add limitless numbers of nodes to the Node.js core. The room to grow your application is the crucial benefit of Node.js.

**7. Cross-platform development**

Discussing the advantages of Node.js brings to light its cross-platform support. It’s common these days where a mobile app links to a desktop app. Node.js can be used as cross-platform mobile development for Cordova, Apache, Titanium.

In simple words, you can directly transfer your mobile application code to the desktop app. Isn’t it great? You can save significant time and money.

**8. Access a single programming language**

Javascript is a popular front-end language, and Node.js uses Javascript for backend programming. So now developers don’t have to learn and invest in different server-side programming and use Javascript for both.

Node.js has made it flexible and easy for developers to switch from front-end to back-end. Also, businesses can hire Javascript developers for the entire development project.

**9. Efficient caching with better flexibility**

In discussing the advantages of Node.js, caching facility is a crucial benefit. Node.js supports single module caching. Therefore, as the request is made to the app, the first module is cached in-app memory. This allows the application to run efficiently and load faster.

**10. Highly extensible with full-stack Javascript**

With the javascript foundation, Node.js developers get extensive support for tools. In addition, Node.js opens the door for front-end developers to do back-end programming. Node.js made full-stack Javascript a reality.