

## WEB APPLICATION PERFORMANCE ANALYSIS

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Speed counts on mobile devices, but the perception of speed is just as important. A web application, like any other product, has features that directly or indirectly influence the business of owners. These characteristics are dictated primarily by the technological level of the tools available online, but also by the level of skill of the team carrying out the project. According to international studies, most people (75%) pay attention primarily to the loading speed of the web application. The next features in order of importance would be the accessibility of the information (66%), the adaptability of the interface (61%) and how attractive the design is (24%).

With the advent of high-speed internet connections, users have higher expectations from the performance of web applications. Search engines have taken this into account and have begun to develop algorithms that take into account the performance of search results. At the same time, the potential site can be the customer's first contact with the company, so a pleasant user experience is needed.

To meet market requirements, we have several optimization methods such as: minimized source code, optimized images by size, a clean source code, excluding unnecessary source code, gzip data compression, API with excellent response time, etc. All these practices are welcome, but without a correct choice of the type of rendering, their efficiency decreases dramatically.

Following the study, we highlighted the types of rendering and their characteristics to understand how web applications can be optimized at the highest level.