



# OPTIMISING WEB RESOURCES TO EXPAND DIGITAL ACCESSIBILITY

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The importance of optimizing loading speed is also confirmed by global digitalization trends, as the number of mobile internet users continues to grow. In conditions of limited network bandwidth, especially in regions with slow internet connections, the speed at which web pages load is a key indicator of website performance.

The search for methods to optimize web page loading speed has become an important area of research in both academic circles and practical applications. Leading scientific institutions and organizations, such as W3C, as well as corporations like Google, Microsoft, and Meta, are actively working to improve standards, technologies, and tools to ensure the fast loading of web content.

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## **The main criteria for selecting optimization methods in this study are:**

- effectiveness in reducing page loading time;
- compatibility with existing project infrastructure and technologies;
- minimization of negative impact on content quality;
- ease of implementation and maintenance of methods.

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# Basic methods

- Reducing the number of requests
- Image optimization
- Lazy loading of content
- Asynchronous loading of scripts
- Using CDN
- Combining and minifying resources
- Caching

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