



Person-Machine Interaction

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UX : Case study

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Introduction

The objective of this work is to compare two user interfaces of search engines, focusing particularly on user experience (UX) and user interface (UI) aspects of Yahoo! and Google. We will examine the strengths and weaknesses of these interfaces to determine, based on a comparative case study, which search engine might be considered "better" in terms of user-friendliness and satisfaction.

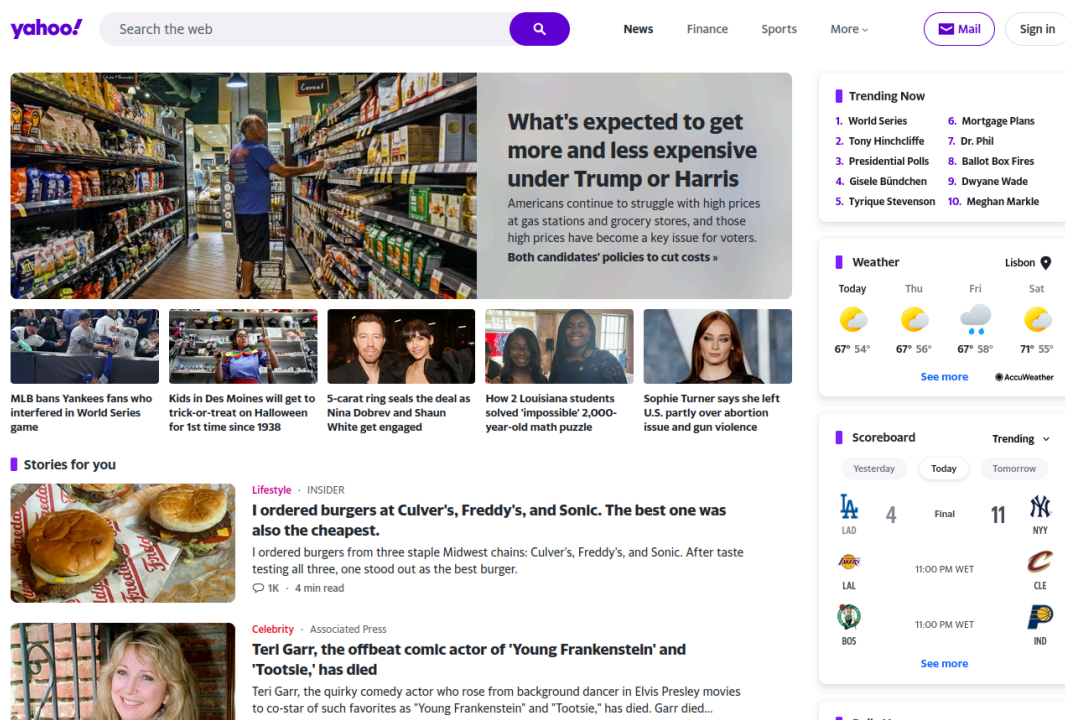
1. Choice of Topic

Which is the best search engine? While this may seem like a technical question, it actually raises many issues related to user interface, ease of access to information, relevance and quality of results, and the overall user experience.

I chose this subject because UX and UI play a fundamental role in the choice of a search engine : I personally wanted to switch from Google search engine to another one more ethical (Ecosia) but struggled both with the UX and the UI of the new one.

This work primarily focuses on Yahoo! and Google, which represent two different approaches to user experience.

2. Case Study: Yahoo!

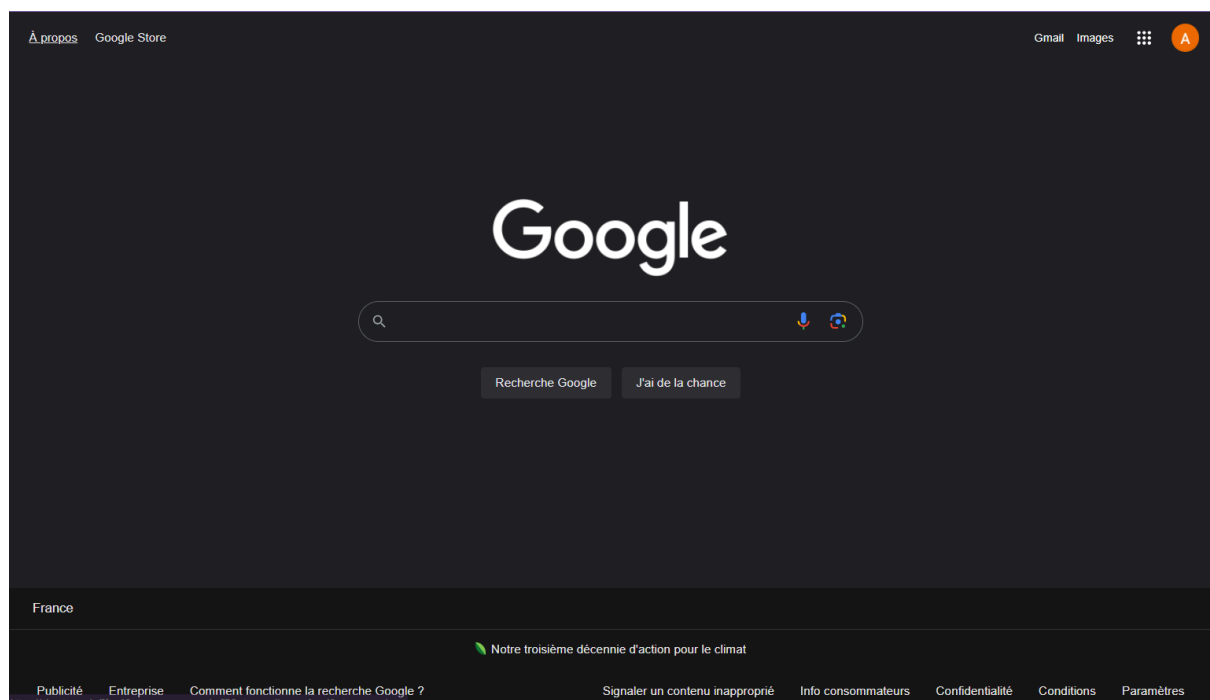


Yahoo! represents an interface where an abundance of information can quickly overwhelm the user. The main points observed in our analysis are as follows:

1. **Excessive Information:** Yahoo!'s homepage displays a large number of visual and textual elements, including ads, news, and additional links, which dilute the primary search function. There is also a lack of design coherence between these elements : they are all of different sizes, which makes it difficult to read the page as a whole.
2. **Coherence and Purpose:** The information overload makes it difficult to identify the main purpose of the page, which is to search for information. This dispersion creates a lack of hierarchy and coherence in the suggested content.
3. **Irrelevant Content:** Sometimes, it's difficult to determine which sports or topics are being covered in the news sections due to the confusing organization of information. The information is also not very clear : sport results are detailed but if you don't know the teams presented, you can't even understand which sport we are talking about.
4. **Overwhelming Advertising:** Approximately 90% of the page is occupied by ads and secondary information, which limits access to the search function.

These elements show that Yahoo! struggles to present a simple, user-centered interface, which negatively impacts the search experience.

3. Case Study: Google



Google, on the other hand, exemplifies a minimalist interface that values UX through simplicity and accessibility:

1. **Minimalism and Visual Hierarchy:** Google focuses almost exclusively on the search function. The homepage is clean, with the logo at the top, followed by the search bar, with everything else secondary. This visual hierarchy naturally guides the user towards the search action.

2. **Simplified Navigation:** The interface is reduced to essential options, well-organized and free from excessive elements. This simplifies navigation, making the user experience more pleasant and intuitive.
3. **Language Preferences:** Google offers customization of language preferences, allowing more inclusive access tailored to user needs.
4. **Accessibility:** The interface adapts to dark mode and contrast options, thus catering to the diverse needs of users, including those with visual impairments.

Overall, Google has successfully designed an interface that efficiently guides the user, allowing them to focus solely on the main goal: searching.

4. Discussion: Quality of Results and Future Perspectives with Generative AI

A recent study by Janek Bevendorff, Matti Wiegmann, Martin Potthast, and Benno Stein in 2024 shows that the quality of results returned by several search engines, including Google, is declining due to increasing SEO spam. This raises a crucial question for the future of search engines: **Will generative AI replace traditional search engines?**

The quality of a search engine does not solely depend on its user interface but also on the relevance of its results. As advancements in generative AI progress, these technologies could transform the way we access information by providing more personalized and contextual responses, potentially eliminating the need for traditional search.

Conclusion

In conclusion, while user interface is an essential factor in user experience, it is not everything. Google stands out with a simplified and efficient interface, while Yahoo! presents a more complex and cluttered page, which can harm the user experience. However, relevance of results remains a common challenge for both platforms.