DELHI
**businessline.**
TUESDAY - APRIL 15 - 2025

# Indian web browsers

## The challenge is to create a local ecosystem

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Last year, the government announced the Indian Web Browser Development Challenge and invited Indian entities to develop an indigenous web browser. The results were recently announced, and *Ulaa*, a browser developed by Zoho Corp, won the top prize, beating 57 other entries.

Crowning a browser is the easy first step. The difficult summit to scale is to gain widespread acceptance in a market dominated by browsers from big-tech firms such as Google, Apple and Microsoft. Can India's browser meet the competition in its home ground, even before taking on competition outside India?

India's browser market is dominated by Chrome (89 per cent), while Safari, Firefox and Edge together account for 8 per cent. This lopsided dominance arises from their strong presence in the PC and mobile operating system (OS) space. Google bundles Chrome with its Android OS, Apple bundles Safari with macOS, and Microsoft bundles Edge with Windows. To disrupt this market equilibrium without a popular operating system in tow, Ulaa or any other indigenous browser would require much more firepower than just the Made-in-India tag.

At its core, Ulaa is not designed from scratch but is based on Chromium, an open-source version of Google's Chrome browser. Though Ulaa's core strengths are privacy and data protection, and it allows several compartmental browsing modes, these features alone do not make it uniquely Indian.

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India needs browsers that can bridge its diversity by adopting Indian languages first. They must offer webpage translations on the fly and allow seamless text-to-translated-speech from one language to another. Though popular browsers allow some automated translation, the user experience is far from seamless.

Achieving this will be a long haul and requires significant investment in research in artificial intelligence and machine translation technologies. The India AI Mission must work with academia and industry to focus on this goal as well.

This goal will aid not just browsers but other software made for India. For Indian browsers to compete, incorporating localisation features that address


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India's diversity is the key. Ulaa is not the first browser to be made in India. The earlier ones, Epic (launched in 2010) and Veera (launched in 2023), are yet to challenge the dominant players like Chrome as they lack India-specific linguistic toolkits and features. Unlike Epic and Veera, Ulaa is in a better position to challenge the leaders as it is backed by Software-as-a-Service major Zoho Corporation.

Launching a new browser is a good start. Updating it as myriad operating systems evolve will require technical finesse and financial muscle. Browsers earn revenue through advertisements, routing queries to specific search engines, or cross-subsidising from other revenue sources. It is unclear how Zoho will maintain commercial viability in the long run. Enterprise editions can earn revenue, but other sources might also be required.

Recent data from the US indicate that the volume of internet traffic originating from apps already outstrips the traffic from browsers. Ulaa must chart its course at a time when it appears that the end of browser era, or at least its transformation to a more restrictive role, has begun. Despite the current healthy market revenues, this will be a long-term challenge.

The first internet browser was launched in 1991, and its source code was released in 1993. With several open-source browser projects available for adoption, the real test of today's browser is not its core engine or design but creating a local ecosystem around it, making it commercially viable and a popular tool across PC and mobile platforms. These are significant challenges for any India-built browsers. It remains to be seen if Ulaa can break new ground on this front and dent the $100 billion plus global market for browsers.

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