01 Context

Long-form reading fosters comprehension, critical thinking, and empathy but demands sustained attention, making interruptions both common and disruptive. These breaks hinder understanding, delay progress, and diminish the reading experience. While existing work has sought to reduce such effects, advances in AI open opportunities for personalized, dynamic support. Yet, research remains sparse, with only early evidence suggesting AI's promise and reader acceptance.

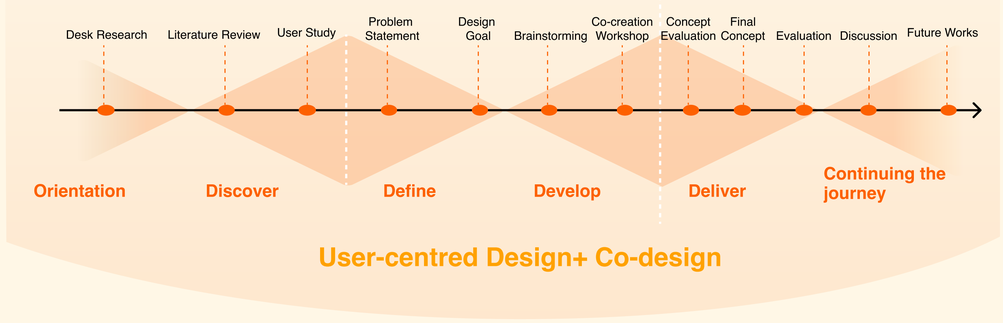
02 Research Question

How can we design interactions that leverage AI to better support readers in managing interruptions during long-form reading?

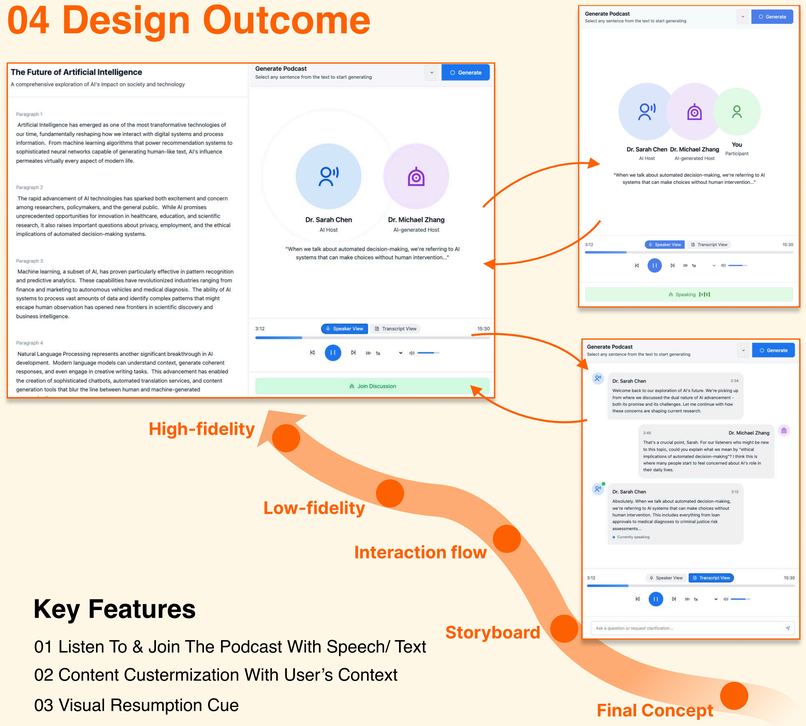
PaperCast

Exploring AI-powered interaction for re-entering long-form reading

03 Approach



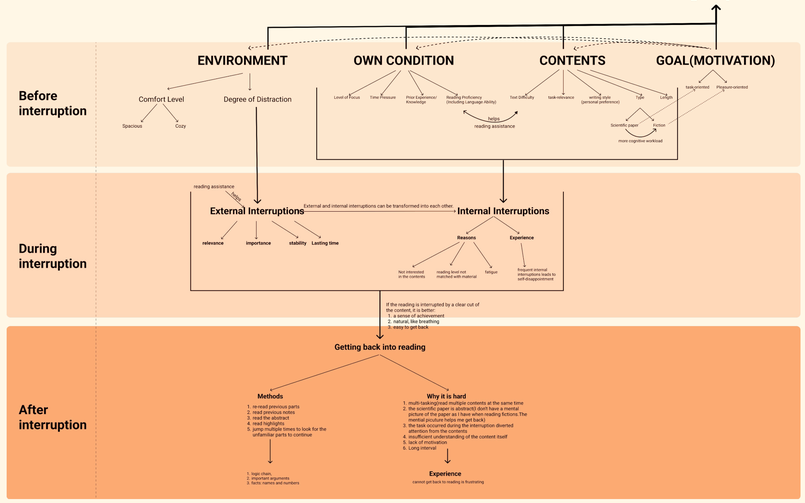
04 Design Outcome



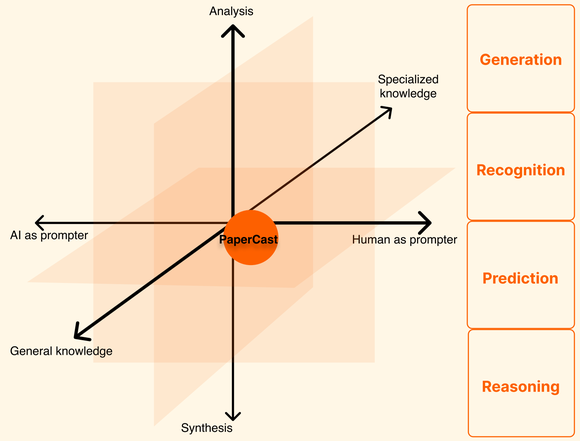
Key Features

01 Listen To & Join The Podcast With Speech/ Text
02 Content Custermization With User's Context
03 Visual Resumption Cue

05 Research Insights



06 AI as a consultant in design



07 Design Recommendations

Layered Information: Balancing Accessibility and Overload

In scientific paper reading, accessible AI-generated information is essential for user trust, yet excessive detail risks overload. A layered approach—presenting key insights upfront while keeping secondary details on demand—helps balance usability with trust.

Seamless Switching Across Modalities

The podcast adds an auditory channel to visual reading, so smooth transitions—like visual resumption cues—are essential. This lets users switch easily between listening and reading while reducing friction.

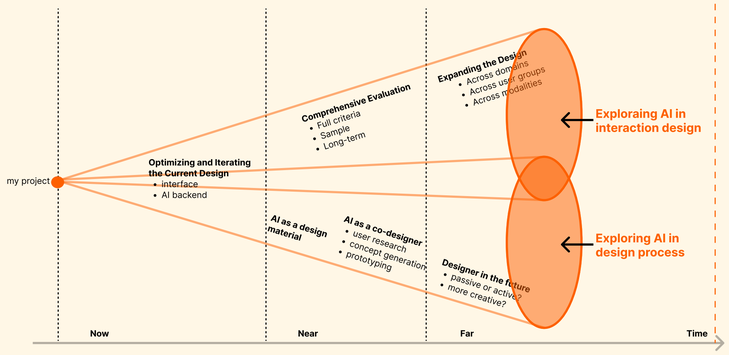
Shift from Passive to Active Interaction

The AI-generated podcast lets users move from passive listening to active engagement. Asking questions or joining discussions in real time supports learning and creates a stronger sense of support and also boosts comprehension.

User-Need–Based Input Customization

Tailoring inputing interface to readers' background, goals, or proficiency simplifies setup and makes AI outputs more stable and predictable, ensuring a consistent user experience.

08 Future work



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7th September 2025
Design for Interaction

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