



SHRI VILEPARLE KELAVANI MANDAL'S
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING
(Autonomous College Affiliated to the University of Mumbai)
NAAC ACCREDITED with "A" GRADE (CGPA : 3.18)
DEPARTMENT OF INFORMATION TECHNOLOGY

**COURSE CODE: DJS231LHSX06****DATE: 18/08/24****COURSE NAME: Design Thinking****CLASS: I2-1****LAB EXPERIMENT NO. 1****AIM / OBJECTIVE:**

To conduct market and industry research and analyse case studies demonstrating the application of design thinking.

DESCRIPTION:**Case Study 1: OpenAI – AI Industry****What is OpenAI?**

OpenAI is an artificial intelligence research and deployment company, best known for developing advanced AI models such as ChatGPT and DALL-E. Their mission centers on ensuring that artificial general intelligence benefits humanity broadly and safely.

Problems Before Design Thinking Application

- **User-Centric Product Design:** Initial AI models were highly technical and challenging for non-experts to use effectively.
- **Understanding User Needs:** There was a gap in translating diverse user feedback into actionable iterative improvements.
- **Limited Creativity in Solutions:** Early development cycles sometimes lacked creative approaches to address new use cases.
- **Scalability Challenges:** Making sophisticated AI tools accessible and scalable for widespread adoption was a major hurdle.



SHRI VILEPARLE KELAVANI MANDAL'S
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING
(Autonomous College Affiliated to the University of Mumbai)
NAAC ACCREDITED with "A" GRADE (CGPA : 3.18)



Design Thinking Principles Applied

- **Empathy:** OpenAI engaged with users from various backgrounds, collecting feedback through conversational tools like ChatGPT to understand pain points and aspirations.^{[1][2][3]}
- **Define:** Problems were reframed from the user's perspective, such as, "How might we make AI intuitive for a student or a business expert?"
- **Ideate:** OpenAI encouraged brainstorming on diverse applications. Language models were leveraged to auto-generate ideas, simulate scenarios, and even create user personas for better product alignment.^{[4][2][5]}
- **Prototype:** Rapid prototyping enabled OpenAI to release experimental products and features (like new conversation prompts or API tools) and gather immediate feedback from global users.^{[3][1]}
- **Test and Iterate:** User feedback was used to fine-tune AI behavior and user experience. A/B tests of new features and iterative updates are routine, helping refine capabilities and usability.^{[1][3]}
- **User-Centric Design:** From interaction design (chat interfaces) to documentation, every aspect is regularly updated based on user insights.^{[2][1]}

Changes/Improvements Observed

- **Greater Accessibility:** ChatGPT democratized AI, making powerful models available to a wide audience and streamlining user experiences.^{[3][1]}
- **Rapid Ideation and Product Development:** Generative models accelerated idea creation, enabling OpenAI to quickly identify new use cases and feature improvements.^{[5][2]}



**SHRI VILEPARLE KELAVANI MANDAL'S
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING**
(Autonomous College Affiliated to the University of Mumbai)
NAAC ACCREDITED with "A" GRADE (CGPA : 3.18)



- **Personalization:** Continuous learning from real conversations and feedback allowed OpenAI to make its models more helpful and personalized.^{[1][3]}
- **Integration Support:** Partners can now use OpenAI APIs to build their own tools (Power Platform integration, custom applications), fostering innovation across industries.^[4]
- **Scalability:** OpenAI's tools are cloud-based and scalable, supporting millions of users globally.

Conclusion

By applying design thinking, OpenAI shifted from a technology-driven to a truly user-centered approach. Empathy-driven research, iterative prototyping, and responsive problem solving have helped OpenAI's tools evolve to meet user needs and fuel AI adoption across multiple sectors.^{[2][4][3][1]}

1. <https://www.innovationtraining.org/using-ai-to-learn-what-is-important-to-learn-about-design-thinking-chatgpt-open-ai/>
2. <https://journals.hs-offenburg.de/index.php/urai/article/download/22/4/100>
3. <https://www.youtube.com/watch?v=XSSKwXfVYik>
4. <https://www.linkedin.com/pulse/openai-meeting-powerplatform-design-thinking-nalin-sns>
5. <https://community.openai.com/t/ideation-a-gpt-to-help-with-creative-thinking/679740>



**SHRI VILEPARLE KELAVANI MANDAL'S
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING**
(Autonomous College Affiliated to the University of Mumbai)
NAAC ACCREDITED with "A" GRADE (CGPA : 3.18)



Case Study 2: Netflix – Entertainment Industry

What is Netflix?

Netflix is a global entertainment company and the world's leading streaming platform for movies and series. It started as a DVD rental service and transformed the way audiences consume content globally.

Problems Before Design Thinking Application

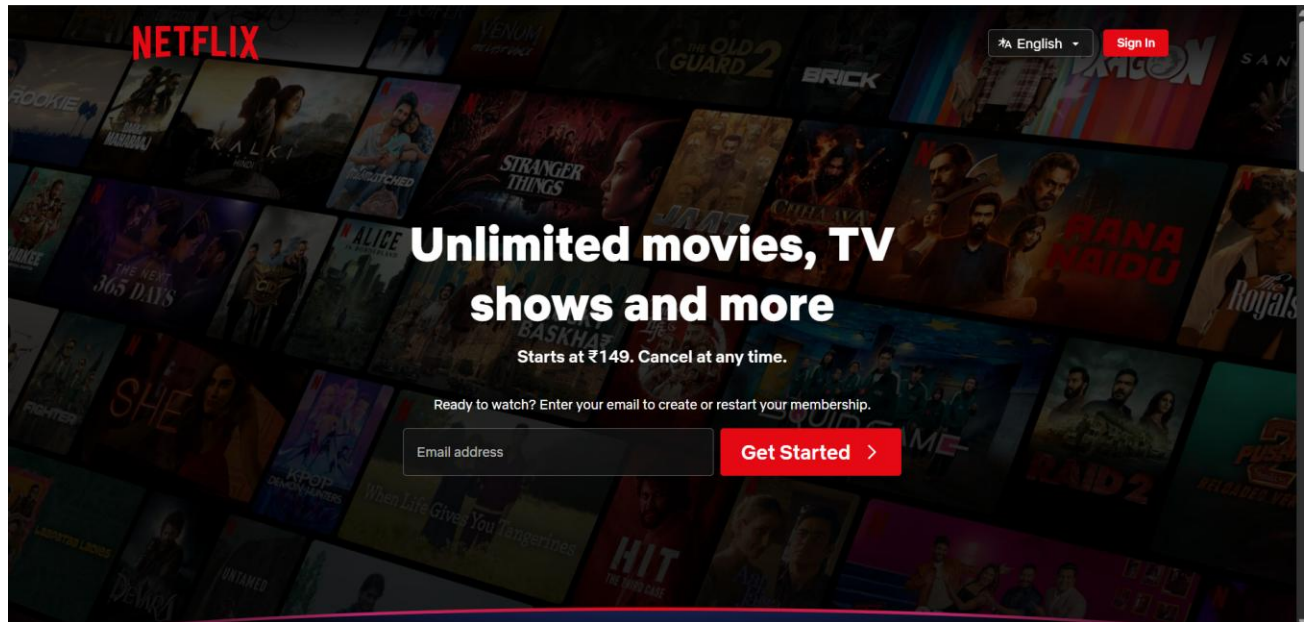
- **Content Discovery:** Users struggled to find new shows that matched their interests.
- **Personalization:** Recommendations often felt generic and did not reflect individual tastes.
- **User Experience Issues:** Navigation and streaming reliability needed major improvements.
- **Global Scalability:** Diverse user bases required localization and adaptation for different markets.
- **Innovation Stagnation:** Netflix sought creative ways to maintain its competitive edge as streaming adoption increased.

Design Thinking Principles Applied

- **Empathy for Users:** Netflix conducted deep user research, leveraging data analysis and direct feedback to understand diverse needs. This led to improvements such as personalized recommendations and intuitive interfaces.^{[6][7]}
- **Define:** Netflix identified key user challenges like “I want to watch something new and interesting without frustration” and reframed technical problems as user stories.^[6]
- **Ideate and Brainstorm:** Cross-functional teams generated creative ideas for new platform features, e.g., auto-play, skip intro, and smart downloads, to improve convenience and engagement.^{[8][7][6]}
- **Prototyping:** Netflix routinely launches prototypes and beta features (low-fidelity wireframes, experimental layouts) for rapid testing and feedback.^[6]
- **Testing and Iteration:** A/B testing is central, with continuous refinements driven by data and user feedback. Features that show improvements in engagement or retention are scaled up.^{[7][6]}
- **Global and Inclusive Design:** Design thinking helped Netflix localize its platform with multi-language options, cultural sensitivities, and accessibility features such as captions and audio descriptions.^[6]



SHRI VILEPARLE KELAVANI MANDAL'S
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING
(Autonomous College Affiliated to the University of Mumbai)
NAAC ACCREDITED with "A" GRADE (CGPA : 3.18)



Changes/Improvements Observed

- **Personalized Recommendations:** Sophisticated algorithms now offer tailored suggestions, making content discovery enjoyable.^{[7][6]}
- **Enhanced User Experience:** Intuitive navigation and reduced buffering have improved engagement and satisfaction.^{[8][6]}
- **Rapid Innovation:** Netflix introduces features like auto-play and skip intro, directly based on user needs and feedback.^{[7][6]}
- **Scalability:** The platform is optimized for global audiences, with regional content offerings and accessibility improvements.^[6]
- **Competitive Advantage:** Ongoing innovation and user-centric solutions have positioned Netflix as a leader in the entertainment industry.^[7]
- **Continuous Feedback Loop:** Data-driven design has created a fast-moving feedback cycle for sustained innovation.^[6]



SHRI VILEPARLE KELAVANI MANDAL'S
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING
(Autonomous College Affiliated to the University of Mumbai)
NAAC ACCREDITED with "A" GRADE (CGPA : 3.18)



Conclusion

Netflix's adoption of design thinking has been pivotal for its continued growth and industry leadership. Empathy, prototyping, and iterative testing fuel personalized user experiences and ongoing innovation. The company's focus on user-centric design remains key to differentiating Netflix and maintaining its market dominance.^{[8][7][6]}

References

Reports for both companies are based on publicly available case studies and industry commentaries that analyze the intersection of **AI and design thinking** (OpenAI) and **entertainment and design thinking** (Netflix).^{[5][4][2][3][1][8][7][6]}

*
**

6. <https://www.designgurus.io/answers/detail/what-is-netflix-design-thinking>
7. <https://worlddesigncouncil.org/blog/netflix-s-unstoppable-evolution-through-design-thinking/>
8. <https://www.dt-seminar.net/content/summer2021/timeline/design-thinking-netflix/>