Netflix Case Study

"I Just Watched Vanilla Sky... Now What?"

Presented by Komal Fulara

Introduction

Netflix is one of the most popular streaming platforms globally, with a vast content library and strong personalization features. However, users often face a frustrating challenge: after watching a unique or emotionally complex movie, it becomes very hard to find something similar to watch next.

This case study explores the gap between Netflix’s current recommendation engine and the emotional or thematic needs of users — and proposes a solution that helps users discover content based on mood, theme, or concept, not just genre or tags.

🎯 Problem Statement

“I just finished Vanilla Sky — a surreal, psychological film about dreams vs. reality. I want more movies like this... but I don’t know where to start.”

While Netflix has categories and a keyword-based search bar, it doesn’t support emotion-based discovery. Users who want more content similar to what they just watched often:

- Ask friends for recommendations
- Search on Google or Reddit
- Visit third-party platforms like IMDb or Letterboxd
- Get frustrated and leave the app

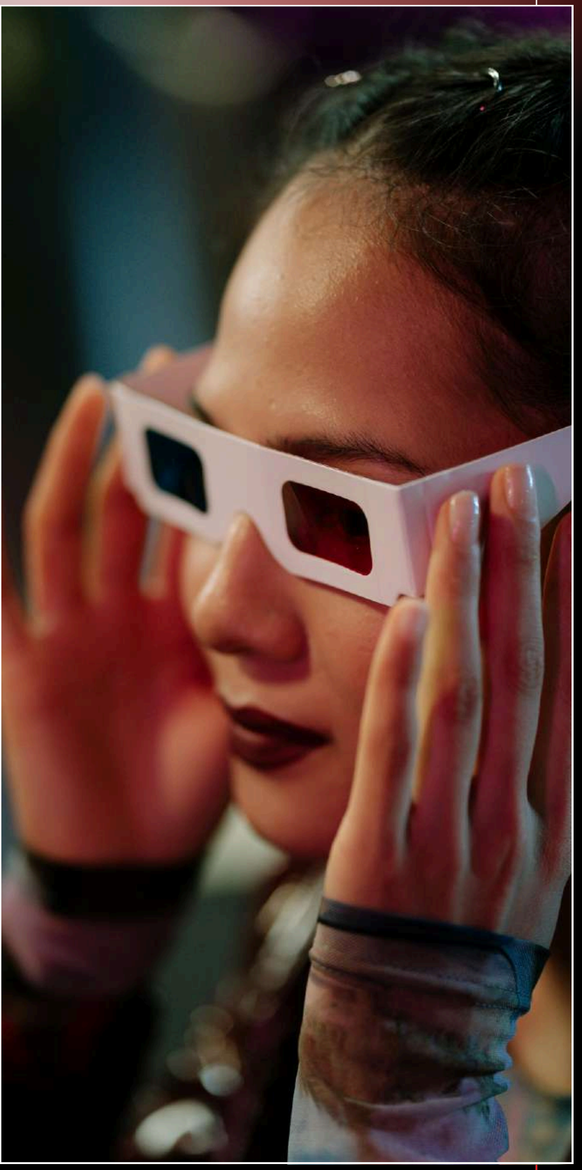
This results in a broken content discovery flow, which impacts user engagement and retention.

👩‍💻 User Persona

User: Komal
Recent Watch: Vanilla Sky
Mood After Watching: Curious, thoughtful, emotionally stirred
Wants Next: Movies that are mind-bending, surreal, and explore similar ideas like dreams vs. reality
Experience: Searches “Vanilla Sky” on Netflix → only finds the same movie or unrelated thrillers.
Outcome: Leaves Netflix and asks for help on Reddit.

User: Diwakar
Recent Watch: Shutter Island
Mood After Watching: Intrigued, mentally stimulated, questioning reality
Wants Next: Movies with psychological twists, blurred lines between reality and illusion, and layered storytelling that keeps you guessing
Experience: Searches for Shutter Island-like movies on Netflix, Quora, Reddit, and other websites → finds generic thrillers, but not quite the same psychological depth
Outcome: Feels unsatisfied and overwhelmed with scattered suggestions — still searching for something equally mind-bending and immersive

💡 Proposed Solution: Search by Mood or Theme



Introduce a new discovery feature in Netflix that allows users to search or filter content based on emotional experience or deeper themes.

🔧 **Feature Ideas:**

- “Search by Mood” Mode: Toggle to choose moods like:
  - Mind-Bending
  - Dreamlike
  - Feel-Good
  - Emotionally Heavy
  - Psychological Thriller
- Dynamic Recommendations: After finishing a movie, Netflix can ask: "**Looking for more like this?"** and offer a short list of thematically similar films.
- Enhanced Search: Allow users to type queries like: **“Movies like Vanilla Sky” or “Dream vs. Reality”** and show curated suggestions.

🌟 **Why This Feature Matters**

- Gives users exactly what they’re emotionally looking for
- Reduces time spent scrolling or searching
- Keeps users inside Netflix, rather than relying on other platforms
- Builds a stronger emotional bond with the product

🚀 Achieving Mood-Based Discovery with AI & ML - Making Recommendations Smarter Every Day

1. 🧠 Introducing Mood-Themed Discovery - Let AI Feel With You

We propose an AI-powered recommendation engine that understands not just what you watched, but how it made you feel.

🔧 **How it works:**

The system uses AI + ML + NLP to analyze:

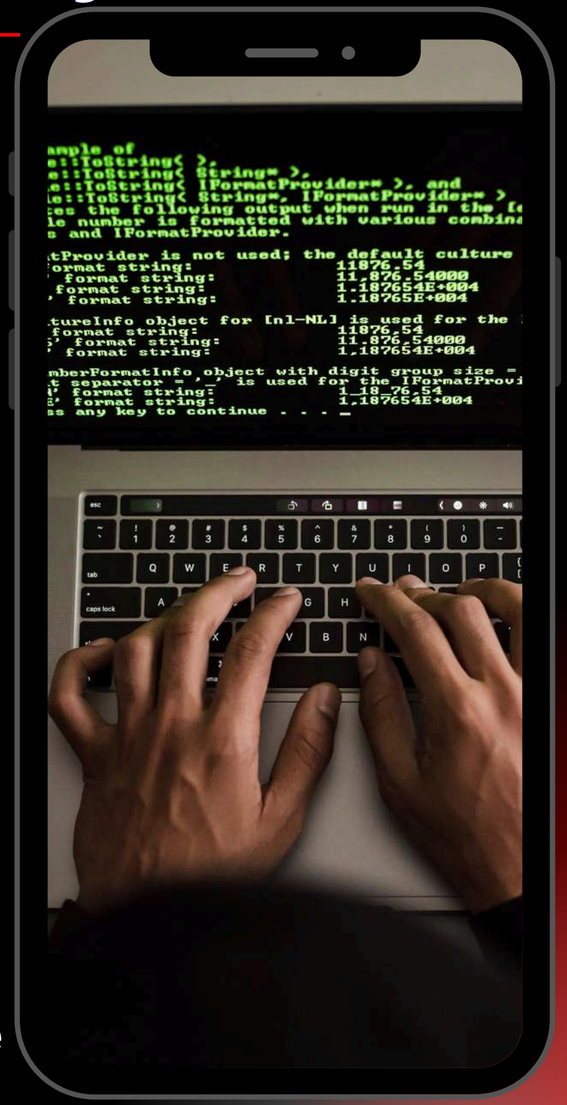
1. 📊 ML To Understand User Behavior

Machine learning tracks and learns from how each user interacts with Netflix.
These signals help the system understand what the user truly enjoys.

🔍 **Key Behavior Signals:**

- Watch Time
  ➤ Longer viewing = higher interest or emotional engagement
  ➤ Short skips or early exits = low interest
- Skips / Fast-forwards
  ➤ Skipping slow scenes may show a preference for fast-paced content
- Likes/Dislikes (Thumbs Up/Down)
  ➤ Direct feedback that trains the model about mood, style, or themes users appreciate

✅ AI uses this behavior data to build a unique “taste profile” for every user



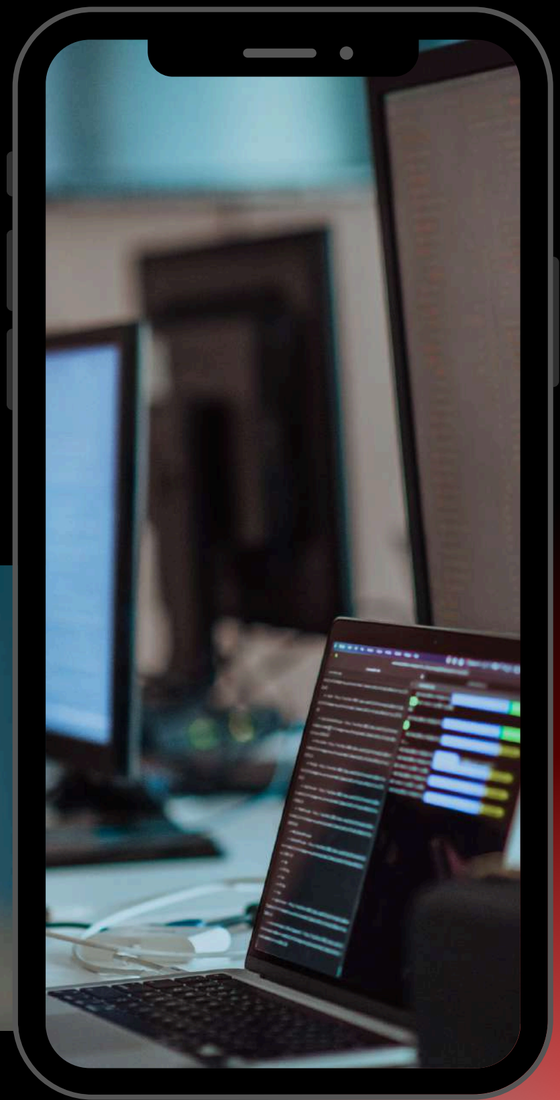
2. 🎥 ML To Analyze Movie Metadata

Every movie or show comes with metadata—basic and advanced details. AI uses this to understand the content's identity and emotional tone.

🧩 Key Metadata Elements:

- Genre & Description
  ➤ Helps categorize films (e.g., thriller, drama, sci-fi)
- Mood Tags (manual or AI-generated)
  ➤ Describes the emotional feel:
- mind-bending, eerie, intense, uplifting, slow-burn
- Cast, Director, Release Year
  ➤ Patterns in preferences (e.g., watching many movies with similar actors/directors)

✅ AI matches these elements with user preferences to find emotionally and thematically similar movies



3. 🎯 NLP on scripts & reviews

🔹 Analyzing Movie Scripts

NLP scans scripts to detect:

- Emotional tone (e.g., suspenseful, romantic, eerie)
- Themes (e.g., identity crisis, revenge, dream vs. reality)
- Plot elements (e.g., twists, character development)

➤ Example: It might recognize that Vanilla Sky has themes of dreams, confusion, and psychological conflict.

🔹 Understanding User Reviews

NLP processes viewer comments to identify:

- Keywords and phrases about how a movie made them feel (e.g., “mind-blowing,” “emotional,” “twist I didn’t see coming”)
- Sentiment (positive, negative, neutral)
- Patterns in what users liked or disliked

➤ Example: If many users describe Shutter Island as "intense and confusing in a good way," NLP captures that feedback to better group similar films.

🔄 Hybrid Filtering Approach

We combine two major recommendation techniques:

- Content-Based Filtering
- Recommends movies with similar themes, tones, or story elements
- Collaborative Filtering
- Recommends what other users with similar preferences enjoyed

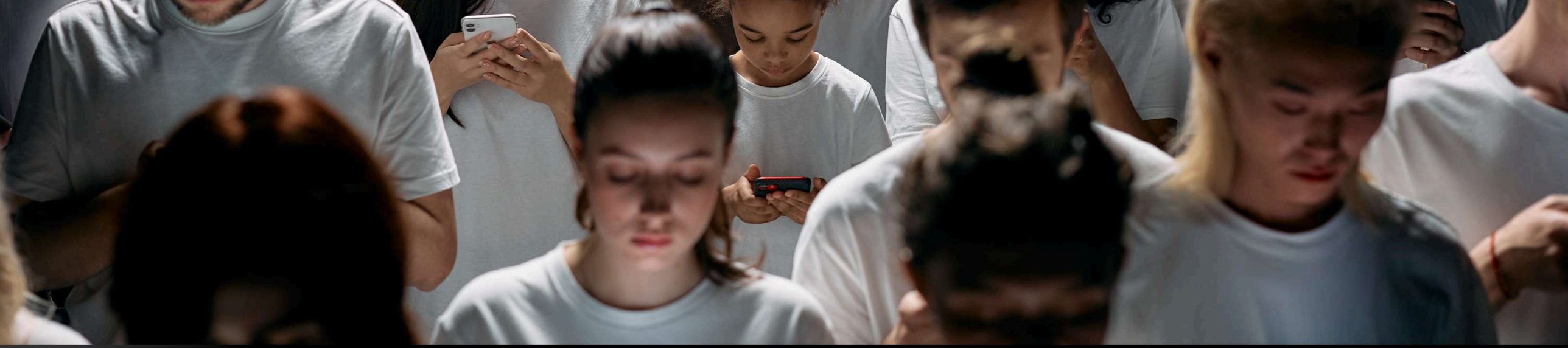
🎬 Example Scenario

User finishes: Shutter Island
Model identifies: Preference for psychological thrillers, plot twists, dark emotional tone
Recommends: Gone Girl, Prisoners, The Machinist, even if genres differ
This lets users continue a mood-driven watch journey—without manually searching or guessing.

📊 Mood-Based Discovery Dashboard (Hypothetical)

Impact Metrics: Pre vs. Post Feature Launch

Metric	Pre-Feature	Post-Feature	% Change / Insights
Avg. Session Duration (mins)	6.5	12.2	⬆️ +87% — Users are spending more time browsing content.
Search Abandonment Rate (%)	43%	18%	⬇️ -58% — Users are finding what they want more quickly.
Mood Filter Usage Rate (%)	N/A	62%	✅ Strong adoption of the new feature.
CTR on Recommended Titles (%)	11.4%	29.1%	⬆️ +155% — Relevance of content suggestions improved.
External Search Bounce Rate (%)	37%	9%	⬇️ -76% — Fewer users leave to find content elsewhere.
Avg. Watch Time (next movie)	22 min	54 min	⬆️ +145% — Users more engaged after selecting through mood.



📌 Conclusion

Netflix excels at personalization, but personalization isn’t just about what you watched — it’s about how it made you feel. By adding a “Search by Mood” or emotion-based discovery feature, Netflix can enhance user experience, reduce decision fatigue, and help users connect deeply with content that resonates.

This small change can solve a very real and common problem, improve engagement, and create a more human-centered platform.

~ by Komal Fulara

Thank You