

MOVIE RECOMMENDATION SYSTEMS

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Our Team



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GitHub + Presentation
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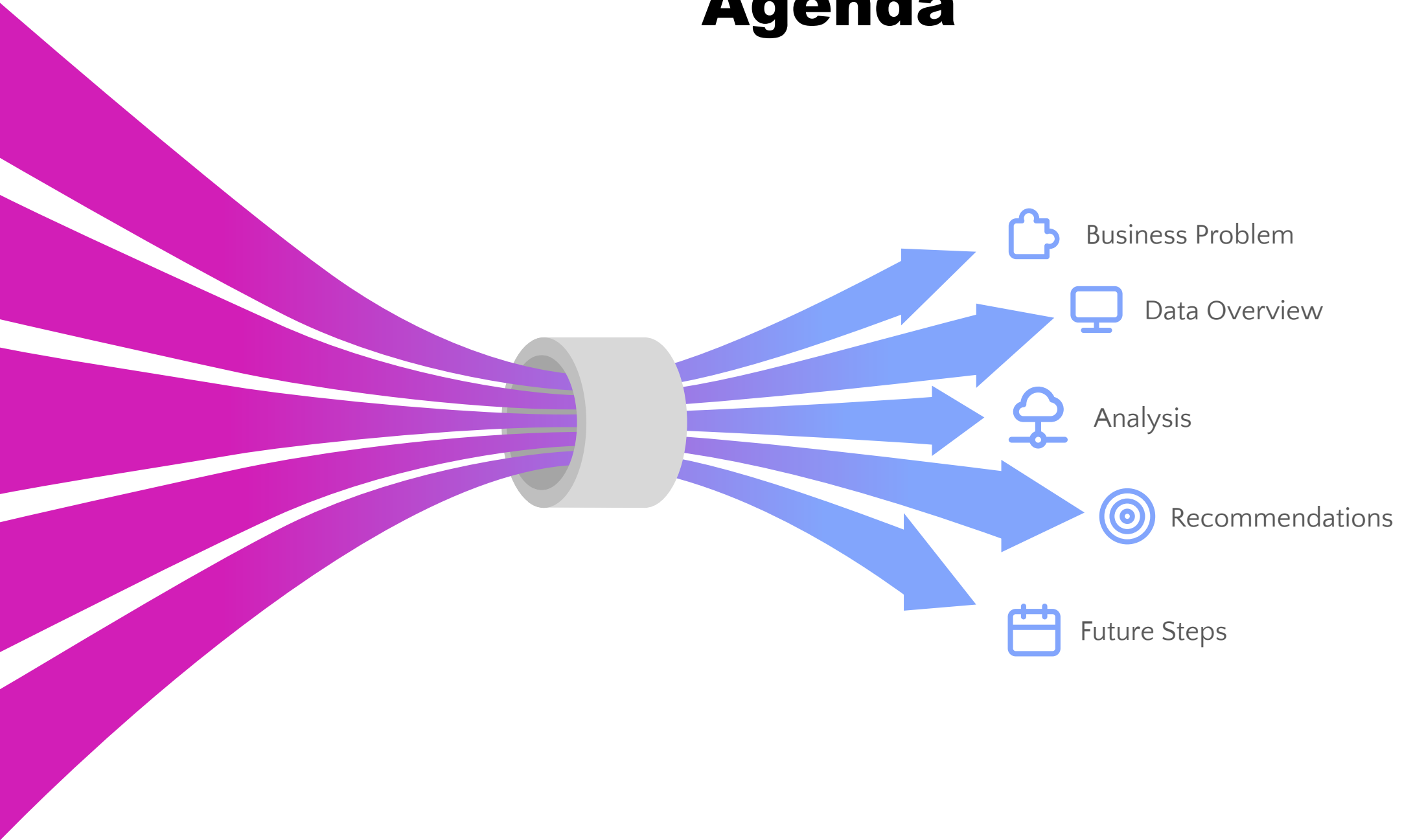


Sangyun Thom

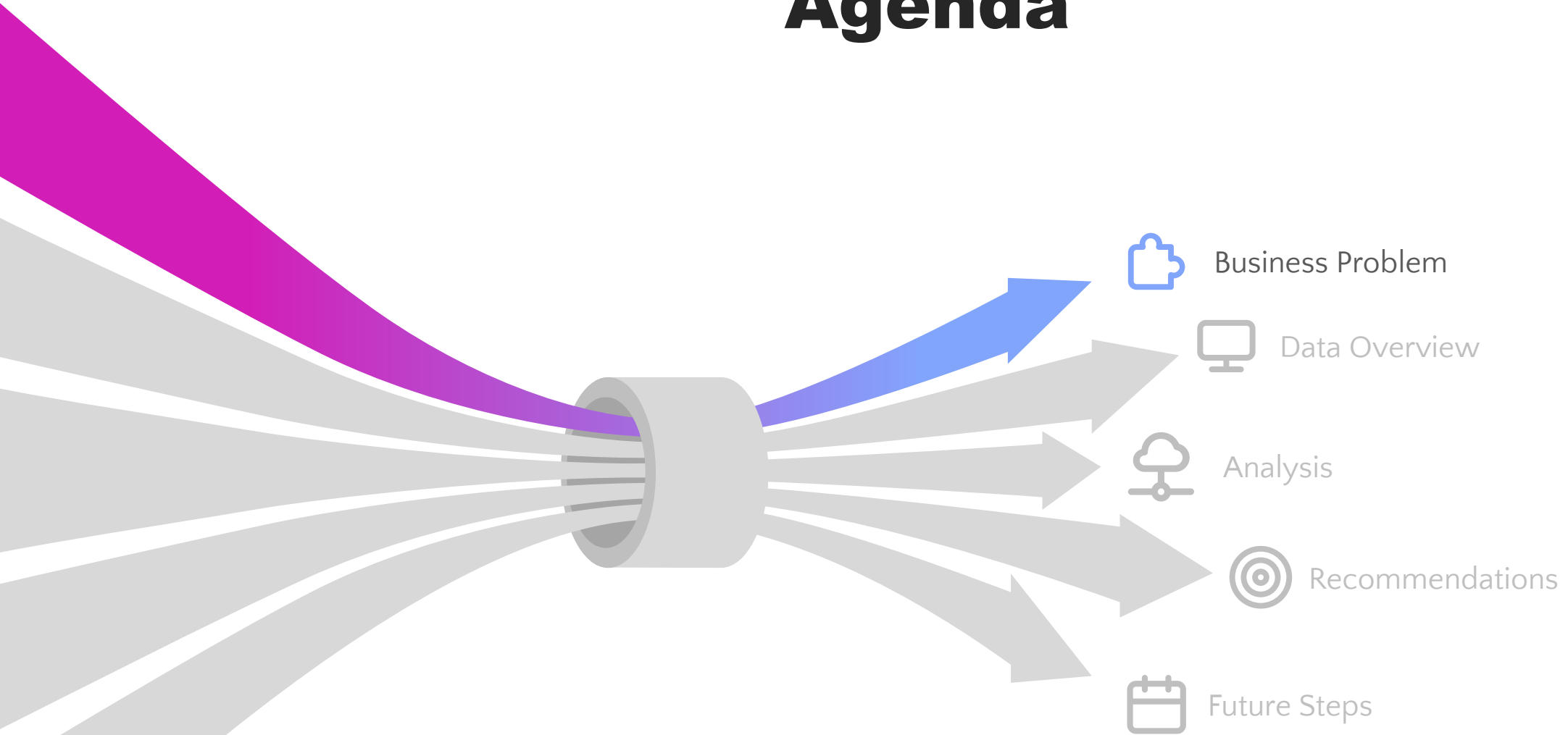
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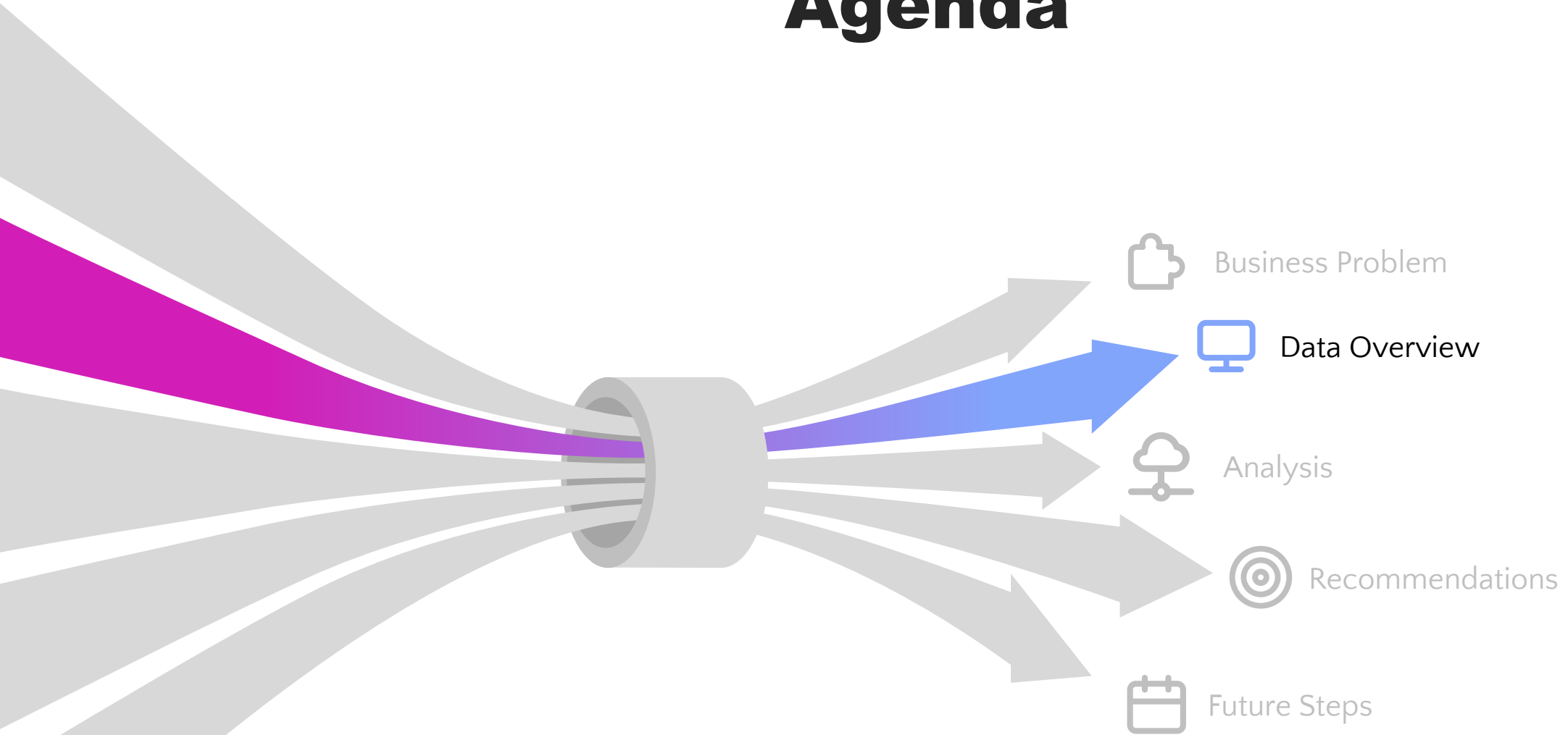
Agenda



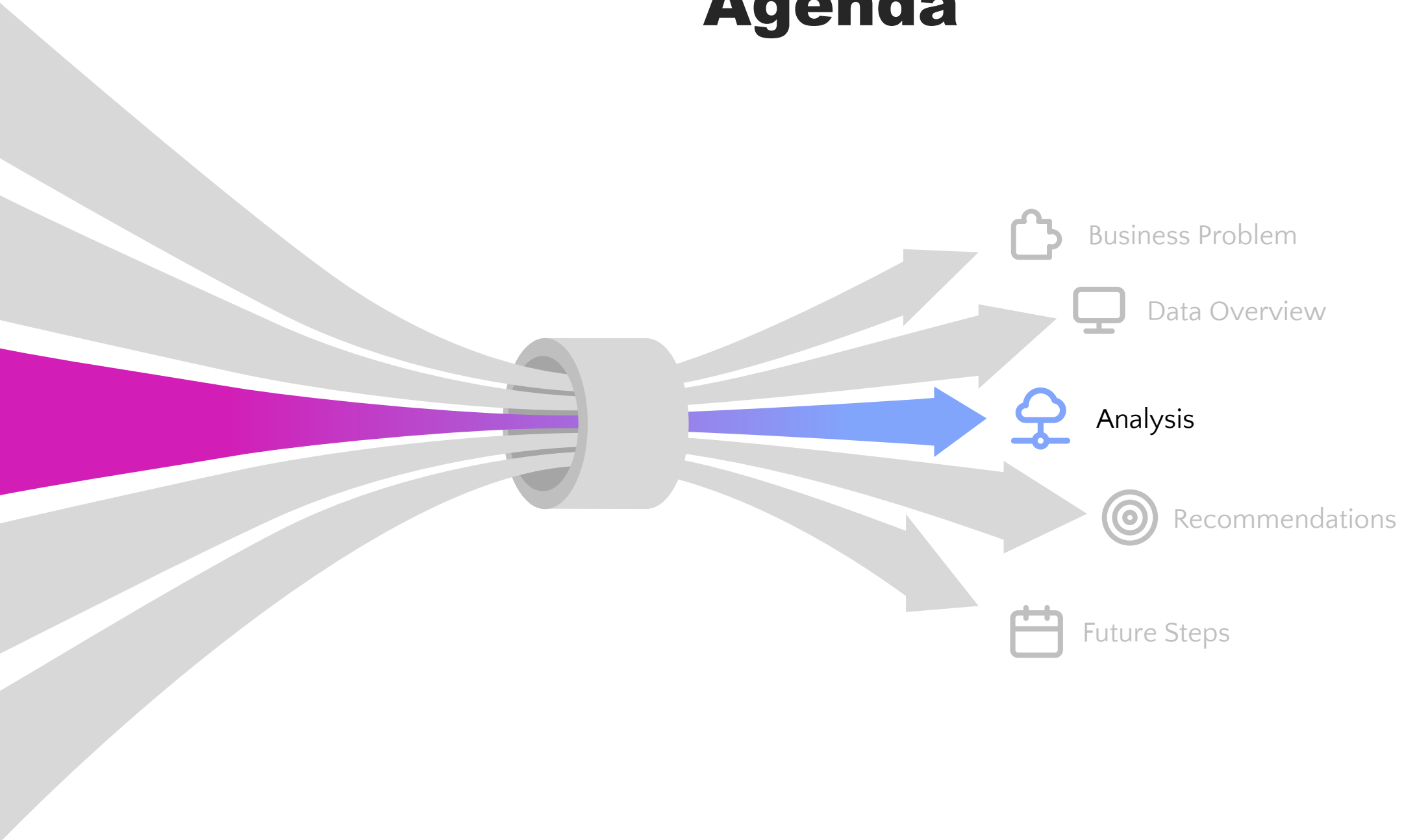
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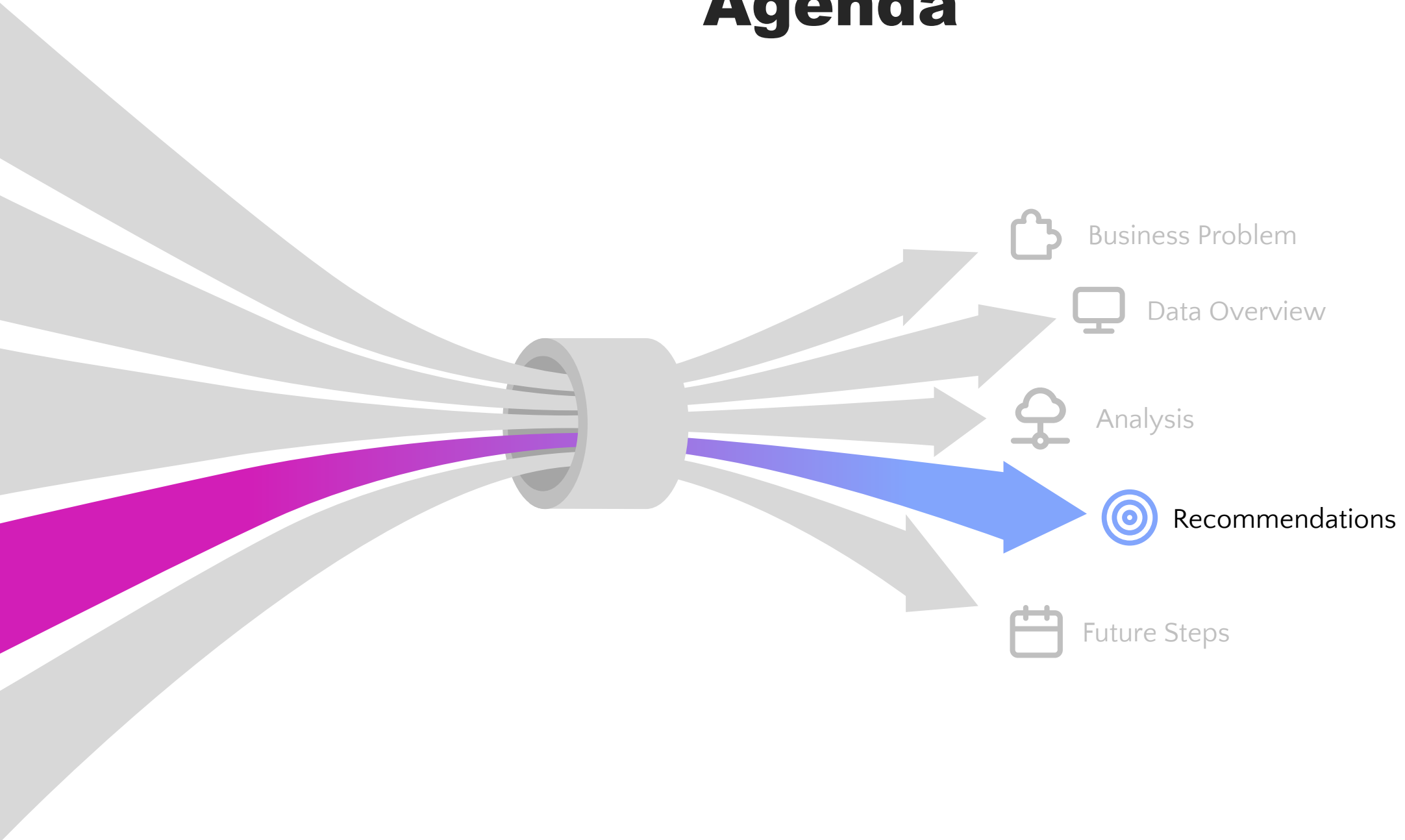
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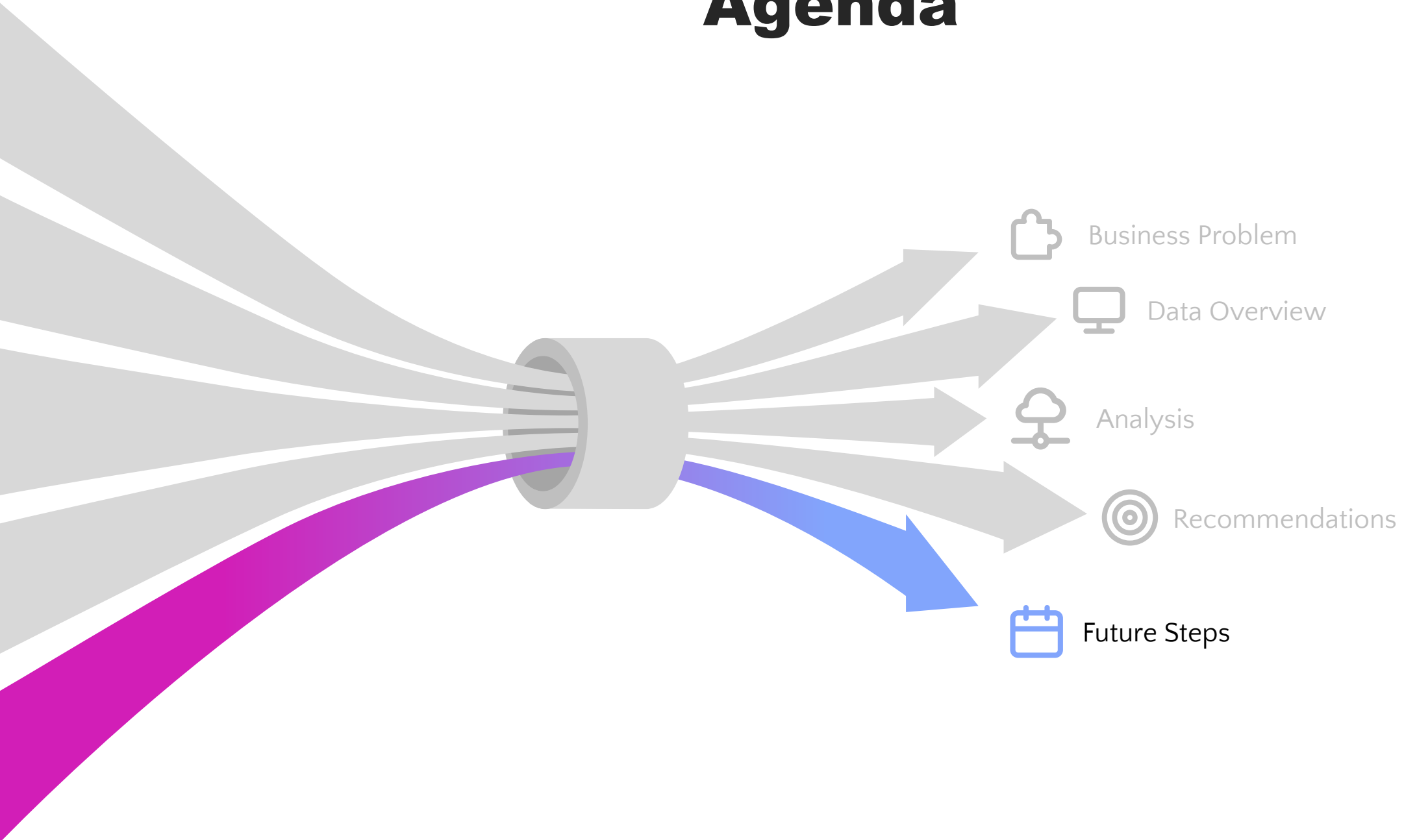
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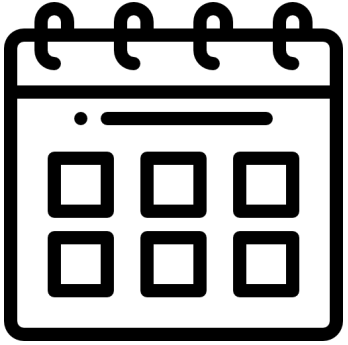
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Agenda



Imagine



Frustrating, isn't it?



BOTTOM LINE

You need a recommender that **listens**.

You need a recommender that **works**.

Our SVD model is **9.93%** more accurate compared to baseline.

BUSINESS PROBLEM

You're new streaming service is clueless.



Data Overview

- MovieLens dataset from GroupLens research lab
- Analyzed 100,000 ratings across 9,000 movies
 - ratings from 1996 to 2018
- Focused on genres



Data Limitations

SUPERUSERS

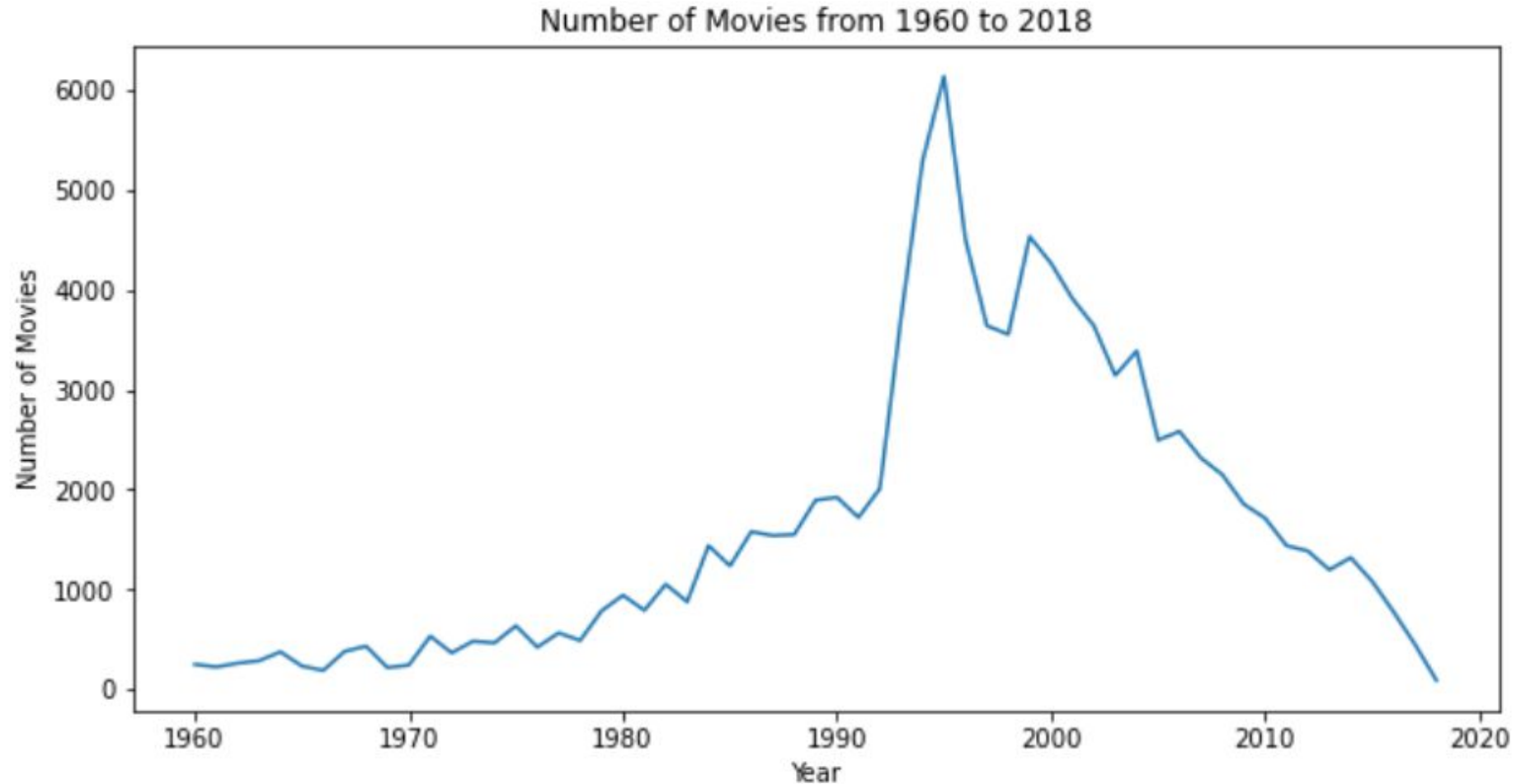


DATA ANALYSIS

- Exploratory Data Analysis
- 3 Recommendation Models

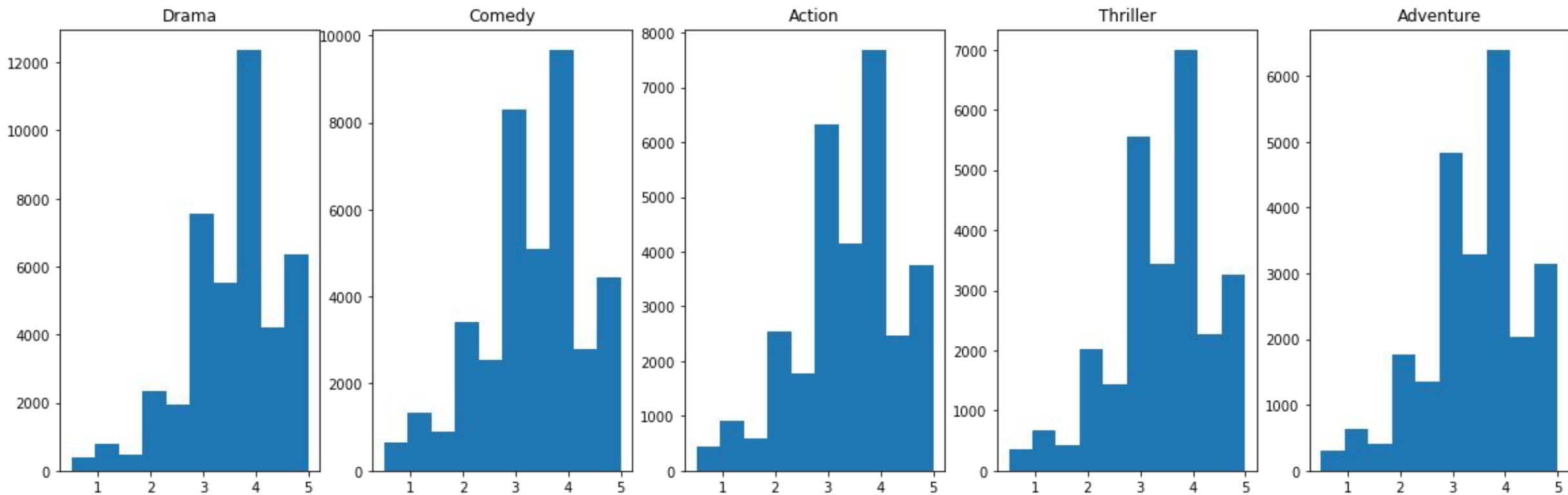


Data Analysis

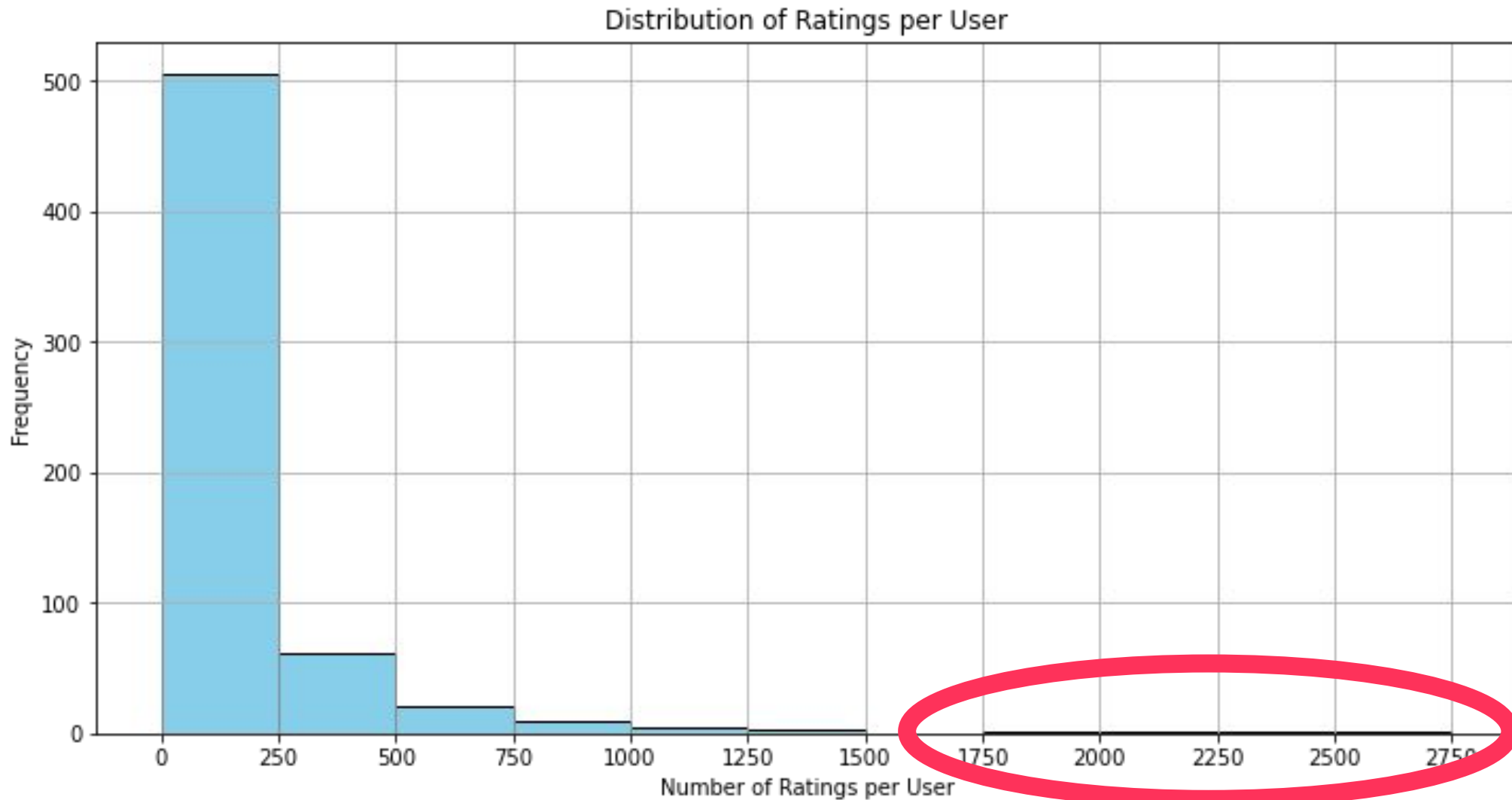


Data Analysis

Rating Distribution for Top 5 Movie Genres



Data Analysis



MOVIE RECOMMENDATIONS FOR A NEW USER



1. New user after sign up



No movie ratings



“Personalizing your preferences” page

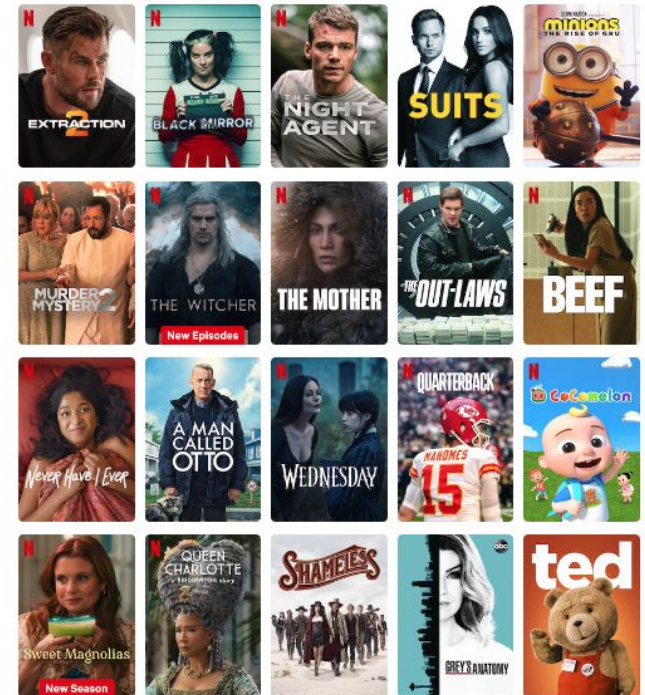


NETFLIX

Help

select 3 you like.

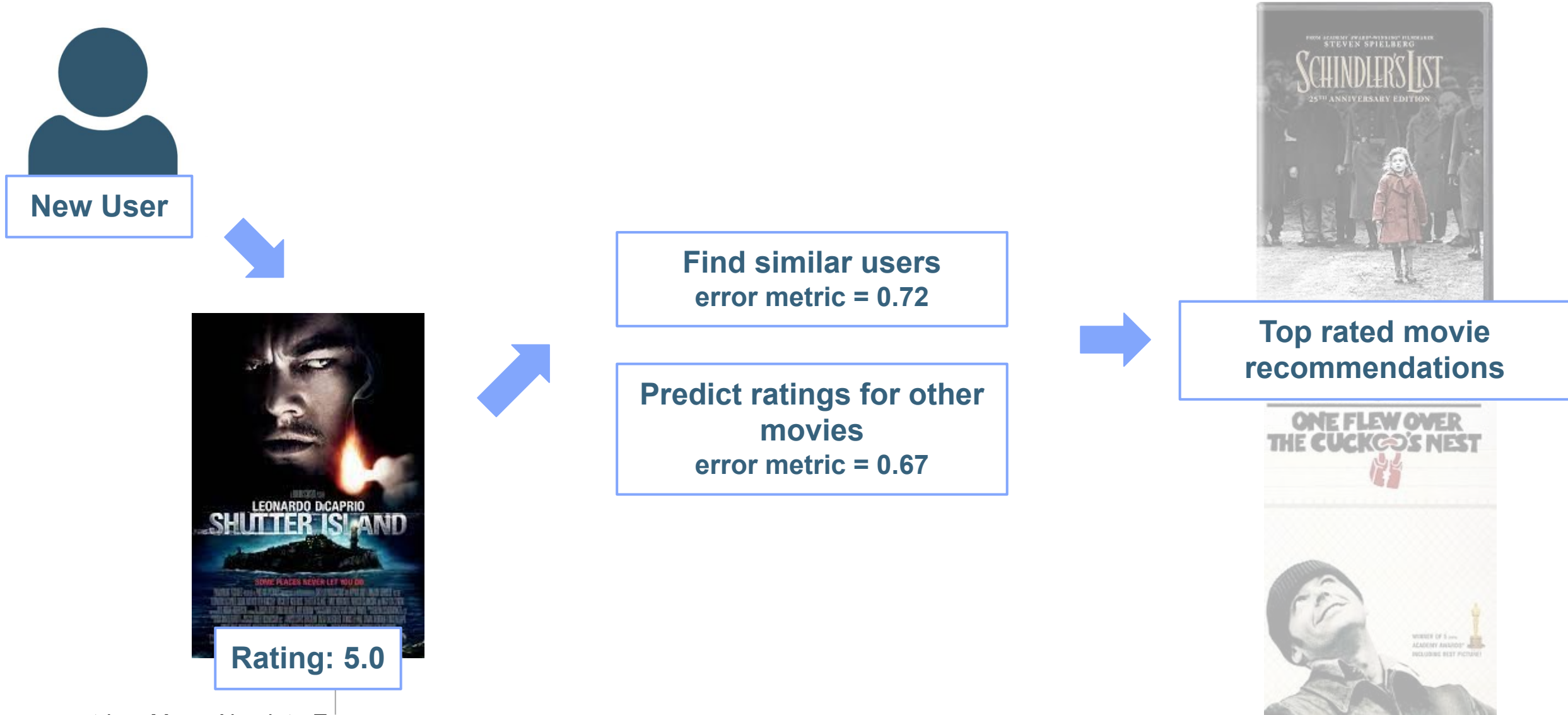
This helps us to find TV shows and movies you'll love.
Select the ones you like.



1. Genre-driven movie recommendations



2. After the first movie rating



* error metric = Mean Absolute Error

ACTIONABLE RECOMMENDATIONS AND FUTURE DIRECTIONS



Recommendations



Increase **accessibility** of movie recommendations



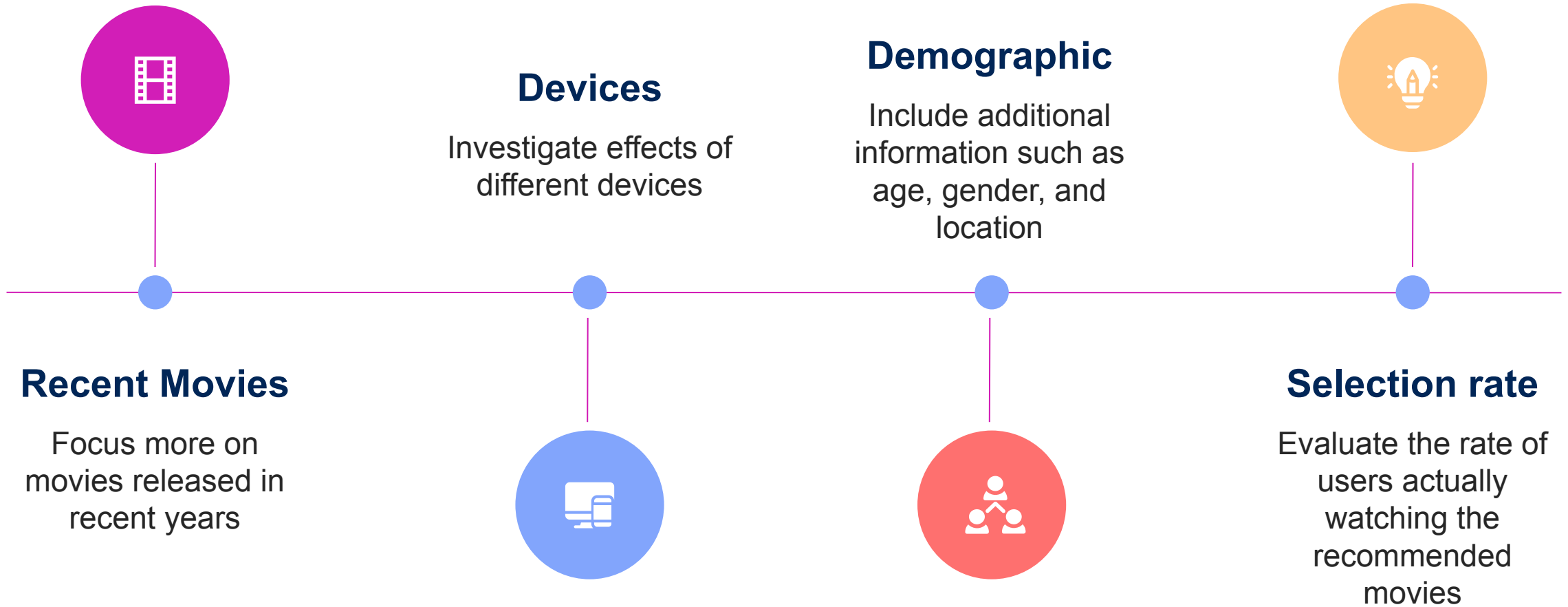
Feedback survey on the recommendations



Actor/actress and director information for **diversity**



Future Directions



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THANK YOU

