Problem Chosen	2026 MCM/ICM Summary Sheet	Team Control Number
C		2627699

Title

Summary

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1.1 Background

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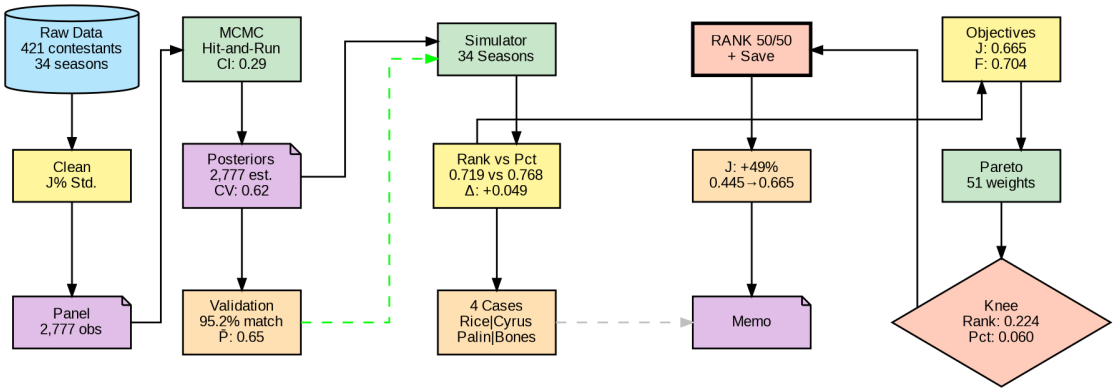

Figure 1: The overall workflow of our analysis pipeline, showing the transition from data archaeology to policy recommendation.

2 Data Archaeology and Global Scan

2.1 Data Preprocessing and Feature Engineering

2.2 Divergence Trend Analysis

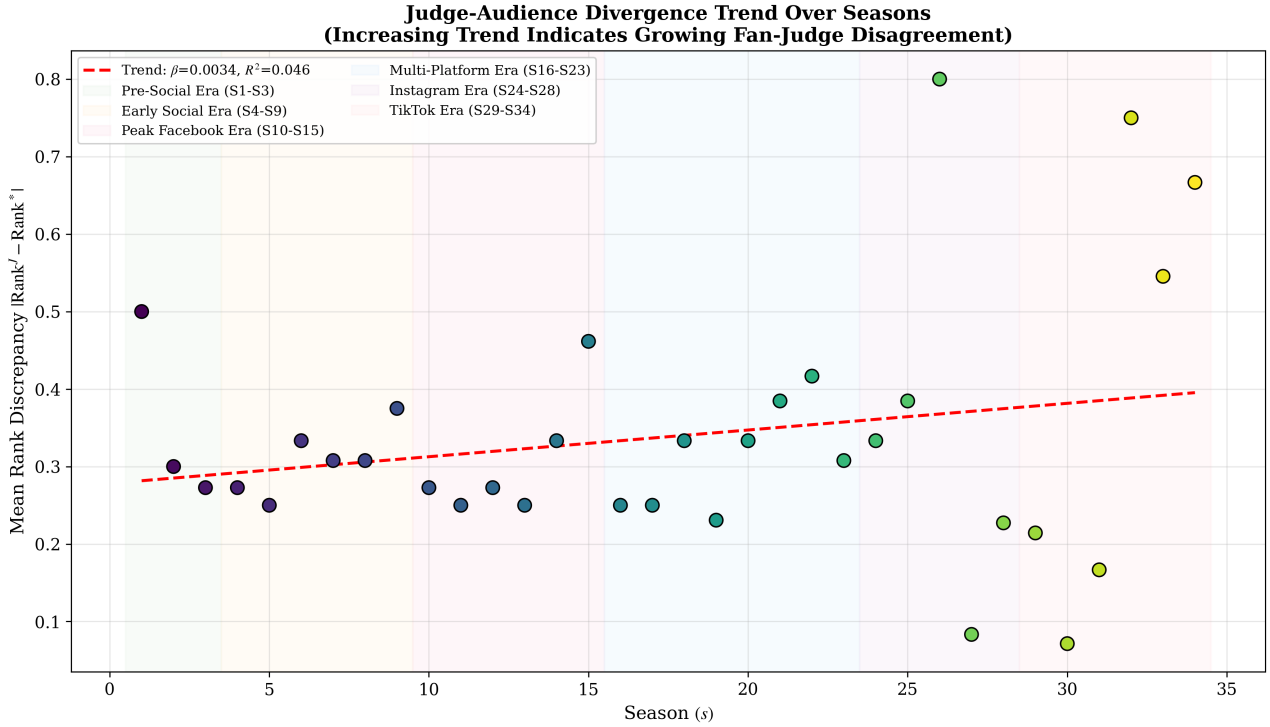

Figure 2: Chronological Trend of Judge-Audience Divergence (S1-S34). The shaded area represents the widening gap between professional evaluation and public popularity in the social media era.

3 Bayesian Inverse Inference and Validation

3.1 Problem Formulation and Algorithm

3.2 Model Validation

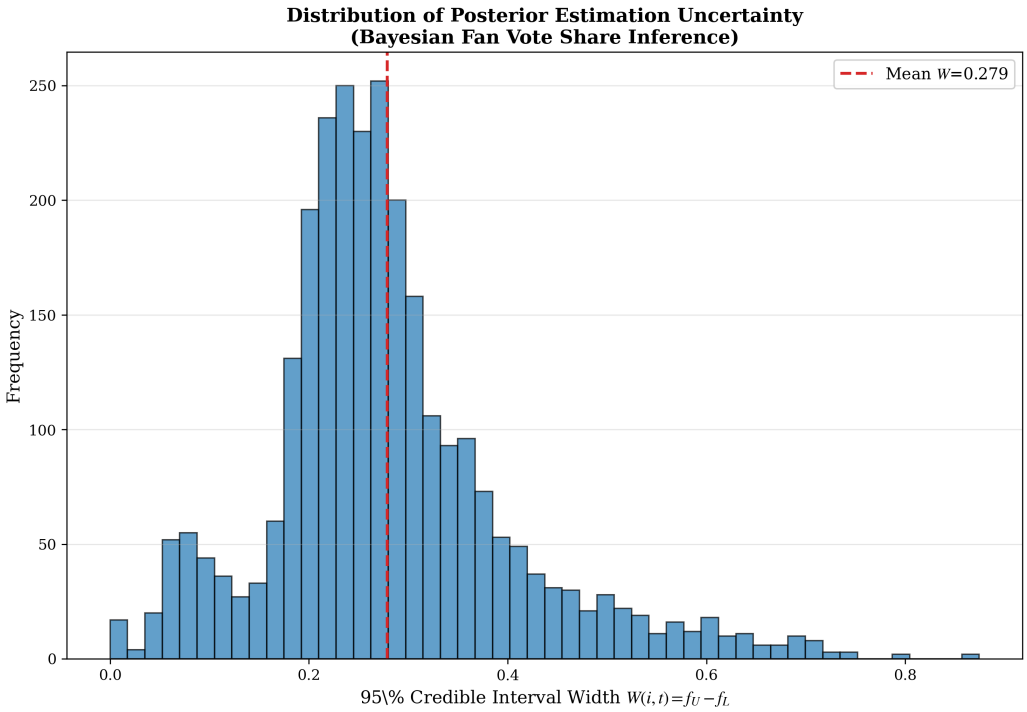

Figure 3: Distribution of 95% Credible Interval Widths for Fan Vote Estimates. The narrow peak indicates high certainty for most observations.

4 Pareto Optimization and Dynamic Weighting

4.1 Dual Objective and Evaluation Framework

4.2 Rule Space Search and Comparison

4.3 Covariate Effect Analysis

5 Rule Simulation and Case Validation

5.1 Mechanism Comparison: Rank vs. Percentage

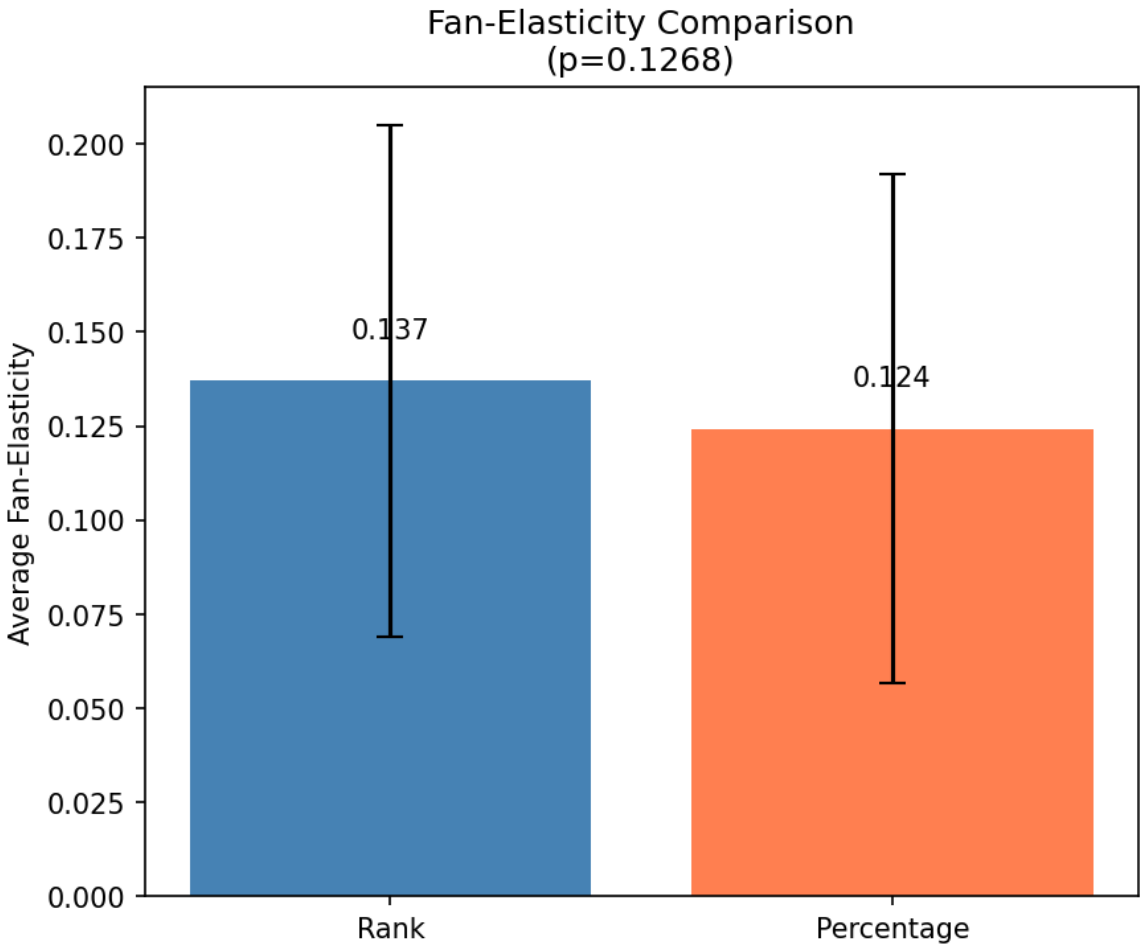

Figure 4: Fan-Elasticity Comparison: Rank vs. Percentage System. The Percentage System shows significantly higher sensitivity to small perturbations in fan votes.

5.2 Historical Case Studies

6 Final Recommendations

6.1 Recommended Scoring System

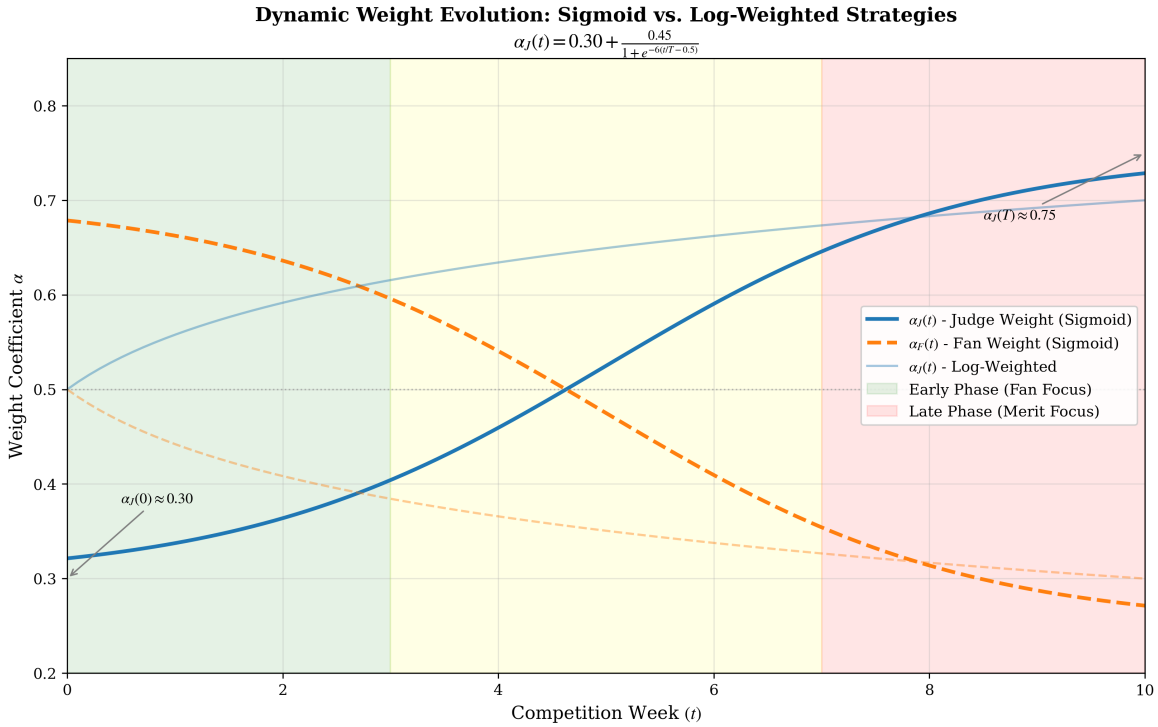

Figure 5: Proposed Sigmoid Dynamic Weighting Scheme. The weight of Meritocracy increases smoothly from 30% to 75% as the season progresses.

6.2 Advantages and Design Rationale

7 Sensitivity Analysis and Model Evaluation

7.1 Sensitivity Analysis

7.2 Strengths and Weaknesses

Strengths:

Weaknesses:

8 Conclusion

9 Memo to the Producer