

Hallyu Influence Analysis and Recommendation System

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Abstract: *The widespread popularity of Korean culture—commonly referred to as the 'Hallyu Wave'—has had a remarkable impact on the attitudes, lifestyles, and consumption patterns of youth across the globe. This research focuses on examining how elements of Korean culture—specifically Korean dramas and cuisine—influence the behavior of young people. A strong correlation was observed between watching Korean dramas and the curiosity to try Korean food items such as ramen, kimchi, bibimbap, and tteokbokki. It was also found that individuals with higher levels of engagement are more open to experimenting with new types of cuisine and demonstrate a deeper connection with Korean culture. This study is based on a structured dataset comprising variables such as age group, Korean drama viewing habits, favorite shows, inclination toward Korean food, sources of influence (such as social media platforms and peers), frequency of consumption, level of engagement, and food preferences.*

Keywords: The widespread popularity of Korean culture—commonly referred to as the 'Hallyu Wave'—has had a remarkable impact on the attitudes, lifestyles, and consumption patterns of youth across the globe

I. INTRODUCTION

In today's digital era, organizations are increasingly relying on automated systems to enhance efficiency, accuracy, and productivity in their operations. One of the most critical administrative functions within any organization is payroll management, which involves calculating employee salaries, maintaining records, and ensuring compliance with financial regulations. Traditional payroll systems, which rely on manual processes, often struggle with numerous shortcomings. These include calculation errors, data redundancy, time-consuming procedures, and a lack of adequate data security. Such deficiencies can lead to financial inaccuracies and compromise sensitive employee information. The inspiration for undertaking this project stemmed from observing these challenges while working at Eastern Stevedores Pvt. Ltd. The Human Resources Department faced difficulties in managing payroll operations due to repetitive manual tasks—such as salary calculations, data entry, and report generation. These issues not only increased the workload but also heightened the risk of errors and inefficiency.

II. SYSTEM DESIGN

The system is designed to analyze the influence of Korean culture on users and provide personalized recommendations based on their interests. It combines data analysis, machine learning, and interactive visualization to generate meaningful insights and suggestions.

- Data Layer → Stores collected dataset (survey + external data)
- Processing Layer → Cleans and preprocesses data
- Model Layer → Builds and trains machine learning model
- Application Layer → User interaction and prediction
- Visualization Layer → Dashboard and insights



III. METHODOLOGY

The main objective of this chapter is to describe the complete process of dataset creation, feature selection, tools used, and data transformation techniques. Since the project focuses on analyzing the influence of Korean culture in India, the data was primarily collected from Indian users who actively consume Korean content such as K-pop and K-drama. The chapter also explains how this data was prepared in a machine-learning-ready format so that it can be used effectively for building a recommendation system

- Data Collection
- Data Preprocessing
- Model Building
- Prediction System
- Model Evaluation
- Dashboard
- Deployment
- Final Recommendation System

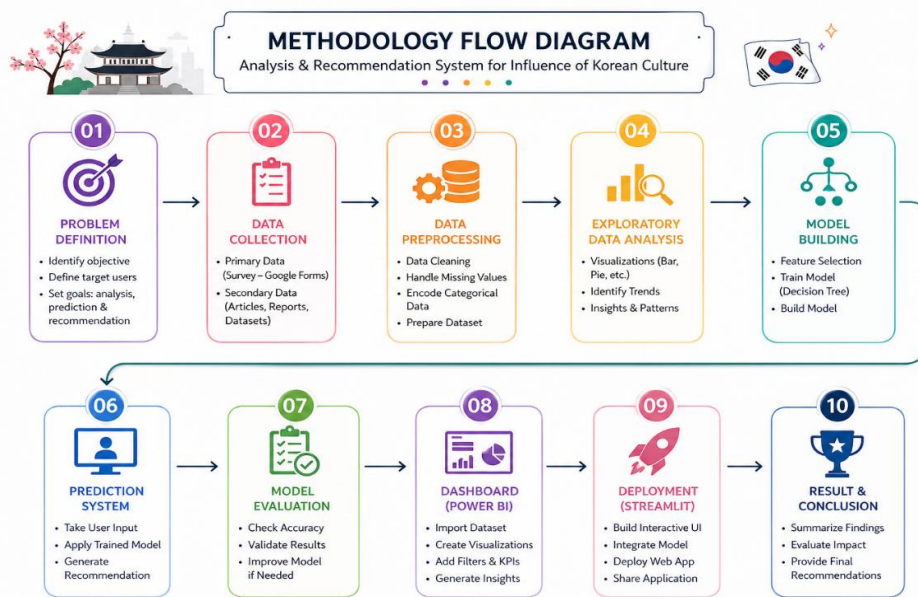


Fig.1. METHODOLOGY OVERVIEW

IV. RESULT AND DISCUSSION

The analysis of the collected data clearly demonstrates that Korean culture has established a strong influence on the preferences and behavior of Indian youth. A majority of the respondents belong to the age group of 16 to 30 years, which represents individuals who are highly active on digital platforms and are more exposed to global cultural content. The results indicate that Korean dramas and music have gained considerable popularity due to their engaging storytelling, high production quality, and emotional depth. Continuous exposure to such content through platforms like YouTube and streaming services has significantly increased user engagement levels.



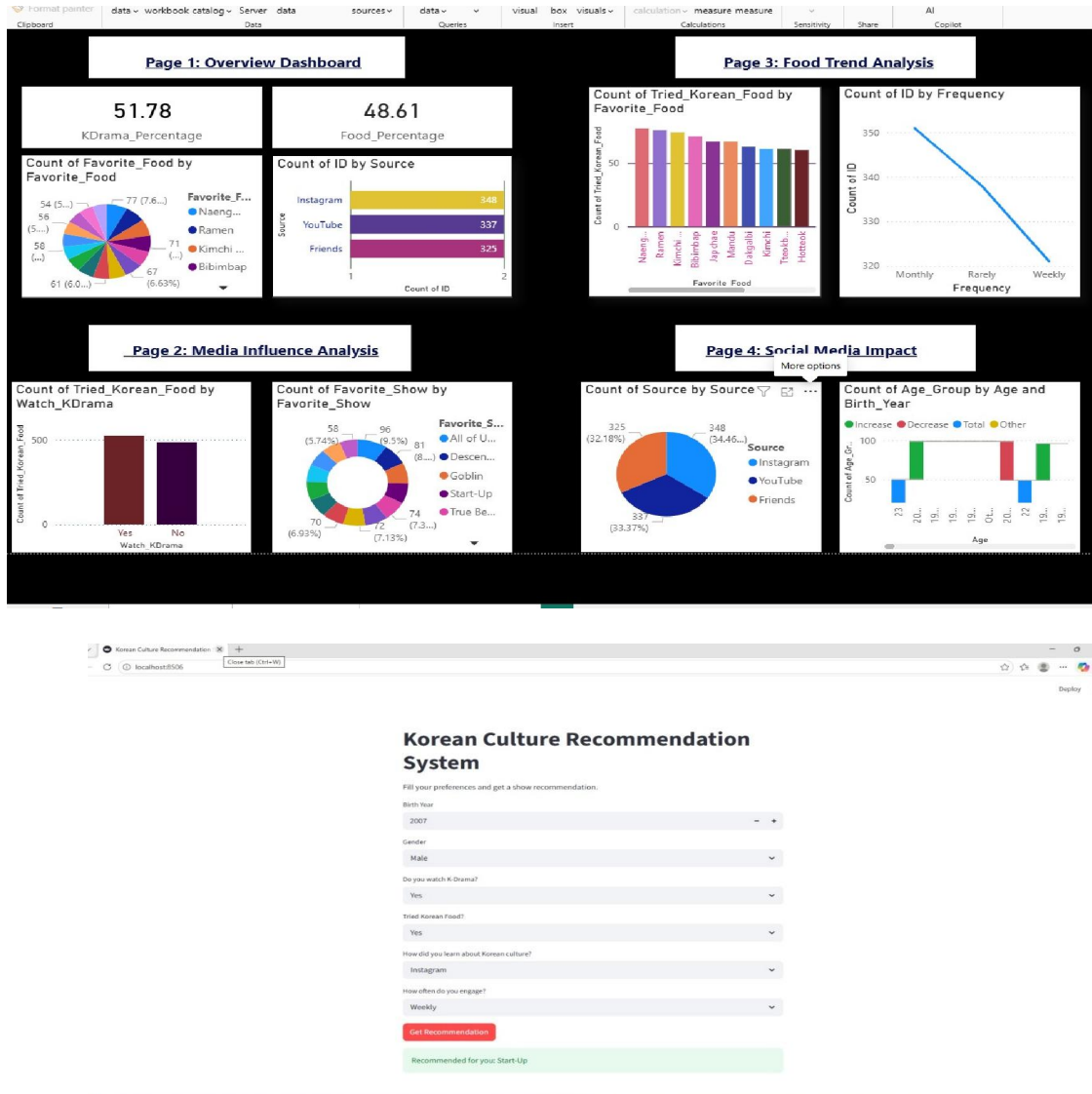


Fig. 2. DASHBOARD AND RECOMMENDATION SYSTEM

V. CONCLUSION

The author would like to express sincere gratitude to the Department of Computer Science and Engineering (Data Science), Tulsiramji Gaikwad Patil College of Engineering & Technology, Nagpur, for providing the necessary resources and support to carry out this work. Special thanks are extended to Prof. Alex Dhoke for valuable guidance, encouragement, and continuous support throughout the development of this research. The author also acknowledges all faculty members and peers who contributed directly or indirectly to the successful completion of this work.

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REFERENCES

- [1]. Madhavan, S., & Ramdoss, D. (2025). Hallyu (Korean Wave): Decoding the Soaring Popularity of South Korean Culture.
- [2]. Jin, D. Y. (2016). New Korean Wave: Transnational Cultural Power in the Age of Social Media.
- [3]. Sarma, A. (2023). Hallyu Effect: A Study of the Consumption Pattern of K-pop among Young Indian Audience.
- [4]. Singh, S. (2022). The Rise of Korean Wave in India and Its Influence on Consumer Behaviour and the Consumer Products Industry.
- [5]. Lee, S. J. (2015). The Korean Wave: The Seoul of Asia. *The Elon Journal of Undergraduate Research in Communications*, 6(1), 85–93.

