

# Cinepolis



Cinepolis is a México-based multinational owner and operator of movie theatres. It is the world's fourth largest movie theater circuit in the world, operating over 700 cinema complexes across 14 countries worldwide.

## **Project Description**

The HDAG team will work to extract insights from Cinepolis' promotional campaigns data (aka. challenges), working directly with the Cinepolis Head of Data Science and data science manager. **In particular, the client has expressed interest in the following questions and work.** We note that some combination (rather than all) of these questions are likely to be explored over the semester.

### **1. Exploratory Data Analysis (EDA).**

- **Customer analytics** - Is there a particular profile of customers that frequently participate in challenges? That frequently accomplish challenges? How is the participation rate of the members changing over time? Is there a delayed effect of the challenges on customers?
- **Revenue analytics** - What type of campaigns, customer targets, and length of campaigns seems to drive higher incremental revenue?
- **Factor analysis** - What external factors play a role in campaign participation? (e.g. email subjects, movie content available, COVID cases, competitors, user's geographic location, etc.)

### **2. Data Modeling and Visualization**

- **Individual user model** – what type of promotion will work best to maximize revenue given each individual user's characteristics?
- **Holistic revenue model** – what type of promotion will work best for the loyalty customer base as a whole?

**Internal Partners:** Cinepolis Head of Data Science, Data Science Manager

**Datasets:** Transactional, demographic, and tracking data for customers and specific campaigns.

**Coding Languages:** Python (PySpark preferred but not necessary).

## **Specific Skills**

1. Data Analytics: Exploring, processing and deriving valuable insights from data
2. Data Visualization: Creating useful and interactive visualizations
3. Machine Learning: Training, testing, and deploying predictive models

Expected Technical Difficulty: **Intermediate**