

## **Introduction**

Shopping mall is one of the building that forming a complex of shops with interconnecting walkways, usually indoors. They are the heart and soul of communities, the foundation of retail economies, and a social sanctuary for teenagers everywhere.

In Indonesia, amid rise of e-commerce shopping mall continue to lure costumers with their attractive design and promotion as well as culinary spots. Visitors no longer come to shopping malls primarily to buy next season's fashions; they go to socialize, to engage and be entertained. This is a new trend for malls to use as leisure venues. In fact, around a quarter of mall floor space is now taken up by food and entertainment and we expect this to rise to up to half, especially in newly built malls.

Head of the Indonesian Shopping Center Association (APPBI), Alexander Stefanus Ridwan said that Shopping Mall boast interaction and shopping experience that could not be satisfied by e-commerce.

Indonesia is home to 321 shopping centers of various class and size. Some of the malls are categorized as upscale, such as Pacific Place, Plaza Senayan, Plaza Indonesia and Senayan City, which all are located in Jakarta. However, it is Surabaya in East Java that actually hosts the biggest mall in Indonesia.

Therefore, Opening a shopping malls in Indonesia is one of the challenges which must be overcome by property developer with serious consideration, such as location of the mall. The location will drive the business in the mall will be success or failure.

## **Business problem**

The objective of this capstone project is to analyze and select the best locations in Jakarta, Indonesia to open a new shopping mall. Using data science methodology and machine learning techniques like clustering, this project aims to provide solutions to answer the business question: In Jakarta, Indonesia, if a property developer is looking to open a new shopping mall, where would you recommend that they open it?

## **Target Audience**

This project is particularly useful to property developers and investors looking to open or invest in new shopping malls in the capital city of Indonesia i.e. Jakarta. This project is timely as the city is currently suffering from oversupply of shopping malls. Colliers International said in its latest report that the retail space occupancy rate in the city stagnated at 83.6 percent throughout 2018 and is expected to fall to between 82 percent and 82.5 percent in 2019. Colliers senior associate director Ferry Salanto said that, as long as landlords and retailers were willing to adjust to the trends, the growth of the occupancy rate would not be affected by online shopping. In order to thrive, Ferry suggested that mall construction projects take into account infrastructure and transportation accessibility in addition to catering to millennials.