

# Population

## Introduction

One of the most important factors to determine the market characteristic is population. By understanding, segmenting and targeting right population, business can establish strong relationship with customers and boost their revenues. Floating population and residential population is the basic unit of understanding the target customers. However, the smallest area for population provided Korean government is in administrative city level; too big to understand customers.

OPENmate estimates two populations, residential population and floating population, for meaningful unit, block level. It will enable them to achieve deeper customer understanding.

# Residential population

Residential population estimates population living in each area by sex and age group.

## Method

Residential building information, such as type, size, number of houses and etc., from Korea Ministry of Land is used to estimate the number of family in each block. Total population of each administrative area, data from Korea Ministry of Security and Public administration, is distributed into each block to calculate estimated population of each block.

## Source

- XGA (eXtensible Geo-coding & Address cleansing), OPENmate
- Block data (360,000 blocks), OPENmate
- Population of administrative area, Ministry of Security and Public Administration
- Residential building information, Ministry of Land

# Floating population

The higher floating population represents commercial districts and the city's most *important* transport hubs. It is important for the marketers to understand the characteristics of the area to take advantage of the opportunity to target right customers.

Floating population estimates population on a street by sex, age, hour, and day, weekend or weekday. The range is from 0 to 100.

## Method

Based on following dependent and independent variables, regression analysis is completed to calculate the floating population of a point on walkable road for 10 m interval.

### Dependent variable

- Population Induction buildings (ex. department stores, movie theater)
- Distance from bus station or subway station
- Area Type
- Number of traffic ways of nearest road
- Activeness of commercial zone

### Independent variable

- Research data of Seoul floating population
- Research data from Small and Medium Business Administration

Based on the result of regression analysis, card transaction data is used to estimate floating population for each classification such as age.

## Source

- XGA (eXtensible Geo-coding & Address cleansing), OPENmate
- Block data (360,000 blocks), OPENmate
- Traffic induction points, The Korea Transport Institute
- Card Data, BC card
- Population Induction points, Ministry of Security and Public Administration
- General Building Data, Ministry of Security and Public Administration
- Residential population, the Statistics Korea