**AB testing marketing campaign**

On Friday 18th 2019 (i.e. week 201903), a company sent out a (physical) mailing to +/- 21,000 users. The mailing consisted of a game (a map) that users could use to play an online mission to earn extra coins. This mission has been accessible to mail recipients only (and is currently still accessible on the platform for these users). The objective of this mailing was to test whether or not inactive users could be incentivized to start playing again.

The *treasure\_island.csv* datasetcontains data that enable to analyze the impact of the mailing. The contents of the dataset are described in the table at p.3 of this case.

two (interrelated) questions arise given this scenario:

1. Has the mailing been successful in reactivating consistently inactive users?
2. If so, how long has this impact been sustained (i.e. how many weeks)?

As follows, a description of the columns of the dataset.

**Contents of *treasure\_island.csv***

|  |  |
| --- | --- |
| **Field** | **Explanation** |
| userid | An integer identifying a user (e.g. 174008) |
| weeknum | An integer identifying a yearweek (e.g. 201902). A week runs from Monday to Sunday. |
| educationclass | An integer identifying the education group in which a user plays in a particular week (e.g. 1) |
| weekssinceregistration | An integer capturing the number of weeks a user has been a member (e.g. 40) |
| regularityactivity | A string identifying the regularity class of a user in a particular week   * consistently inactive: The user is inactive this week, and has been inactive in the previous four weeks * inconsistently inactive: The user is inactive this week, but has been active in at least one of the previous four weeks * inconsistently active: The user is active this week, but has been inactive in at least one of the previous four weeks * consistently active: The user is active this week, and has been active in the previous four weeks |
| logindays | An integer capturing the number of days the user has logged in in a particular week (e.g. 1) |
| playtime | An integer capturing the total playtime in milliseconds of the user in a particular week (e.g. 60000) |
| receivedMailing | A boolean capturing if the user received the mailing (e.g. TRUE) |