Visual Analysis of Car-hailing Reimbursement Data for Overtim

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ABSTRACT

Compensation management is one of the most important elements of personnel management. One type of compensation is traffic supplementary pay for the overtime employees. Conventional analysis of the traffic reimbursement focuses on the basic financial statistics such as the expenditure trends and rankings among different departments in the company. However, it largely ignores the wellbeing of the individuals and their residential distribution that can help improve the effectiveness of compensation strategies. In this work, we propose a visual analytics system based on a company’s traffic reimbursement data for the overtime. It assists the compensation managers in understanding the overtime employees’ commuting status and providing more indirect compensation benefits for the employees.

REQUIREMENTS

R1. Tracking car-hailing reimbursement.
R2. Understanding residential location of employees.
R3. Recommending carpooling for the same destinations.

SYSTEM OVERVIEW

(A) Department Table View. (B) Projection View leverages t-SNE to obtain the two-dimensional embedding. (C) Timeline View employs two-layer linked timelines to support both coarse-grained and fine-grained time selections. (D) Map View gives analysts an intuitive understanding of the employees’ residential destination and traffic status.
(D1) Distribution of employees’ residential orientations.
(D2) Distribution of employees’ residential locations.
(E) Timeline Comparison View.
(F) Chord Diagram.
(G) Origin-Destination Parallel Coordinate.
(H) Table View.

RESULT

There are a lot of car-hailing from the company to “HC 1”, and the most popular residential areas for the employees are “Zone A” and “Zone B”. A financial personnel in our company commented that although “Zone A” is closer to the business center, it is an old residential area and the renting prices are relatively low, while “Zone B” is a welfare residential area provided by the company.

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