

Abstracts



Menno - OD matrix visualization revisited



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Body

The content of an Origin and Destination matrix informs about the nature of movement and connectivity between locations. These could be point locations, like airports, or regions, like countries. The type of movement or flow can be qualitative (different airline flying between two airports) or quantitative (the number of migrants between two countries), or both. Traditionally this type of data is visualized in flowmaps. In these maps flows are often represented by arrows of different colors and width to represent the flow between an origin and a destination. However, flow maps also tend to become visually cluttered quickly. Additional problems arise when time series have to be displayed too. In practice people have tried to work toward solutions applying different algorithms to aggregate flows or to find a better geographic layout. Others concentrated on interaction techniques that allow filtering or selection via mouse-over. Some looked at other alternative visualizations. These could be cartograms, chord diagrams, tree maps etc. In some of these alternative approaches the geography gets lost. In our suggested solution we concentrate on the design of alternative visualizations of the matrix itself. Despite that the origins and destinations refer to locations the matrix represents attribute space, and because of this it is more than likely the geography gets lost. Therefore we linked the matrix to the (flow) map. Both are presented in alternative designs in a dashboard like environment. Among the alternatives are several three-dimensional designs that allow for interaction to brush time.

Sessions

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Thursday, Apr 6 1:20 PM