Computation and Application to Dataset

The Dataset: Walmart Store Data from Kaggle

Prior Analysis : Kimmo Kiviluoto and Erkki Oja

In 1998, Kiviluoto and Erkki Oja used ICA on parallel Financial Time Series from a retail chain of 40 stores. They claim in their paper *Independent Comp onent Analysis for Parallel Financial Time Series* that by removing the fundamental factors of the data, they were able to see the impact of management decisions of a particular store more clearly. With another set of store data, I will attempt to show a similar result using comparable set of data although this will look at weekly sales not cashflow data.

Pre-processing ICA

Centering

Whitening

Exploration

FastICA Algorithm

Now for the correct way:

Here is the first sentence. Here is another sentence. Here is the last sentence to end the paragraph.

This should be a new paragraph.

FastICA Application/Simulation

Comparison to other Methods for ICA and for other BSS