

Visualizing MS Outlook Meeting Data in Shiny

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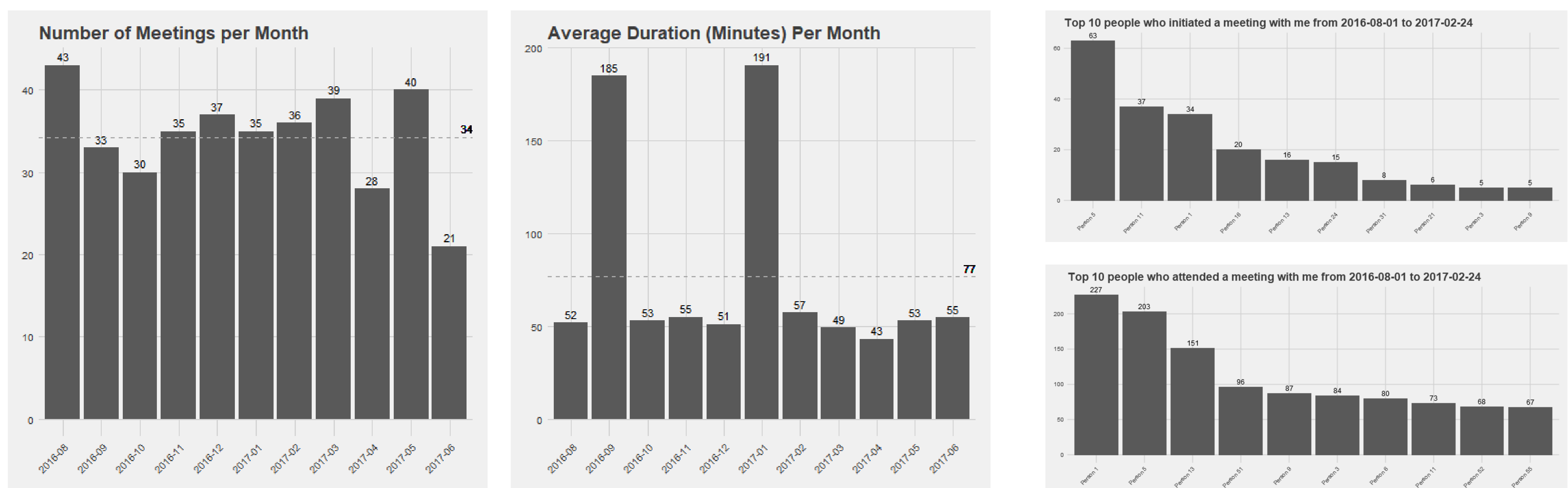
Background

Have you ever wondered how much of your work time was sitting in meetings and especially the ones that you do not need to be in? You are not alone. In fact, 71% of U.S. workers surveyed believed that meetings are not productive¹ and 24% of U.S. workers surveyed think the biggest time-wasting activity at work was “having too many meetings/conference calls”².

This Shiny application can analyze and visualize your meeting history in Outlook to provide a data-informed understanding of your meetings. The application provides an interactive heatmap of your meeting frequency. It also displays an interactive network of the meeting attendees using **D3.js** and a static network graph using **igraph**. In addition, it also provides basic data exploration displayed by **ggplot2**. The application allows a better understanding of how work time is spent and can help with making data-driven decisions for better resource allocation.

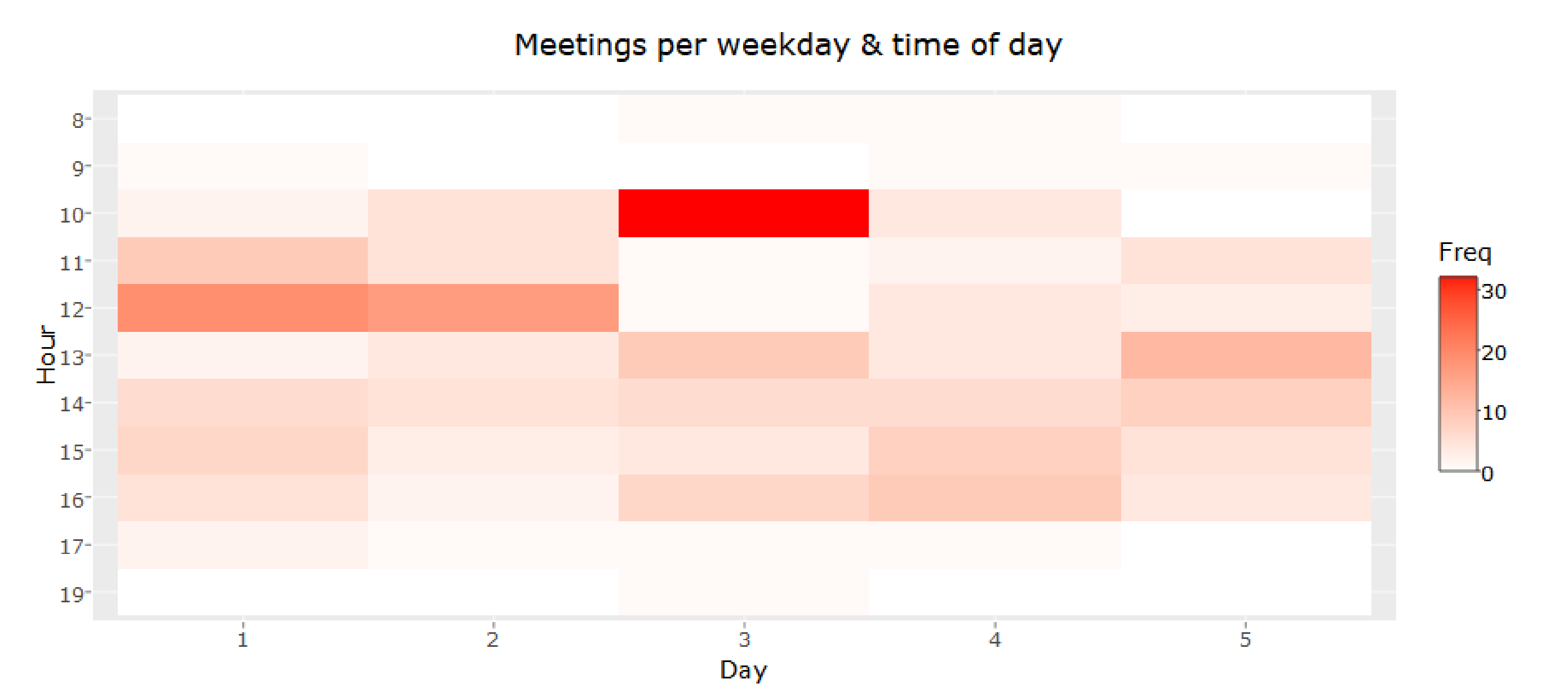
Data Exploration

On the “Summary” tab, the app displays number of meetings you had per month, as well as, average duration (in minutes) of your meetings per month. On the “People” tab, the app displays a frequency plot of people who have meeting with you the most.



Interactive Heatmap

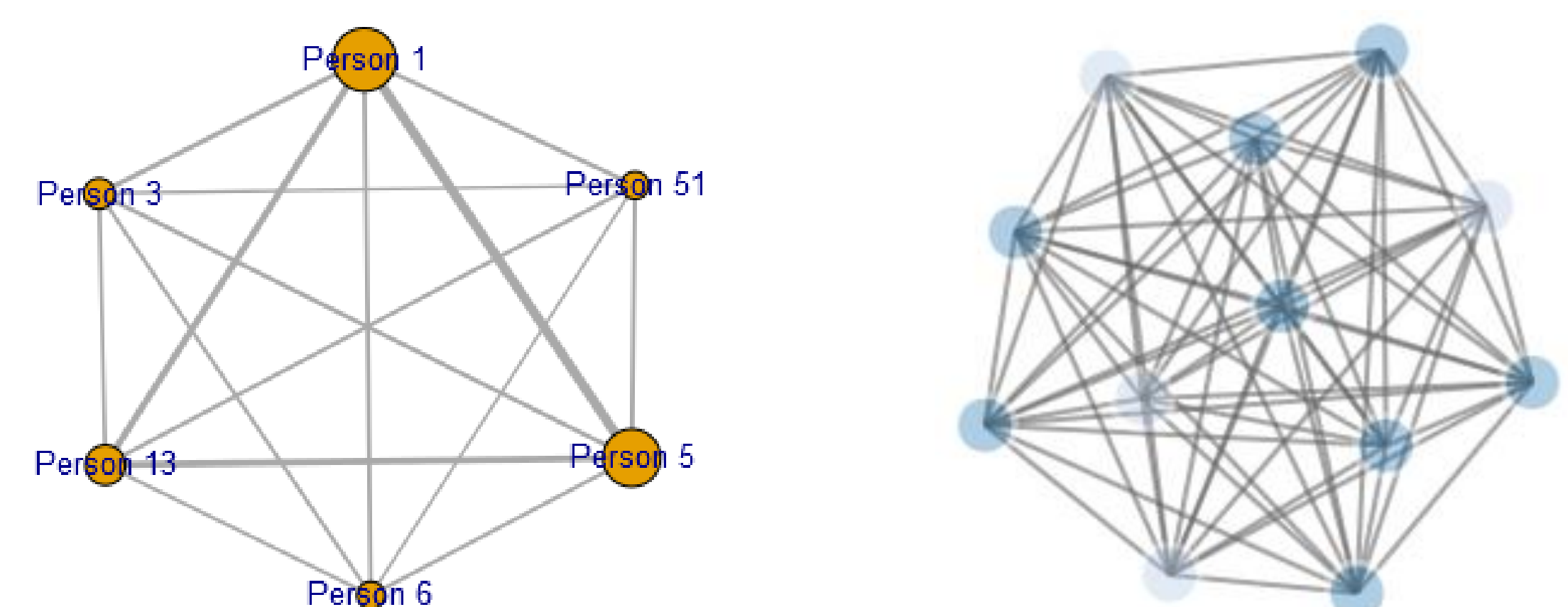
On the tab of “Time”, the Shiny application displays a heatmap of the meeting history, broken by hour and day.



Network Visualization

On the tab of “Network”, the Shiny application displays a network group of your meeting history.

Static network graph is produced using **igraph**.
Dynamic network group is produced using **D3.js**



Next Step

- Incorporating Microsoft API which allows automatic data input, instead of requesting a csv file manual upload from users
- Adding variables: Meeting Status (Accepted, Rejected, Tentative)
- Open to suggestions!

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GitHub: <https://github.com/phoebewong/>

App: https://phoebewong.shinyapps.io/calendar_shinyio/

References:

- “2014 Wasting Time at Work Survey.” 2014. <http://www.salary.com/2014-wasting-time-at-work/slide/6/>.
- “Survey Finds Workers Average Only Three Productive Days Per Week.” 2005. <https://news.microsoft.com/2005/03/15/survey-finds-workers-average-only-three-productive-days-per-week/#qHzMPOLe4TU4BuyR.97>.