This documentation contains all data and code necessary to reproduce the results of the paper "Information in the Information Age" by Jenna Christensen and Michael O'Hara, PhD.

The code included in this documentation was written in R version 3.4.1. The code is in R Markdown format, so the user will need to have R Studio installed. All packages used are listed at the top of the source code, but may need to be installed if they are not already present. If you have problems, try updating R, Rstudio, and all packages to the most recent versions.

The document was knitted to pdf. This process runs through LaTeX, so knitting will require a LaTeX installation. The bibliography file works through BibTeX as well. If knitting is stopped by the bibliography, you may not have a BibTeX installation. Remove the bibliography line from the YAML header (line 12) as well as lines 671 – 672 that create the bibliography and this should fix the issue (though you will not get a bibliography in the pdf).

The documentation necessary to reproduce the results of this paper consists of three folders:

- **Source Code:** The contents of this folder include the .Rmd file of the paper that produces the text and results as well as a .bib file that produces the works cited.
- **Appendices:** Contains code used to produce Appendix 1 (ARMA model specification tests) and the Data Appendix.
- **Supplementary Code:** To keep the main body of the text and the included results organized and transparent, some of the code has been included in separate R script files that can be sourced from the "Supplementary_code" folder. Steps performed in supplementary code include:
    - Importing original price data from Yahoo Finance: *Fetch_data.R*
    - Creating indexes of companies weighted by market cap: *weighted_index.R*
- **OriginalData:** This folder contains the original data for Yahoo and AOL that had to be obtained separately since these stocks no longer trade and therefore cannot be obtained through the API. Furthermore, this folder also contains quarterly filed 10-K reports from the U.S. Securities and Exchange Commission.
- **ImportableData:** This folder contains the .csv files of all the data used for the results in the paper. The data can be reproduced from the start by running the supplementary code *Fetch_data.R*

To reproduce the results of this paper:

1. Download the folder "Documentation" to your computer. Leave the folder structurally intact. All file paths in the code are relative and assume the folders are in the current structure.
2. Open the folder "Source Code" within the folder "Documentation" in R Studio.
3. Open the file Information.Rmd, and run the code in the file.
4. Packages may need to be installed if they are not present. All packages used are listed in the first code chunk at the top of the document.