WHY LaTeX?

1. It separates content from style; this allows to create templates and easily maintain consistent layout.
2. It supports formulas, tables, pictures & graphs, links, schemes, bibliographies, indexes, etc.
   For all these objects you don't need manual formating. (saves much time)
3. Overall, latex is no much better than word, but used for publishing papers in journals

TOOL: Overleaf

- Online + documentation!
- Allows working together
- Includes version controll
- Does not require any soft to be installed
- Easy to use (error input helps)
- Contains many templates

TOP 10 Packages

1. AMSMATH & AMSFONTS & AMSSYMB
   Work with matrices & special maths symbols
2. TiKZ/Pgf
   inclusion of figures (directly drawing)

Part I

investigation

LaTeX

Other packages:

11. csquotes - quotations
12. marginnotes + import hack [marginfix]
13. listings - source code
14. enumitems - improves counting
15. glossaries - add glossary
16. pdfpages - insert pdf in doc.
17. mdframed - add frame to say theorem: ∎

3. pgfplots
   helps to include plots from, say, Matlab, etc. with legend, additional points...
4. geometry
   helps to set custom margins of a page.
5. xcolor
   works with driver-independent colors and lets you work with rgb, cmyk, hsb...
6. Booktabs
   provides better quality of tables
   [also tabularx longtable]
7. Fancyhdr
   works with headers & footers in your doc.
8. quotchap
   redesigns chapter headers. allows to use quotations
9. Hyperref
   inserts hyperlinks
10. kbordermatrix
    allows to add column and row labels to matrix

Conclusion: it was developed in 1984. now in 99% cases MS Word can be used instead. Really better only when working with R, ggplot(2) and knitr to include graphs dinamically. May be better choice (a bit) working with maths expressions.