

A “Quarto” Life Crisis

February 15, 2026

Abstract

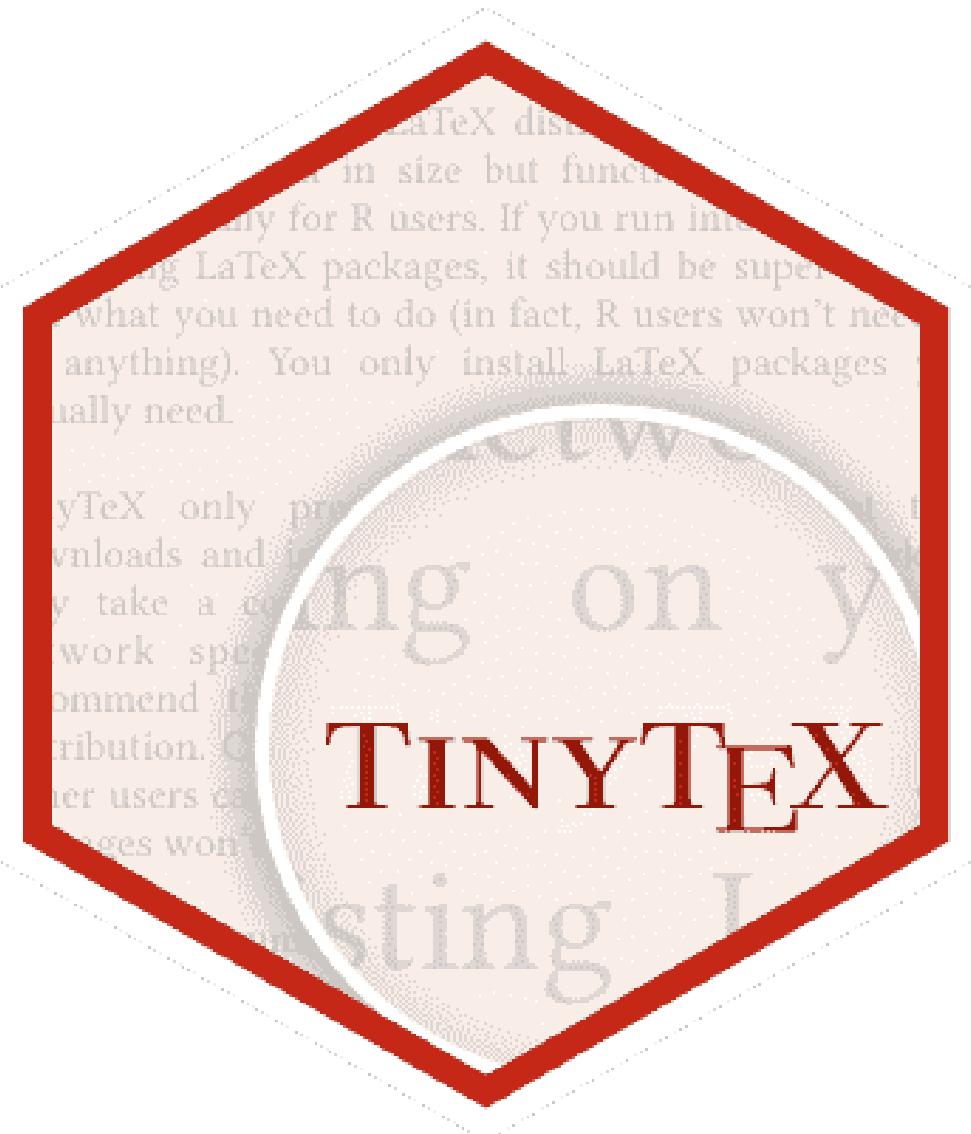
1 Quarto

- enables you to weave together content and executable code into a finished presentation.
- makes the process of creating and collaborating on scientific and technical documents dramatically better.
- is Posit's attempt to bring R Markdown to everyone! Unlike R Markdown, Quarto doesn't have a dependency or requirement for R.

2 Minimum Requirements

for writing research papers in PDF





2.1 Note

RStudio v2022.07 and later includes support for editing and preview of Quarto documents.

3 Integrated workflow

R Markdown and Quarto allow for the seamless integration of narrative text, raw data, and executable code in a single document.

- Simpler syntax with Markdown
- You can hide or show your codes, hide or show results, choose to or not to evaluate codes

4 Dynamic updating

Results, tables, and figures update automatically when the underlying data changes, eliminating manual editing errors and ensuring the final paper remains up to date with the analysis.

5 Dynamic updating

```
1 # load data
2
3 library("kableExtra")
4
5
6 # calculations
7
8 mean_sepal_length <- mean(iris2$Sepal.Length)
9 mean_sepal_width <- mean(iris2$Sepal.Width)
```

```

10 # format into a pretty table
11 names(iris2) <- gsub('[.]+' , '' , names(iris2))
12 rownames(iris2) <- NULL
13 iris_table <- kable(iris2, booktabs = TRUE) %>%
14   add_header_above(c("Length" = 2, "Width" = 2, " " = 1)) %>%
15   add_header_above(c("Measurements" = 4, "More attributes" = 1))

```

6 Dynamic updating

The means of sepal length and sepal width are 5 and 3.53, respectively.

Table 1: Iris Data

| Measurements | | | | More attributes | |
|--------------|-------|-------|-------|-----------------|--|
| Length | | Width | | | |
| Sepal | Petal | Sepal | Petal | Species | |
| 4.6 | 1.5 | 3.1 | 0.2 | setosa | |
| 5.0 | 1.4 | 3.6 | 0.2 | setosa | |
| 5.4 | 1.7 | 3.9 | 0.4 | setosa | |

7 Multi-format outputs

One source file can be rendered into professional PDFs, Word documents or Tex files for collaborators, interactive HTML reports and presentations, as well as into beamer or PowerPoint.

1. Specify the formats in your YAML.
2. Use the terminal: `quarto render your_qmd.qmd --to beamer`.

8 Automated elements

Complex tasks such as cross-referencing, bibliography management, plots and table formatting are handled programmatically, which maintains consistency throughout long documents.

1. Citations: According to [Klein et al. \(2020\)](#)
2. Cross-referencing: See Table [1](#).
3. Extensions for journals (e.g., [JASA](#))

9 Challenges

10 References

jpatteet (2022), ‘Quarto rendering pdf, running xelatex 10 times’.

URL: <https://github.com/quarto-dev/quarto-cli/issues/3518>

Klein, M., Wright, T. & Wieczorek, J. (2020), ‘A joint confidence region for an overall ranking of populations’, *Journal of the Royal Statistical Society* p. 589–606.

Posit (n.d.), ‘Comprehensive guide to using quarto’. quarto.org.

URL: <https://quarto.org/docs/guide/>