A major challenge I've encountered in creating individualized reproducible reports are placing tables side-by-side.

Other Approaches

Side-by-side tables can be achieved in HTML by coding a table, but I need to produce the report as a PDF.

The first method I found using `grid` graphics as outlined in the vignette from `gridExtra`. Building a design for your table can be cumbersome, and it took me a lot of trial-and-error to come up with this custom format.

```
library(grid)
library(gridExtra)
```

```
## Warning: package 'gridExtra' was built under R version 3.2.3
```

```
library(gtable)
```

```
## Warning: package 'gtable' was built under R version 3.2.4
```

```
CustomTable <- function(df, row.names = rownames(df), font.size = 8) {
     theme1 <- ttheme_minimal(
     core=list(fg_params=list(fontsize = font.size, hjust = 0)),
     colhead=list(fg_params=list(fontsize = font.size)),
     rowhead=list(fg_params=list(fontsize = font.size))
     )

     horiztonal <- replicate(nrow(df),
     segmentsGrob(
     x0 = unit(0,"npc"),
     y0 = unit(0,"npc"),
     x1 = unit(1,"npc"),
     y1 = unit(0,"npc"),
     gp = gpar(lwd = 1)),
     simplify = FALSE
     )

     g <- tableGrob(df, theme = theme1, rows = row.names)

     g <- gtable_add_grob(g, grobs = horiztonal,
     t = seq_len(nrow(g)-1), b = seq_len(nrow(g)-1), l = 1, r = ncol(g))

     g
}

my.table <- mtcars[1:5, 1:5]

grid.arrange(CustomTable(my.table), CustomTable(my.table), nrow = 1)
```

	mpg	cyl	disp	hp	drat
Mazda RX4	21	6	160	110	3.9
Mazda RX4 Wag	21	6	160	110	3.9
Datsun 710	22.8	4	108	93	3.85
Hornet 4 Drive	21.4	6	258	110	3.08
Hornet Sportabout	18.7	8	360	175	3.15

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The difficulty I ran into using this method was when I tried to place the tables on the page, especially in relation to other elements, like a `pandoc.table`.

I found the second method at StackOverflow involves writing the tables to file then placing them in the document. While effective, it's not ideal when you're creating two to four tables for five hundred individualized reports.

Building a table with `Latex`

If you run `print(knitr::kable(my.table, format = 'latex'))` to the console, you can see the `Latex` syntax. Using this syntax, we can construct a container table and place our tables inside it.

In order to use `Latex` within a `R` code-block, I use `cat` and the chunk-option `results='asis'`. `cat` prints the code to the document and `results='asis'` makes sure the `Latex` is used in formatting the final document.

In the code below, I start by centering the table on the page with `\\begin{center}`. (Double `\` is required to differentiate from an escape character.) Next, I create the table container and specify there will be three centered columns. `\\begin{tabular}{ c c c }` To add a line between the tables, include a pipe when declaring the columns, like `\\begin{tabular}{ c | c | c }`. Next, I print my table using `knitr::kable(my.table, format = 'latex')`. Next, I separate my first column and table from the next using the `&`. Last, I print the second two tables and close out the container.

	mpg	cyl	disp	hp	drat
Mazda RX4	21.0	6	160	110	3.90
Mazda RX4 Wag	21.0	6	160	110	3.90
Datsun 710	22.8	4	108	93	3.85
Hornet 4 Drive	21.4	6	258	110	3.08
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http://tex.stackexchange.com/questions/56008/different-sizes-of-font-available-in-table

https://www.sharelatex.com/learn/Font_sizes,_families,_and_styles