Tidying data for ggplot2

Group 4

2025-05-01

Tufte slopegraph

Heatmap of Maunga Whau

```
## Warning: The `x` argument of `as_tibble.matrix()` must have unique column names if
## `.name_repair` is omitted as of tibble 2.0.0.
## i Using compatibility `.name_repair`.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
```

Few's Deviation Analysis

```
## Warning: Using an external vector in selections was deprecated in tidyselect 1.1.0.
## i Please use `all_of()` or `any_of()` instead.
##   # Was:
##   data %>% select(months)
##
##   # Now:
##   data %>% select(all_of(months))
##
## See <https://tidyselect.r-lib.org/reference/faq-external-vector.html>.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
```

```
## # A tibble: 24 x 6
##    Nationality Month Actual Budget Variance Percent_deviation
##    <chr>       <fct>  <dbl>  <dbl>    <dbl>             <dbl>
##  1 Domestic    Jan    84853  83000     1853              2.23
##  2 Domestic    Feb    84838  83830     1008              1.20
##  3 Domestic    Mar    88103  84668     3435              4.06
##  4 Domestic    Apr    85072  85515     -443             -0.518
##  5 Domestic    May    88723  86370     2353              2.72
##  6 Domestic    Jun    90384  87234     3150              3.61
##  7 Domestic    Jul    89374  88106     1268              1.44
##  8 Domestic    Aug    95273  88987     6286              7.06
##  9 Domestic    Sep    94239  89877     4362              4.85
## 10 Domestic    Oct    92394  90776     1618              1.78
## # i 14 more rows
```

```
## # A tibble: 4 x 13
```

```
##    Expenses       Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct   Nov
##    <chr>        <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl>
## 1 Domestic Ac~ 84853 84838 88103 85072 88723 90384 89374 95273 94239 92394 96934
## 2 Domestic Bu~ 83000 83830 84668 85515 86370 87234 88106 88987 89877 90776 91684
## 3 Internation~ 12538 12438 14934 14033 13945 15938 14086 15934 13945 17338 19384
## 4 Internation~ 12000 12600 13860 13200 13860 15246 14520 15246 16771 15972 16771
## # i 1 more variable: Dec <dbl>
```