

Figure 6

Overview

This script takes a data frame produced by platforms.qmd and outputs a figure that adheres to PLOS submission guidelines.

Import packages and utilities

```
project_root <- here::here() # requires that you be somewhere in the
# project directory (not above it)
# packages
suppressMessages(source(file.path(project_root, "scripts/packages.R")))
# functions and objects used across scripts
suppressMessages(source(file.path(project_root, "scripts/utils.R")))
```

Load data

```
platforms_raw <- load_qualtrics_data("clean_data/hosting_services_Q8.tsv")

# This poorly named function from utils.R
# is basically just read.csv with my data path in there
vc <- load_qualtrics_data(file.path("data_for_plots/vc_platforms.tsv"))
data_repos <- load_qualtrics_data(file.path("data_for_plots/data_repo_platforms.tsv"))

counts <- data.frame(colSums(platforms_raw))
names(counts)[1] <- "count"
counts <- counts %>% arrange(desc(count))
counts
```

	count
GitHub	222
Custom Website	71
GitLab	69
Article Supplement	35
Zenodo	34
Bitbucket	33
Other	26
SourceForge	18
OSF	14
Thingiverse	12
Dryad	11
Figshare	11
Gitea	7
Codeberg	6
Dataverse	6
Launchpad	5
Mendeley Data	2
Vivli	0

```
# Includes all platforms
ordered_platforms <- rownames(counts)
```

```
vc$platform <- factor(
  vc$platform,
  levels = rev(ordered_platforms)
)

data_repos$platform <- factor(
  data_repos$platform,
  levels = rev(ordered_platforms)
)
```

```
p_vc <- basic_bar_chart(
  df = vc,
  x_var = "platform",
  y_var = "prop",
  title = "Usage of version control\nhosting platforms",
  ylabel = "Percent of respondents",
  axis_title_size_x = 6,
  axis_title_size_y = 6,
  axis_text_size_x = 6,
```

```

axis_text_size_y = 6,
title_size = 7,
show_axis_title_x = TRUE,
show_axis_title_y = FALSE,
show_bar_labels = TRUE,
label_position = "above",
label_color = "black",
label_size = 2.1,
plot_title_margin_b = 2,
percent = TRUE,
horizontal = TRUE,
color_index = 9,
x_axis_title_margin_t = 5
)

p_vc <- p_vc +
  # Expands y-axis by 15% on the upper end
  scale_y_continuous(
    labels = percent,
    expand = expansion(mult = c(0, .15))
  )

```

Scale for y is already present.

Adding another scale for y, which will replace the existing scale.

```

p_data <- basic_bar_chart(
  df = data_repos,
  x_var = "platform",
  y_var = "prop",
  title = "Usage of data repositories",
  ylabel = "Percent of academic respondents",
  axis_title_size_x = 6,
  axis_title_size_y = 6,
  axis_text_size_x = 6,
  axis_text_size_y = 6,
  title_size = 7,
  show_axis_title_x = TRUE,
  show_axis_title_y = FALSE,
  show_bar_labels = TRUE,
  label_position = "above",
  label_color = "black",
  label_size = 2.1,

```

```

plot_title_margin_b = 2,
percent = TRUE,
horizontal = TRUE,
color_index = 9,
x_axis_title_margin_t = 5
)

p_data <- p_data +
  scale_y_continuous(
    labels = scales::percent,
    limits = c(0, 1),
    expand = expansion(mult = c(0, .1)))
)

```

Scale for y is already present.

Adding another scale for y, which will replace the existing scale.

```

p_combined <- patchwork::wrap_plots(
  p_vc,
  plot_spacer(),
  p_data
) +
  plot_layout(widths = c(1, 0.01, 1))

ggsave(
  filename = file.path(FIGURE_PATH, "Fig6.tif"),
  plot = p_combined + plot_annotation(tag_levels = "A") & theme(plot.tag = element_text(size =
device = "tiff",
width = 5.2, height = 2.5, units = "in",
dpi = 450,
compression = "none",
bg = "white"
)

```