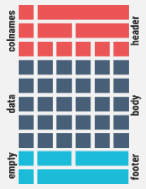
# OFFICER: PowerPoint Report Automation

| | PowerPoint Elements | Officer/flextable function |
|---|---|---|
| **General** | Create pptx<br>Add Slides<br>Edit (Add elements)<br>Remove<br>Move<br>Save | `read_pptx() // empty or read in a template`<br>`add_slide()`<br>`ph_with()`<br>`remove_slide()`<br>`move_slide(my_pres, index = 1, to = 3)`<br>`print(my_pres, target = "first_example.pptx")` |
| **Layout** | Summary elements<br>Free_location<br>Layout | `layout_summary(my_pres)`<br>ph_location (left, top, width, height, rotation, bg)<br>`add_slide(mypres, layout = "Two Content")` |
| **Text** | Size/Font /Color<br>Effect (bold, italic) | fpar (ftext ("Hello world", fp_text(color = "white", font.size = 40,font = 'Calibri', bold = TRUE, shading.Color = "yellow"))) |
| **Table (flextable)**   | Create table<br>Add Header / Footer<br>Column Width<br>Row height<br>Background color<br>Edit<br>Format<br><br><br>LayOut<br>Border line size<br>Border line color<br><br><br>Remove border<br>Heatmap | `ft <- flextable(head(airquality))`<br>`add_header_row(ft, values = c("air quality", "time"), colwidths = c(4, 2))`<br>ft <- ft %>% width (j = c (1,3), width = 0.3)<br>ft <- ft %>% height ( i = c (1,3,4), height = 0.5)<br>ft <- ft %>% bg (i = c(1,3,4), j = c(2,3,5), color = c('red'))<br>compose(as_paragraph(value = c(as_image())))<br>colformat_double(); prefix(); suffix();<br>ft <- ft %>% set_formater( col_1 = function(x) sprintf( "%.1f%%", x*100 ))<br>ft <- set_table_properties(ft, layout = "autofit", width = .8)<br>`set_flextable_defaults(`<br>`  font.size = 10, font.family = "Helvetica",`<br>`  font.color = "#333333",`<br>`  table.layout = "fixed",`<br>`  border.color = "gray",)`<br>`flextable(dat)`<br>`ft <- border_remove(x = ft)`<br>`bg(bg = scales::col_numeric(palette = "viridis", domain = c(0, 1)))` |
| **Chart (Bar, Stack Bar, Line Chart, Area, scatter)** | Chart Type<br><br>Color<br>Axis<br>BarWidth<br><br>Background Color | `ms_barchart()/ ms_linechart()/ ms_scatterchart()/ ms_areachart()`<br>**chart_data_fill**(my_barchart,<br>values = c(serie1 = "#003C63", serie2 = "#ED1F24")<br>**chart_ax_x**(my_barchart, cross_between = 'between',<br>major_tick_mark = "in", minor_tick_mark = "none")<br>**my_barchart** <- chart_settings(my_barchart, grouping = "stacked", gap_width = 50, overlap = 100 )<br>`mschart_theme()` |
| **Image** | Size/Location | `ph_with(x = doc, external_img(img.file),` |

**Resource**

1. officeverse (ardata-fr.github.io)
2. Manipulation of Microsoft Word and PowerPoint Documents • officer (davidgohel.github.io)
3. Using the flextable R package (ardata-fr.github.io)
4. Chapter 10 Charts with mschart | officeverse (ardata-fr.github.io)