# MTS Meeting #2 Showing MTS team our MTS Figure Revamps 29 AUG 17

## Intro

1. Reminder: Get the docs from last time

## Our Story

1. Heard about “award” and looked into ways of revamping the current figures and document, as we discussed last week, but also leadership behind this
2. Using a HCD or UCD process
   1. Explain HCD – create prototype, user testing, tweak, repeat. Iterative.
   2. Applied best practices for data visualization for this type of data and devised about a dozen options. UX best practices when it comes to data viz, ensuring 508 compliance
   3. User testing to understand comprehension, speed of comprehension, and aesthetic preferences.
   4. Met with OMB and CBO to better understand how they are using MTS
   5. Revised, tweaked

## Our Show and Tell

1. Figures 3 & 4, 1
   1. Testing for structure – comprehension, speed, aesthetics – high level
   2. Color palettes, best practices, - details
2. Cover Figure recommendation: Sankey
   1. HISTORY
   2. Started with side by side stacked in tableau, similar to current cover figure to redo with stacked instead of ppt call out boxes.
      1. Benefit: avoiding looking like corp tax is paying for, say, defense
      2. Problem: looks like there’s 4 items/pillars
   3. Looked online for best practices, other examples
      1. *Found Sankey-maker*
         1. So-so quality or control
      2. *WaPo* had an article with a good Sankey basically showing MTS data
         1. Didn’t like deficit, but liked most of this, colors, clarity, ease of comprehension
      3. *Found blue/grey sankey*
         1. Like: how it treated deficit, spacing, simple colors
   4. Sankey not a built in feature of Tableau…
      1. Sankey in Tableau is WIP
         1. Trying to tweak it to look similar to blue/grey 🡪 show blue grey?
      2. Happy to give them a workbook with a sankey once we get it working if they like the idea
         1. All options require manipulating the data from the MTS published format to a Tableau-usable file.
         2. It’s looking like you’d need to do some manipulating of the data to get Sankey we want. I’m using Python to do this data wrangling. We have a team at Booz that once they decided they were incorporating a Sankey into their processes, they created a system to take the source file and spit out the output file.
      3. We’re assuming Tableau is the application they’ll be using, but you can also create sankeys in D3 (pretty + control but need coding) or, again, with online Sankey-makers (meh quality + less control but no coding)

Cover figure super vetted and may face resistance to change

Likes breaking out other – in the vein of transparency

## Gita’s advice for improving MTS document in general

Here are universal recommendations to improve the user experience of the MTS visualizations. I am happy to speak to these again on the call.

**Improving User Experience for Data Visualizations:**

* The value of user experience (UX) is to enhance an individual’s understanding of a subject matter through visual design.
* For expert analysts who are used to reading tables, charts and graphs visual design aides may not be necessary. However, for a quick over view of the end results or hypotheses, visuals can be helpful.
* The ways in which we improve the user experience are through use of color, proportion and typography to create a visual hierarchy. The visual hierarchy enables the viewer’s eyes to glance over a page without causing confusion while they are interpreting the visual.

User testing can help fine tune the user experience and ensure the end result of the visuals is on target and serving its purpose. You only need 5 user testers to determine the outcome of the visual design you wish to test.

Mts is system generated, they don’t have tons of control currently—would need to revamp CARS’ process of spitting out the report

1. ask about tableau – is this what they want? (can run through history/challenges)

Brian is showing MTS data in tableau, getting started, willing to hear different tricks, tips, making progress

* We can send our workbooks
* Reach out to us for Tableau help to meet their deadline?
  + Set up meeting with jen swisher/brian lee for tableau/technical knowledge sharing
  + Cc him
* Need it by October for producing in November FY 18

Repilicability – can’t connect to CARS database, can use excel files.

Would need to go through approval and change boards to get access to database

This is why they’re doing tableau- can do faster than the above change/request process

1. RECOMMENDATIONS
   1. Recommendation: wash, rinse, repeat. take ours, and identify key users. Perform user testing with them. Tweak based on their feedback. End with figures that you feel confident are aesthetically appealing but also usable, not just pretty to look at
   2. Figure 2
      1. Recommendation to ditch Figure 2 or understand why it’s important/useful?
   3. Mts revamps as per Gita’s feedback

US

We send workbooks

Python scripts

Set up tech knowledge share with brian and jen

THEM

See if they can find someone with python and has it on machine, loop them in