PROJECT OVERVIEW



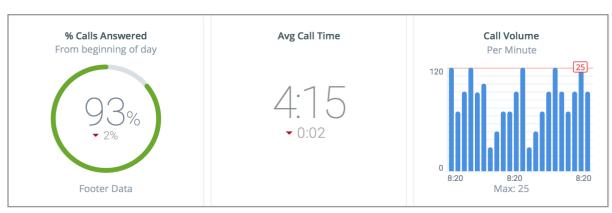
Design Motivation

Before I was given the official assignment brief, I knew very little other than the project was concerned abstractly with the idea of thresholds, and alerts/notifications. Without warning, the following brief appeared in my inbox:

We [TalkDesk] want to provide insights to our supervisors so that they can monitor everything from call volume to agent status. We do this with our Talkdesk Live dashboard where each module can be customized to the supervisors needs. This includes setting performance thresholds.

A performance threshold usually represents a target zone of performance. For example, a supervisor may set a target zone for Avg Wait Time. This is the time a caller will wait on the phone before their call is routed to an available agent. Lets say, in this case, the supervisor wants to be visually alerted any time the average wait time exceeds 10 minutes. This is a simple binary threshold. Anything below 10m is the "good" zone (0m - 10m), anything above $(10 < \infty)$ is "bad". Now lets add more value for the supervisor by adding a third "caution" zone to represent when the metric is approaching "bad" but not quite there yet.

For this UI challenge, we want to figure out the easiest way for supervisors to customize these thresholds. Don't forget to ask questions as there may be unforeseen requirements. One such challenge would be the direction of the threshold. For Avg Wait Time anything above 10m is bad. But for another metric like Avg Abandonment Time (the average time in which a caller will hangup before the call is answered), anything below 5m might be good.



A few examples of the simple, early-stage visualizations found in TalkDesk's dashboard.

Conceptual Ideation

Where to start?

To further understand such a design problem, I usually start by asking several questions to help add some form to this abstract idea.

Why is this feature important?

- **1** Performance thresholds acutely affect business outcomes of TalkDesk's clients, so if the information presented is unclear, TalkDesk is providing a
- 2 Businesses are in different spaces and have different needs ==> need for customization
- **3** Making TalkDesk feel more like an assistant who can listen to you and respond to your preferences; gives TD another datapoint to tailor experience

Who is the user (customer)?

Any supervisor in a company using Talk Desk.

Why does this solve a need?

- **1** A system for setting thresholds is neccessary yet currently absent from TalkDesk's product.
- **2** The threshold system needs to be easy for admins to adapt goals to existing team's performance.
- **3** Not every admin is an expert, so we should provide contextual recommendations and opportunities to more deeply understand the system.
- **4** Nobody is keeping vigilant 24/7 watch over their dashboard; warnings need to be clear and accompanied with possible solutions.

Inspiration & Research

How do other designers solve this problem?

Seeing the way others approached the problem usually leads to a wide variety of solutions, especially if the problem is less prolific. In my research on thresholds and warnings, it quickly became clear the diversity of ways designers approached the same problem. I'll include some ways of addressing the threshold problem below, sorted by which company is responsible for the design pattern.

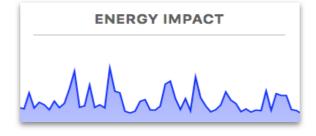
Apple

Macbook Power & Energy Usage



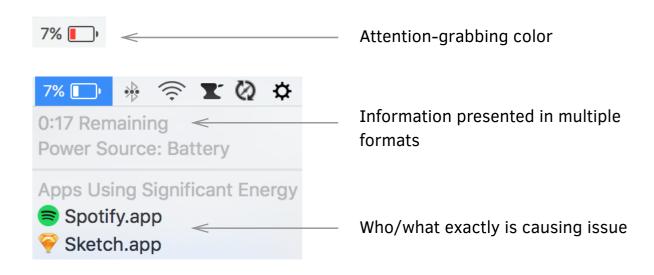
Apple's Activity Monitor is designed to display a lot of data to the user, and its UI is a good example of information hierarchy. Your eyes are drawn to the important, high-level representations of data.





Caution State (and worsening)

Physically slows power consumption (low CPU; low GPU)



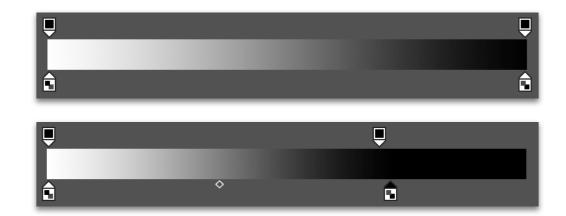
Caution State (and improving)

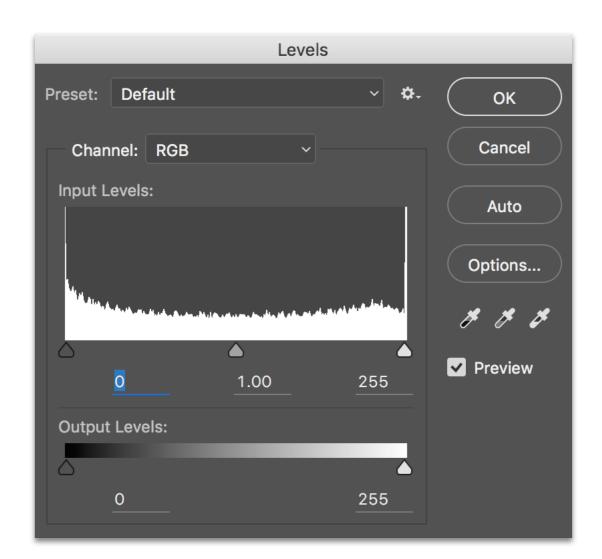
7% [/]·

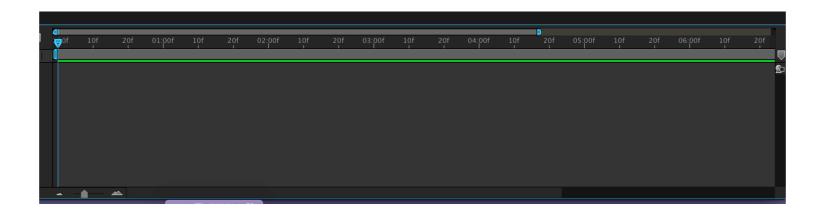
^{*} Same indicator until fully charged

Adobe

Photoshop Levels & Gradients

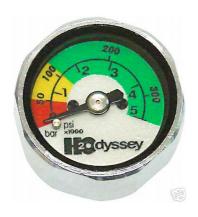






Oxygen Tank

Wanted an analog/real world example



Sketching/Mockups

Current Edit Modal



The current threshold system excels in situations where managers have an exact number in their head for an acceptable threshold, but how TalkDesk's customers are using LIVE suggests the system can be unintuitive.

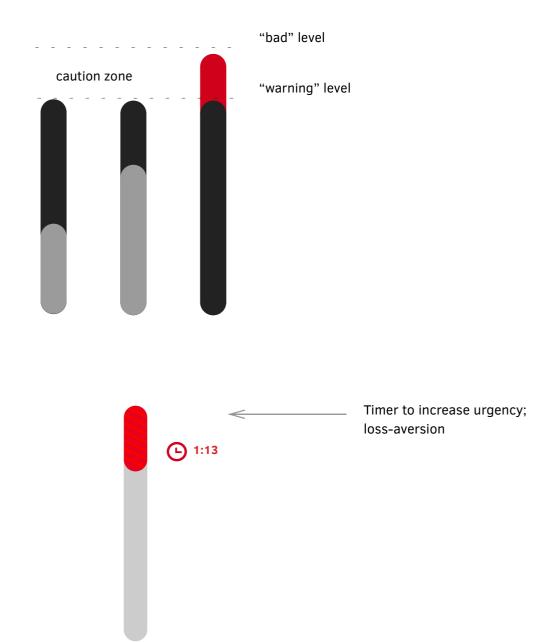
Currently, if I go to LIVE and look at the Avg. Wait Time metric, I'm given a number without any graphical representation. Without any visual representation, the user lacks obvious context, like a number without a number line.

Instead of just providing a number, we can provide an actual visual representation along with a mental model that allows the person to understand and intuit their performance on a deeper level.

"Invisible Thresholds"

the caution zone is invisible above the bar, severely discourages

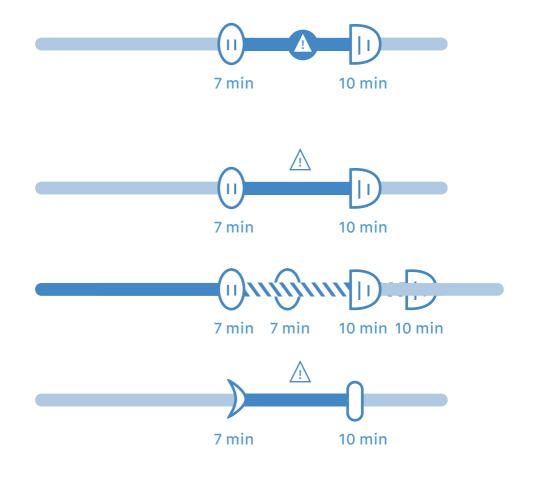
going over



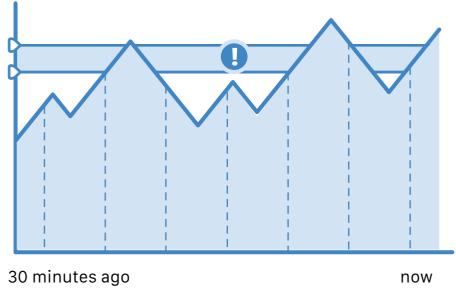
Handles & Warning Indicators



Representing Caution



Historic Wait Time



Rather than having the settings hidden away in another pane, we can integrate the visualization and the setting, along with recommended feasable bounds.

Adding Context **Target-Centric**

If the person has a specific target that they're working towards, we can represent the metric with reference to that target. This is to say, feedback given is always relative to the target.



Current Wait Time

