YVONNE (YIWEN) HOU

# Design for Efficiency

ByteDance, Meta Enterprise Design ( MED )

Meta
Enterprise Design

To comply with my non-disclousure agreement, some information has been omitted and obfuscated.
Information shown is my own and does not reflect views of ByteDance.

OVERVIEW

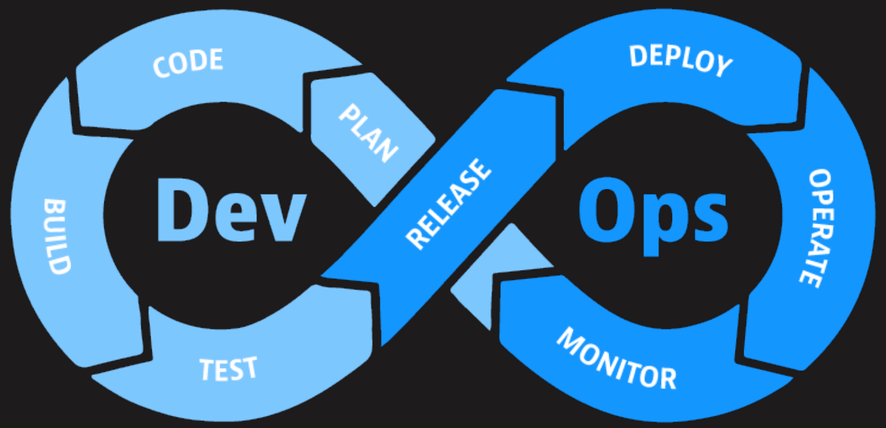
# Context

## What

Cony is an internal DevOps platform used by technical users on a day-to-day basis.

## Scope

Build upon the original Cony platform, I added a new computational resource monitoring module called Viper.

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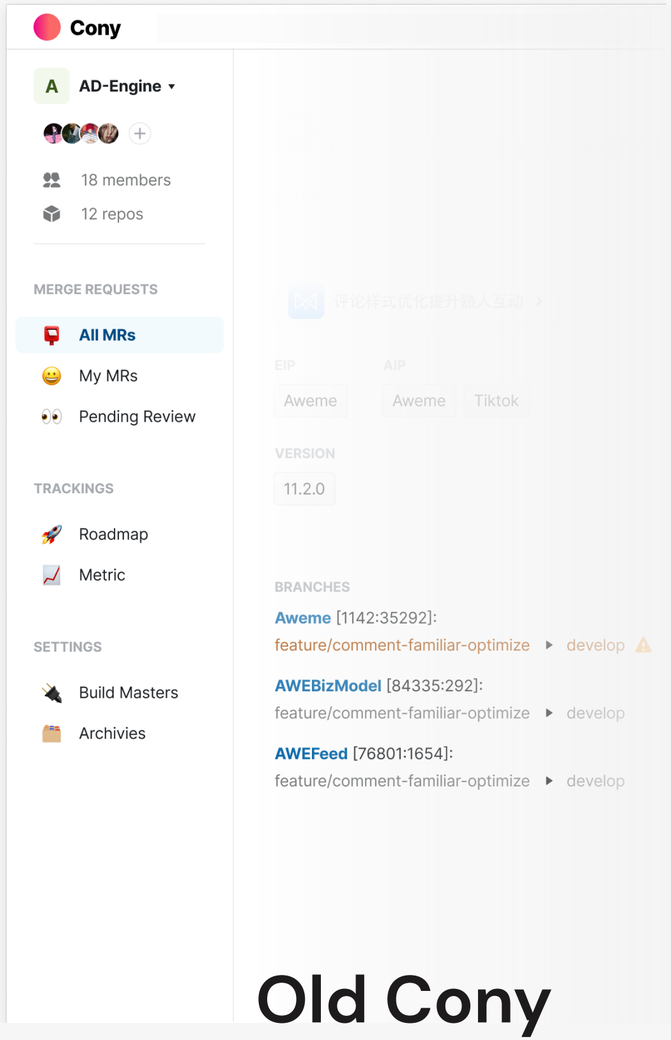
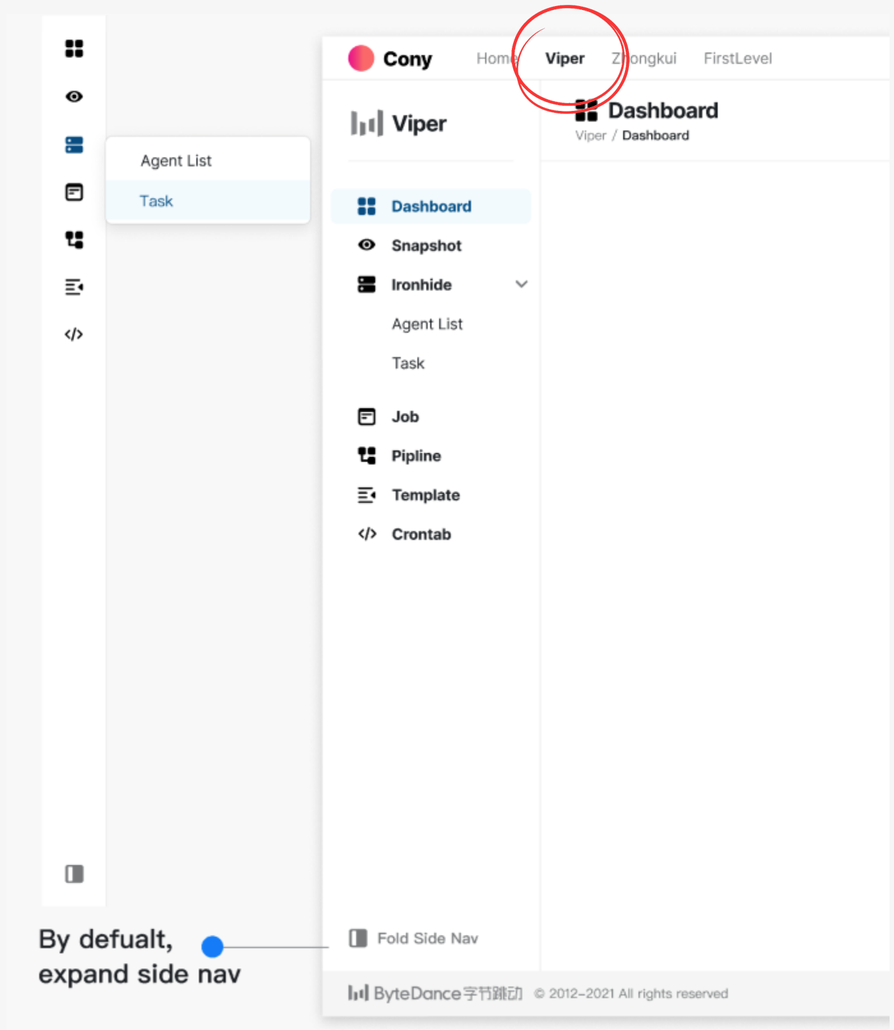



Old Cony




Restructure & integrate
new module Viper

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OVERVIEW

# Context

## Role

As the sole designer, I collaborated with a cross-functional team throughout the product life cycle from co-defining PRD to Design QA.

## Goal

1. Seamless integration into the current platform
2. Increase efficiency

## Challenge

2-month time constraint

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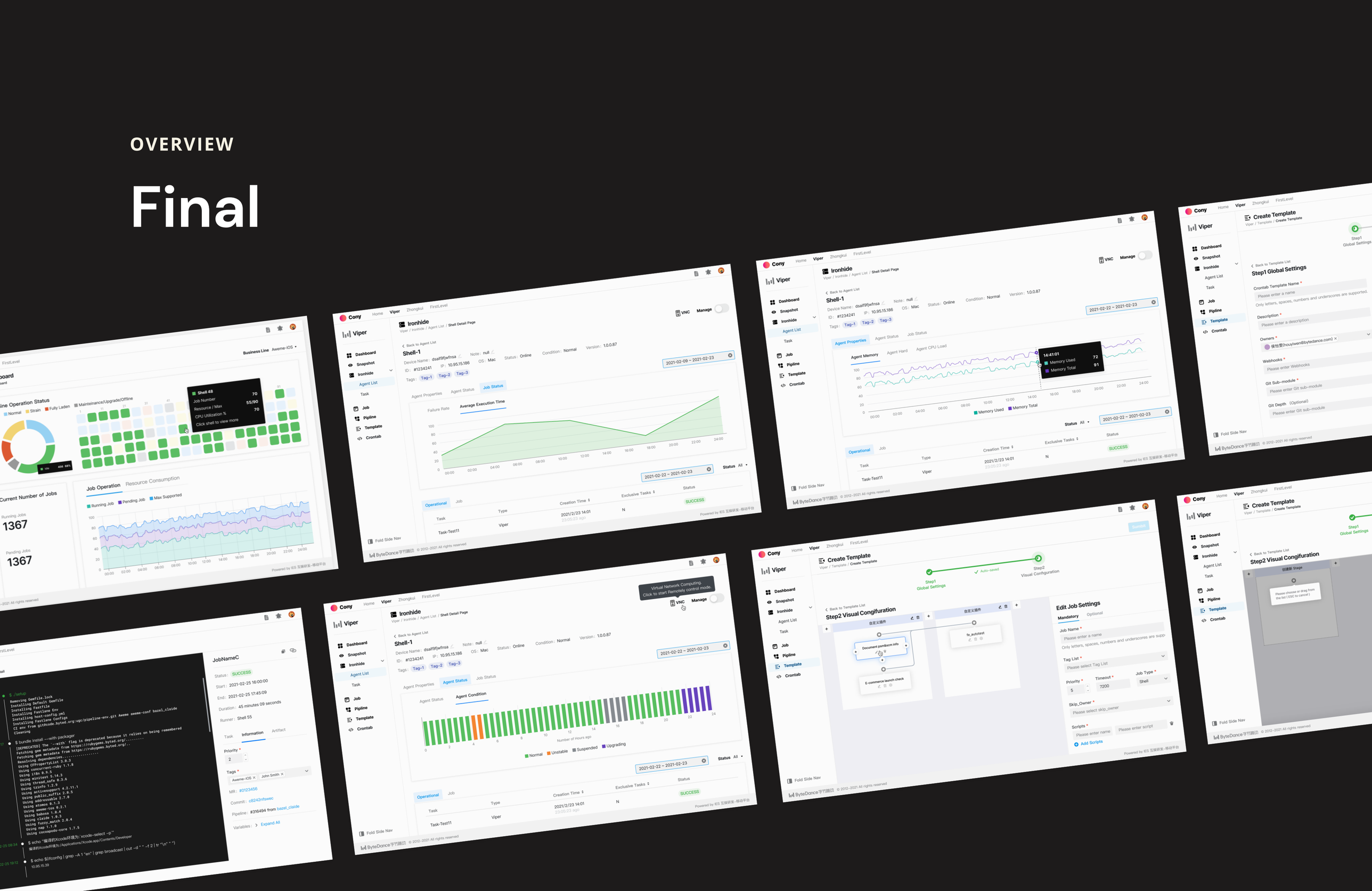
OVERVIEW

# Final

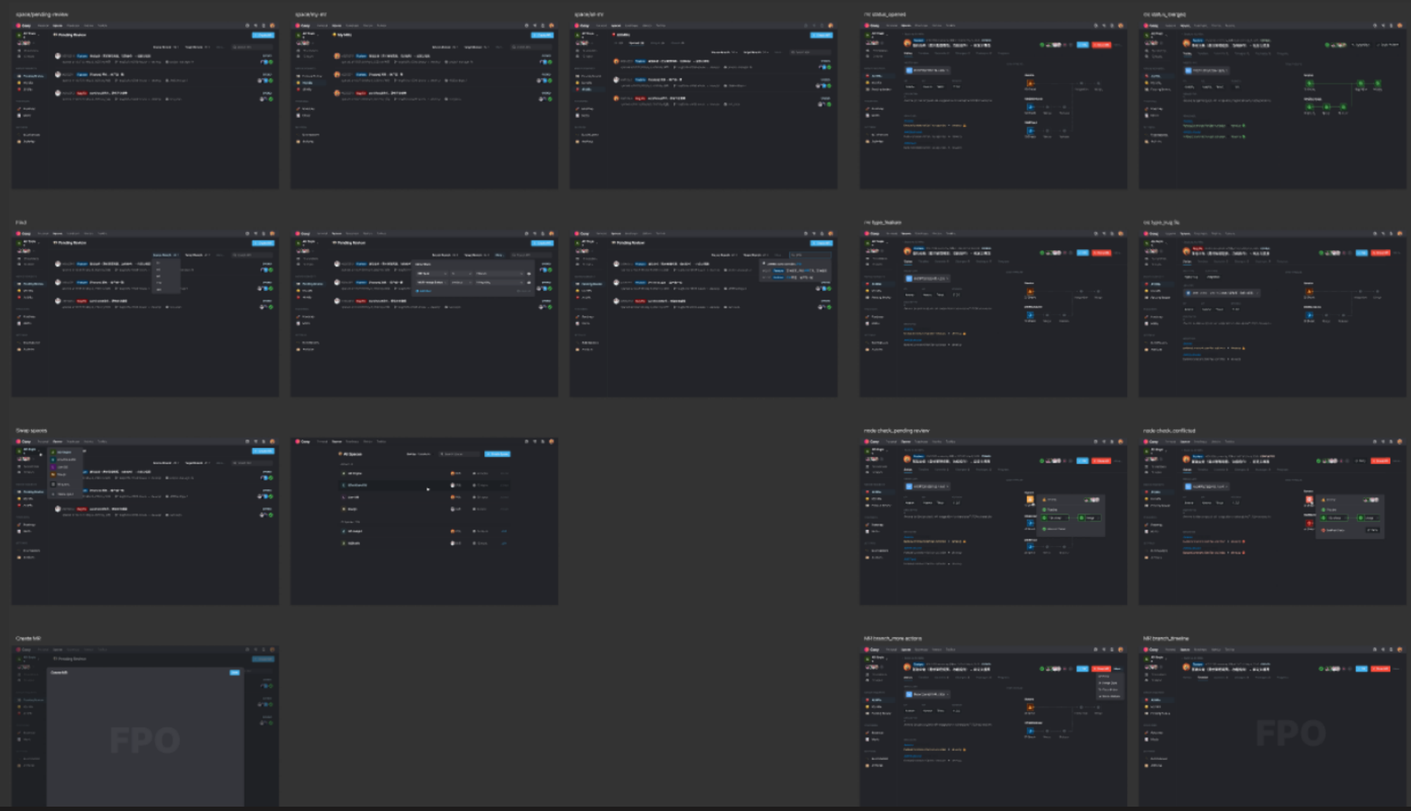


OVERVIEW

# Final

## Cony is now Dark

Every Merge Request Happens at Night

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# My Design Process

Layout

Data Viz

Accessibility

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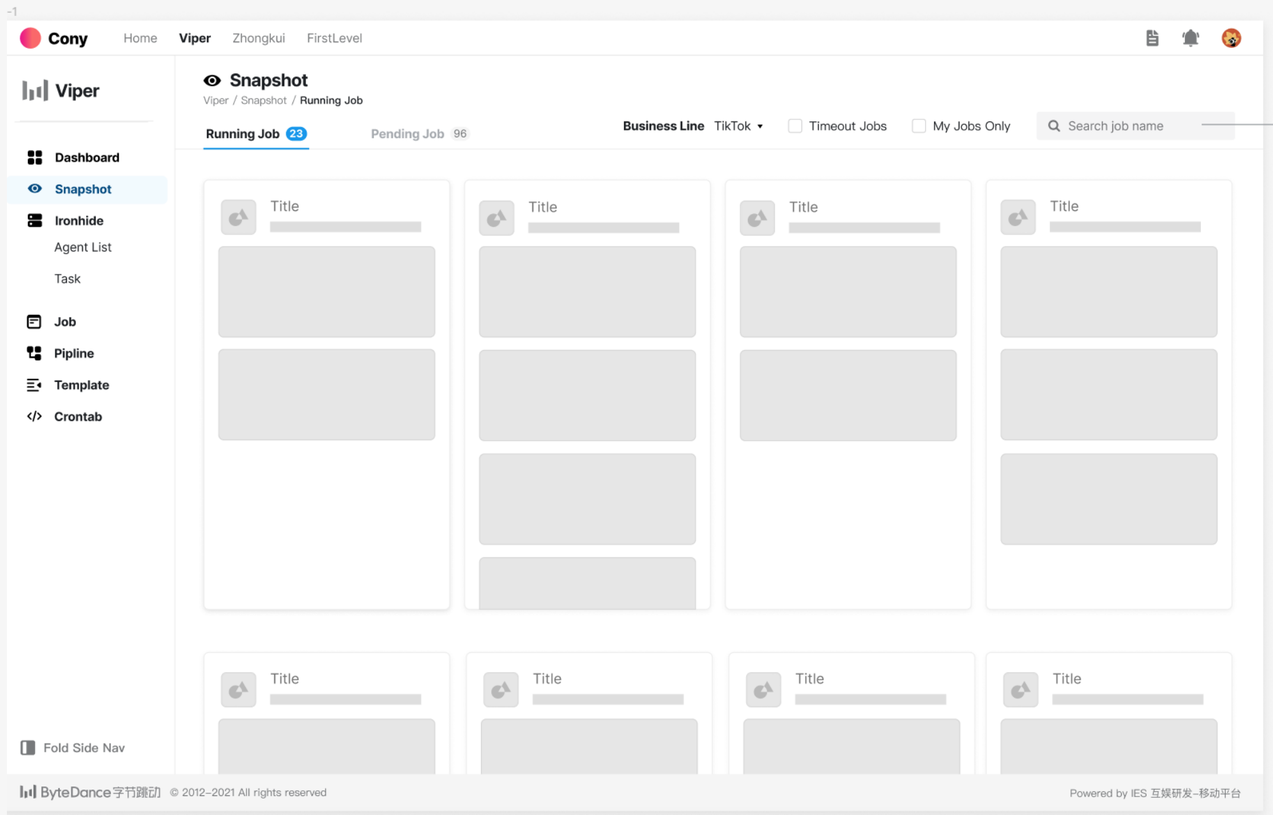
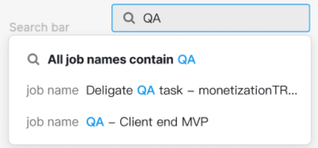
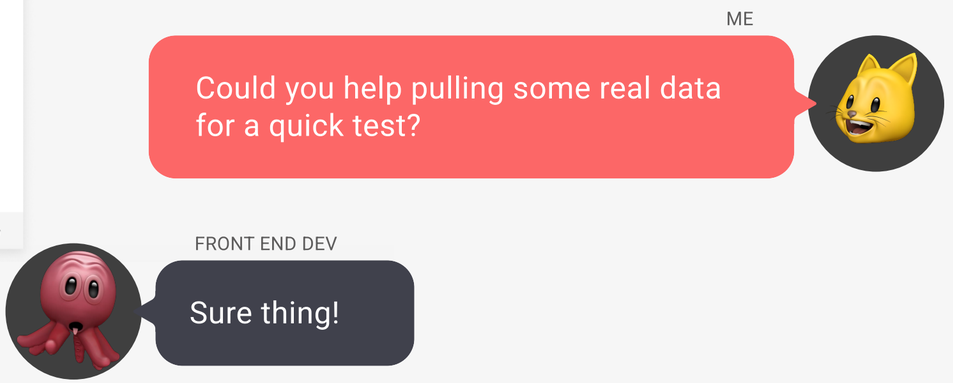
DESIGN PROCESS

# Iterate towards better Layout

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DESIGN PROCESS

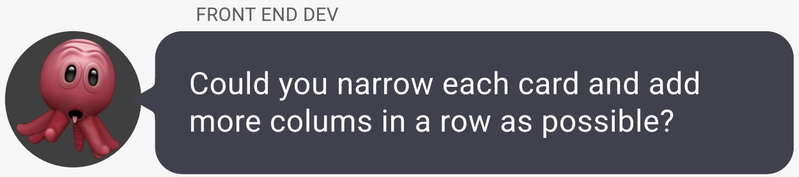
# Iterate towards better Layout

Turns out, it looks differently than I expected:

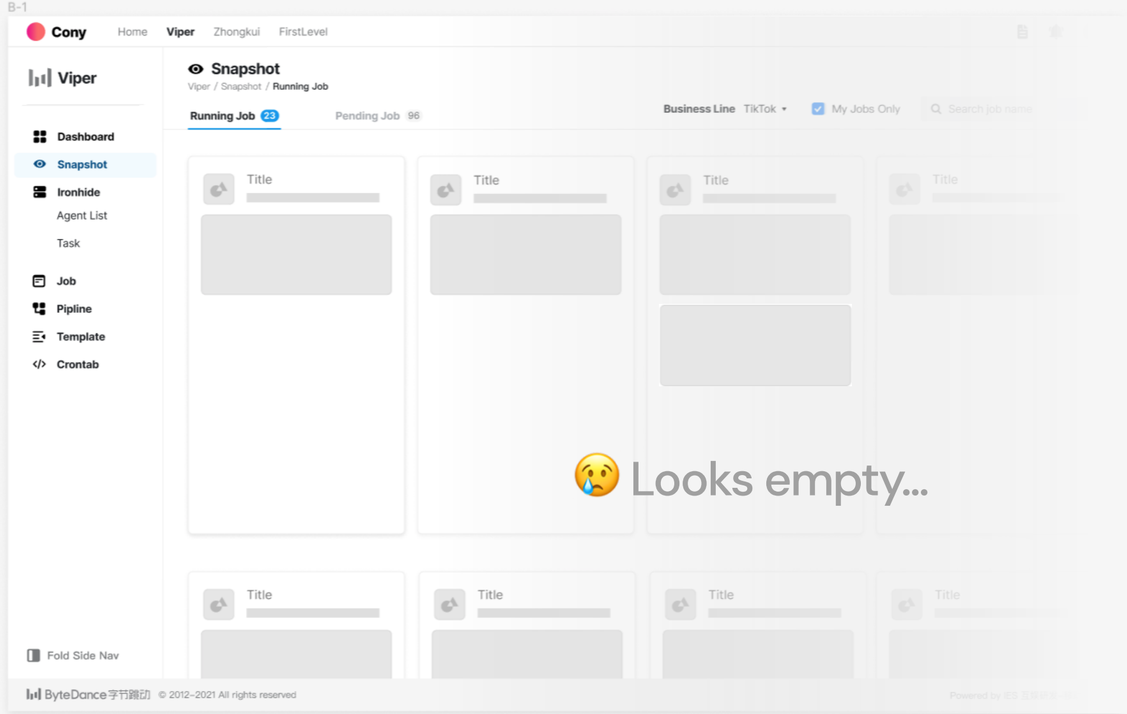
~46% one card per container

~38% two cards per container

~15% three or more cards per container




B-1

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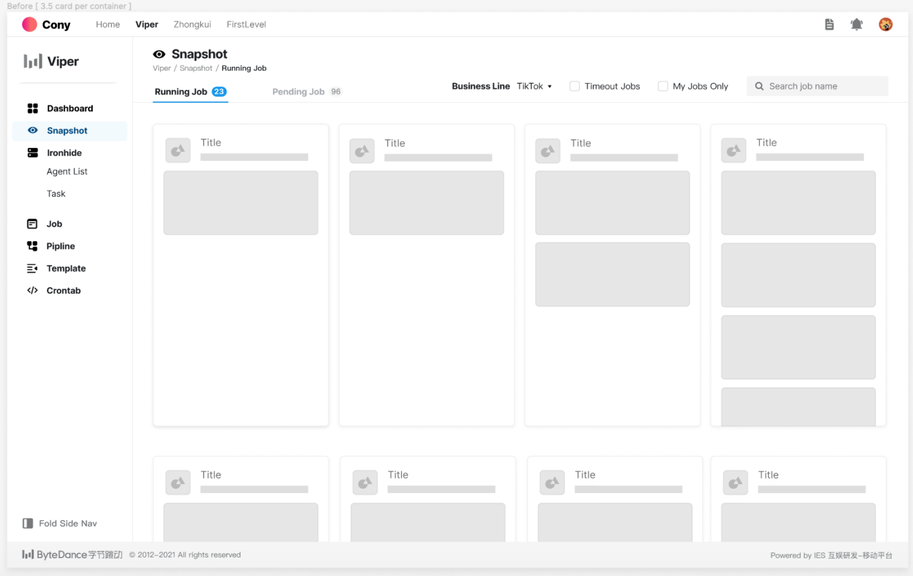
DESIGN PROCESS

# Result

Before [ 3.5 card per container ]

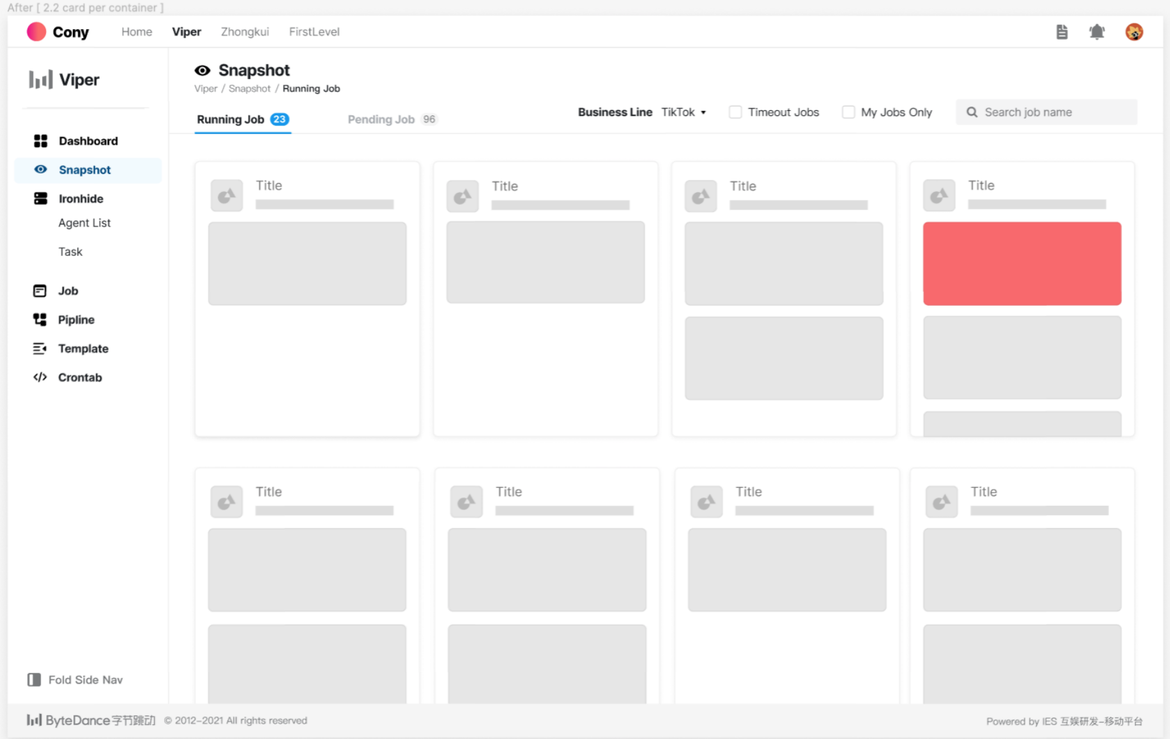



## Before

Each showing 3.5 cards

max. **12 complete cards** per page

After [ 2.2 card per container ]




## After

Each showing 2.2 cards. ( 0.2 = scrolling signifier )

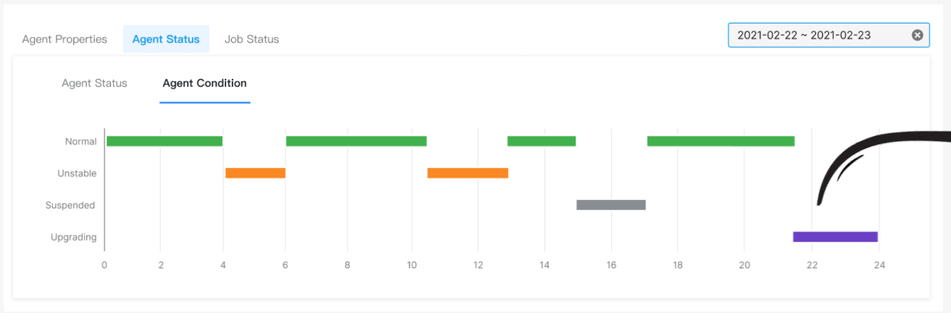
max. **16 complete cards** per page

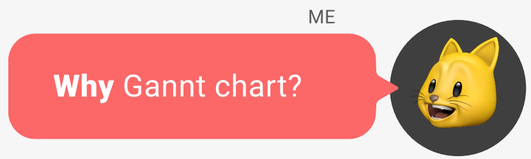
**33% more content per page!**

DESIGN PROCESS

# Iterate towards better Data Viz

## Before

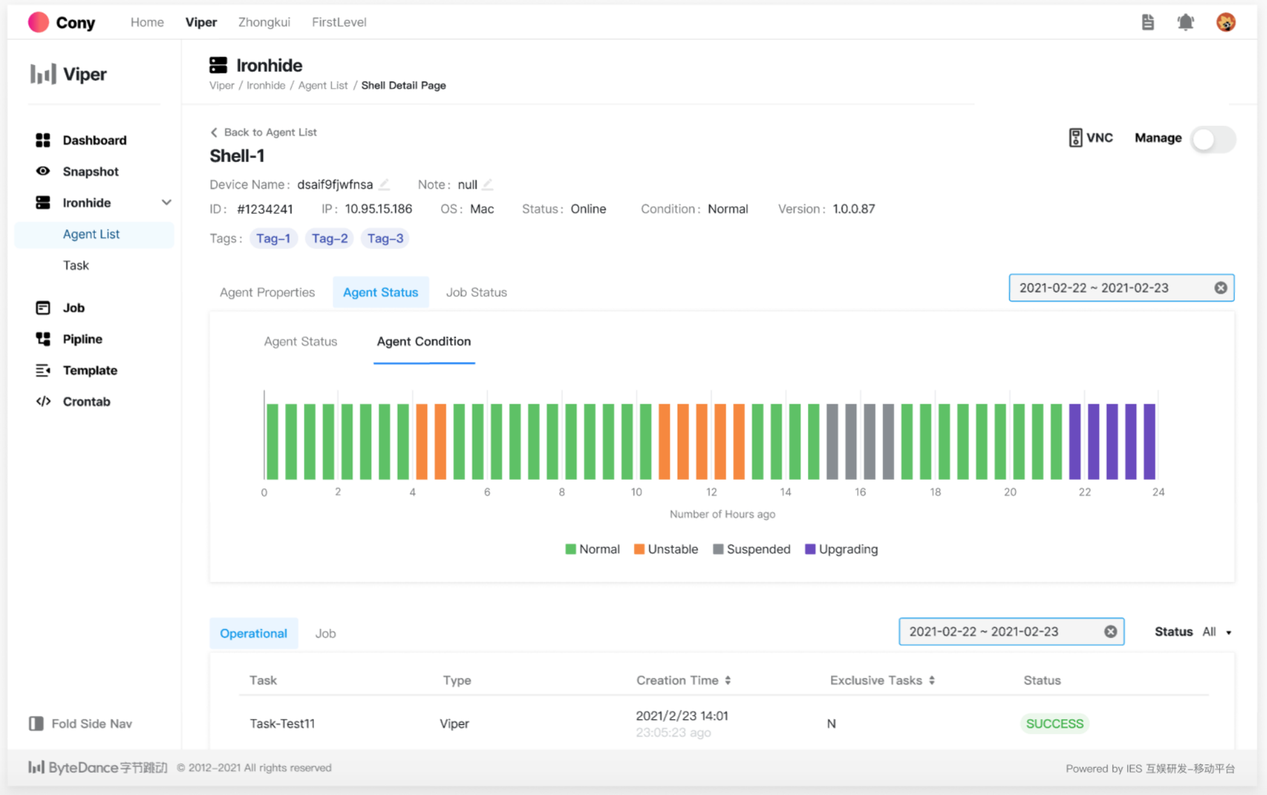



User need:
Quickly understand the machine status over the past 24-hr.

Hidden Dev need:
Reuse component as possible

## After

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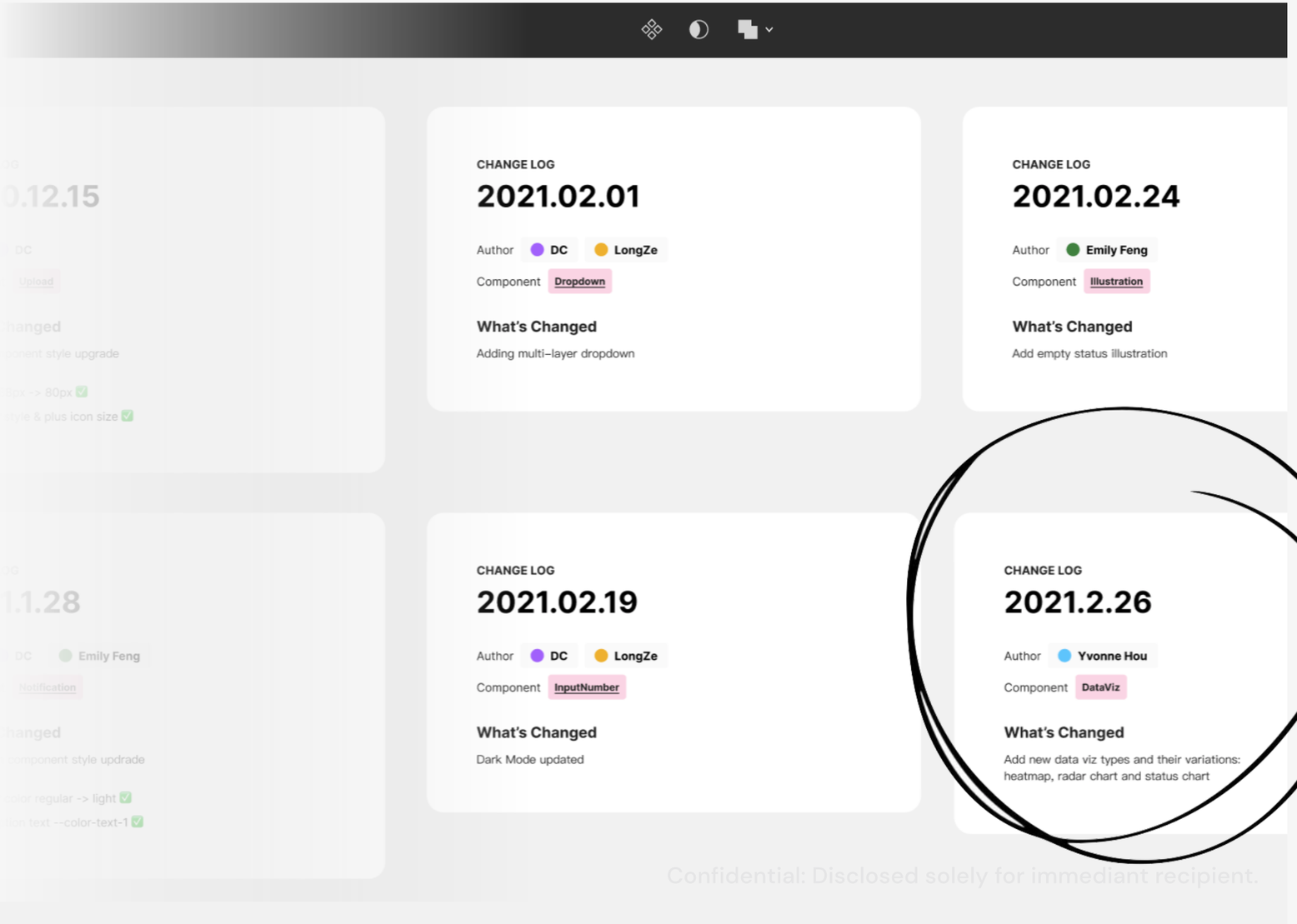
DESIGN PROCESS

# Result

Added to ByteDance's Design System, facing *100,000+* users.

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DESIGN PROCESS

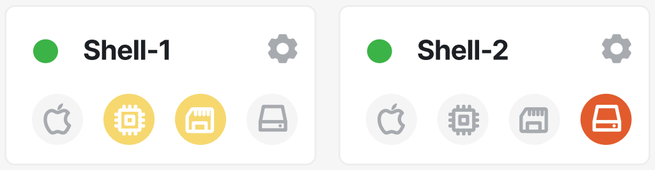
# Iterate towards better Accessibility

Iteration 1

Users scan the page to spot *abnormalities:*
Only Strain & Fully Laden matter.




Iteration 2




Status Idle Normal Strain Fully Laden

DESIGN PROCESS

# Result

Iteration 2

| Abc | Abc |
| --- | --- |
| #F6D86F | #FFFFFF |
| Contrast Ratio | 1.4 : 1 |
| Large Text | FAIL FAIL |
| Graphics | FAIL |

Iteration 3

| Abc | Abc |
| --- | --- |
| #FFF9E3 | #B88522 |
| Contrast Ratio | 3.1 : 1 |
| Large Text | AA FAIL |
| Graphics | AA |

Final Ver.

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DESIGN PROCESS

# Design Validation

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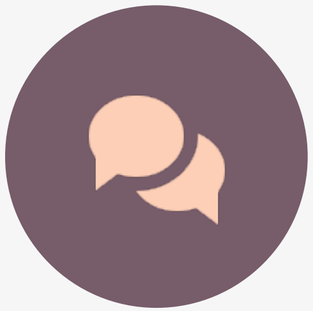
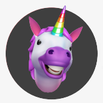
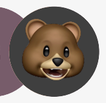
DESIGN PROCESS

# Design Validation



## Think Aloud Usability
## Feedback Session

| | | |
|---|---|---|
| | zhenjie@bytedance.com | TikTok server-side R&D; Working extensively on Spring Festival campaigns recently, frequent user. |
|  | jun.thinker@bytedance.com | Monitor the data status on a weekly basis. |
| +3  | Team of 4, Focus group | Backend developer team, frequent Cony users. |

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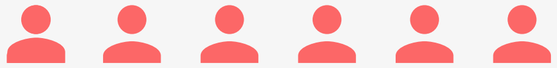
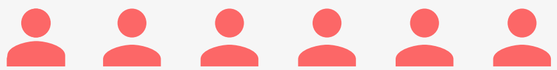
DESIGN PROCESS

# Design Validation

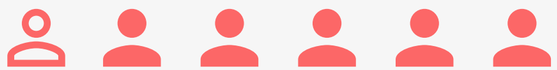
***Understand major data visualizations quickly.***



***Find their own jobs & timeout jobs quickly***



***Successfully create a pipeline from established template***



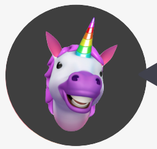
R&D

It’s easy to understand and find things. I can tell what’s it for without your explaination.

R&D

I don’t see a problem switching.

MANAGEMENT



The graphs are neat and I will download for report use directly.

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DESIGN PROCESS

# Design Validation

**Think Aloud Usability Feedback Session**

**Cony Platform User Satisfaction Survey (2021.3)**

**CSAT Score: ~86% (from 362 respondents)**

**An Improvement compared against**

- old cony site,
- other internal tools within ByteDance,
- industry benmarking scores according to ACSI.

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# Thank You

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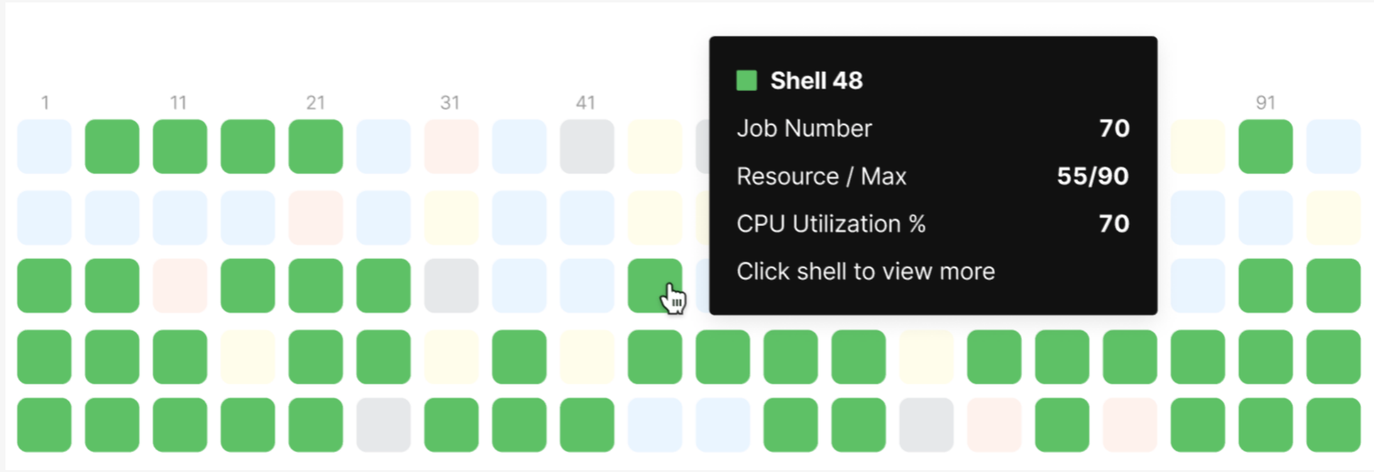
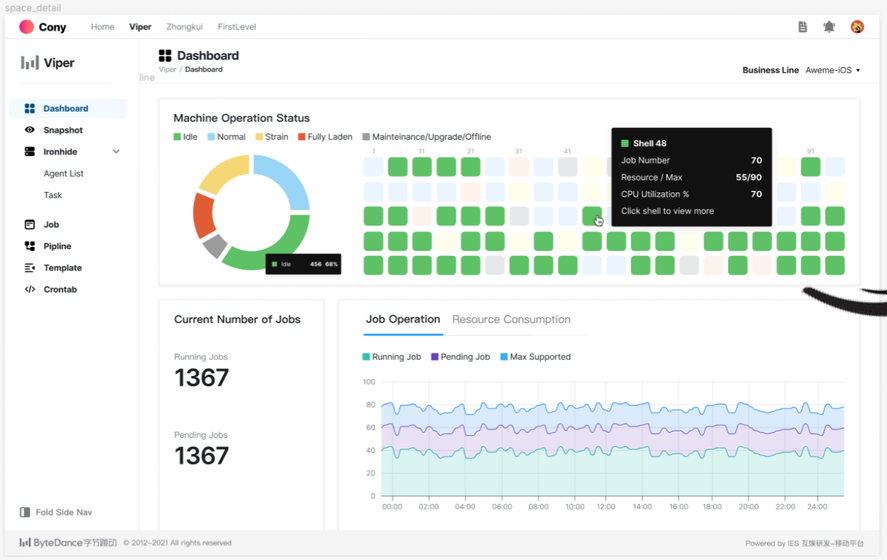
DESIGN PROCESS

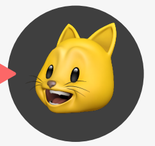
# Iterate towards better Data Viz




ME

Heat map can also work as a **shortcut** to quickly pinpoint a specific shell.



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