#### PROCUREMENT DASHBOARD REDESIGN

City of Boston | Procurement Department

**Akhil Raote**, UX Fellow | University of Washington, Industrial and Product Design

#### **Keywords:**

Data Visualization, UX Design, Finance

#### **Summary:**

Ground-up redesign of the City of Boston's Procurement Dashboard, providing CoB Finance staff with an easy to use centralized hub for their contract and spending data. Utilizing **qualitative and quantitative user research** methods, including 10+ hour-long user interviews, to uncover new user needs and develop a high fidelity prototype design proposal.

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# PROCUREMENT DASHBOARD REDESIGN

**Procurement Department** City of Boston, MA Ryan Nicoll - Data Analyst

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**AKHIL RAOTE** 

University of Washington Industrial and Product Design There is currently **no unified**, well-designed way for City of Boston finance staff to view their contract and spending data, despite a strong user need.

#### BACKGROUND

- The only current dashboard that is able to display spending and contract information was originally not developed for this purpose.
- It has the data available, but poor UX and graphic design has lead to low adoption rates
- As a fellow, I was tasked with redesigning this dashboard by uncovering new user
  needs and developing a better way to display financial information.



## RESEARCH

Finding user insights for new features



#### **INTERVIEWS**

- Led eleven hour long interviews
- Understood how Boston financial staff currently track their contracts and spending, as well as what pain points they have when interacting with technology



#### **COMPETITIVE ANALYSIS**

- Each interviewed department had their own bespoke internal spreadsheets for tracking
- Sheets had a variety of different features and levels of fidelity
- A unified, internally developed tool was clearly needed



#### **USABILITY STUDIES**

- Led two usability studies on existing dashboard
- Confirmed it was difficult to navigate, unintuitive to use, and didn't surface the most necessary information





#### **FINDINGS**

- Clear overview of spending per business and purchase order
- Contract status data:
  - Expiration date
  - Usage by spending
  - Renewal options
- No-contract spending overview
- Ability to filter data by fund, account code, business, etc.
- Functional search feature



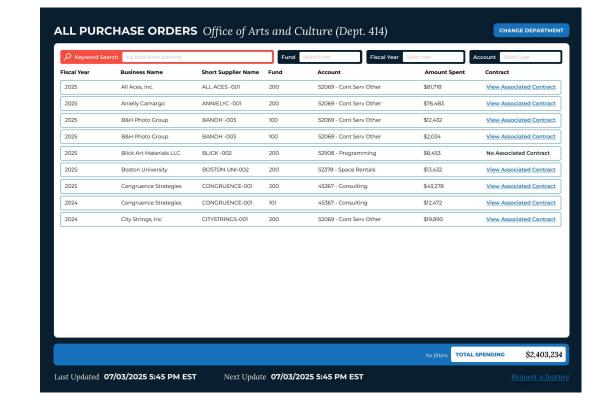
#### FINAL DESIGN PROPOSAL

Information architecture and high-fidelity prototype



#### **ALL SPENDING**

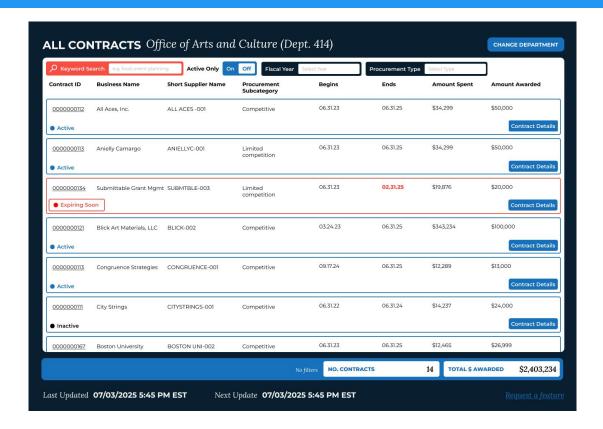
- Clear overview of spending per business and purchase order
- Functional search and filters
- Total spending easy to access
- Contract drill down available





#### CONTRACTS

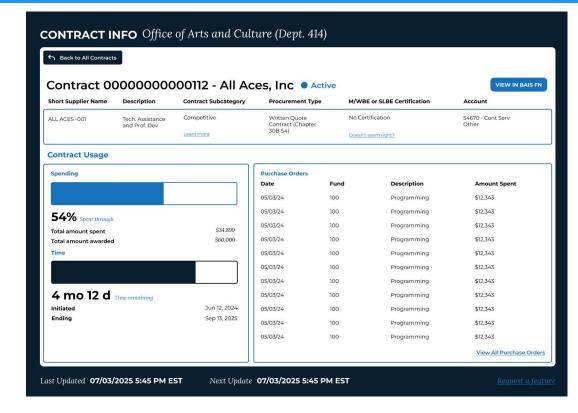
- Clear overview of contract status and data
- Callouts for expiring soon
- Contract details drill down available
- Filters and search function





### CONTRACT DRILL DOWN

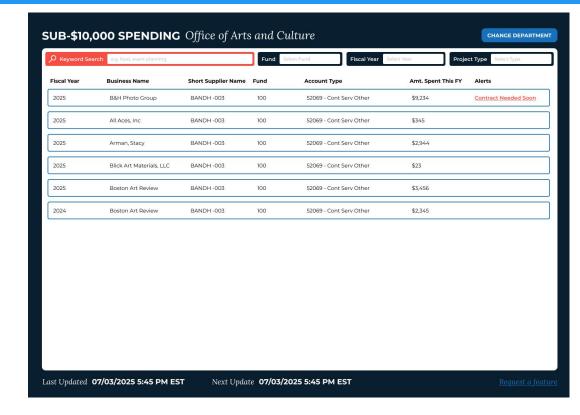
- All necessary information about contract
- Easy to scan
- Time remaining and % usage clearly visualized
- All purchase orders on contract easy to access





### SUB \$10K SPENDING

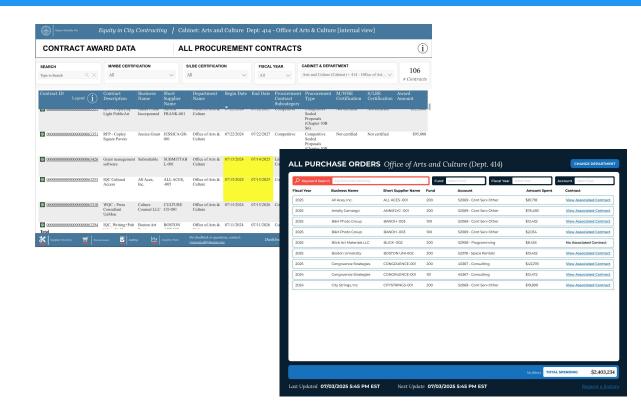
- Clear callout when spending limit is approaching
- Split by business or by individual purchase order





#### BEFORE V. AFTER

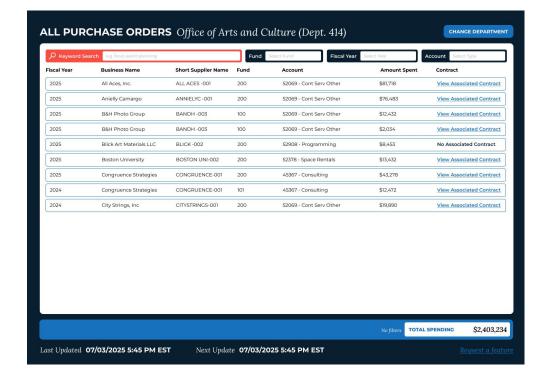
- Graphic design and information clarity improvements
- Improved fit within branding guidelines





#### **NEXT STEPS**

- Continued user testing after
- Implementing design recommendations in Power BI





# **THANK YOU!**