UX ARCHITECTURE FOR DATA COLLABORATION

Stibo Systems Case Presentation

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June 20, 2023

Outline

- UX research process
- Results and observations
- Information architecture
- Interaction design

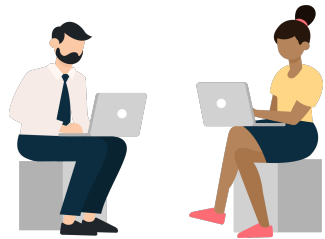
As a newly hired UX architect, your initial task is to create an outline for the UX work in a project aimed at improving the UX of the **collaboration tooling** in an existing online Excel-like table system.

…assume that you have the necessary budget for it.

UX Research - key questions

Why, how, and when do users collaborate?

- What are the primary tasks and objectives?
- What are the different roles and responsibilities in collaboration?
- How do remote work impact the user experience?
- What other tools do they use to support the tasks – planning, communication, analysis etc.?



Ida Larsen-Ledet, and Henrik Korsgaard. Territorial functioning in **collaborative writing**. CSCW 2019
Ida Larsen-Ledet, Henrik Korsgaard, and Susanne Bødker. **Collaborative writing** across multiple artifact ecologies.CHI 2020

UX Research

Discover

1. Contextual interviews of collaborative session(s)
2. Task flow analysis
3. Internal/external research
4. Workshops (?)
5. Analytics (?)

Define

- Collaborative task objectives
- Scenarios, personas and user journeys
- Information concepts and architecture
- UX quality criteria and KPIs

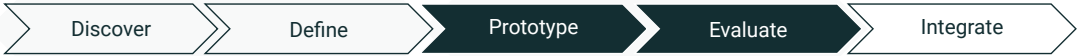
UX Research – iterate where needed

Prototype

- Collaborative user flow
- Information architecture and UI design
- Key UI components and technical features

Evaluate

- Internal review and testing
- User feedback (informal/think aloud)
- Review UX quality criteria and KPIs



Collaborative scenarios

1. Collaborative projects

- Peers collaborate on a larger project
- Different responsibilities and expertise
- Mixed focus collaboration with a high degree of coordination
- Multiple data views

2. Real-time collaboration

- Peers collaborate on smaller (urgent) tasks
- Real-time collaboration
- Shared task focus
- Few data views

3. Training

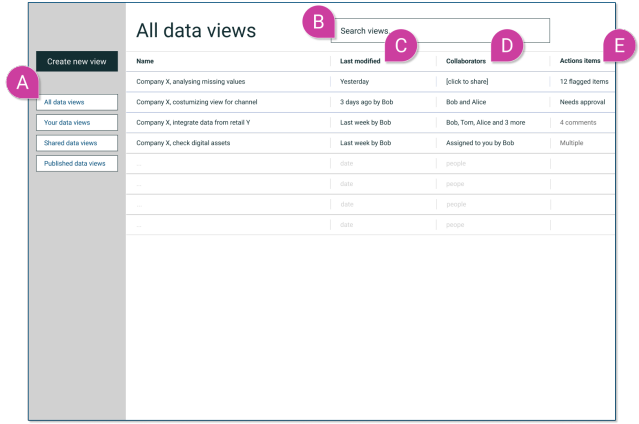
- Expert user provide training and onboarding of novices
- Focused on learning the application and/or data
- Tailored data views and exercises

Key UX qualities

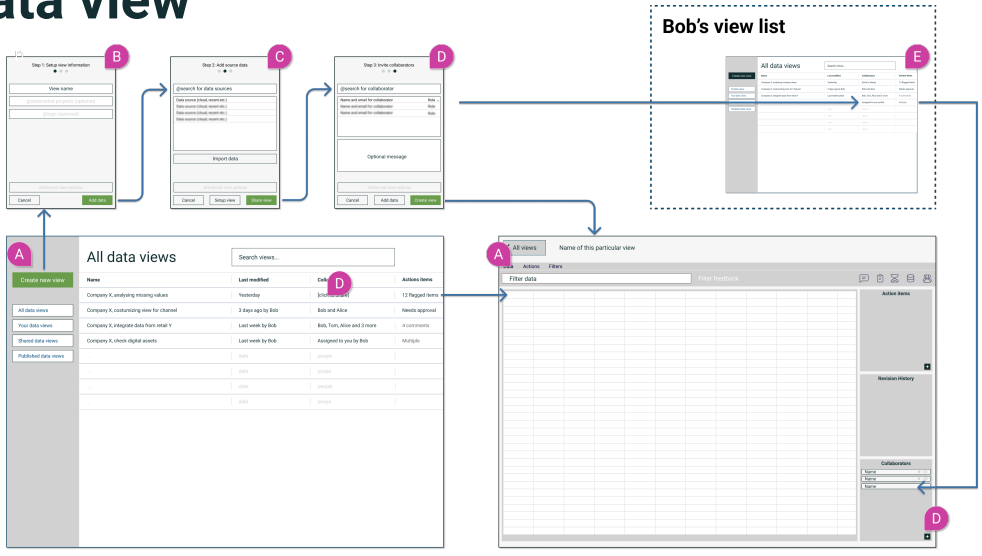
- Collaboration should be responsive and clearly communicated
- Sharing with collaborators should include task assignment and notes
- Important to know who did what in a shared view (awareness, track changes, accountability etc.)
- Support sandbox experimentation and analysis before publishing
- Collaborative features should not compromise existing task/productivity features

Information Design: Data views as first class objects

- Main information artifact when collaborating – it's what we share and work on
- A data view encapsulate a data source, users, and the revision history
- Views can be published in formats fitting the consumer needs

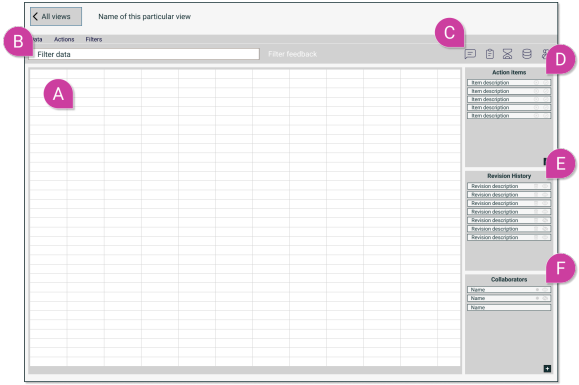


Creating and sharing a data view

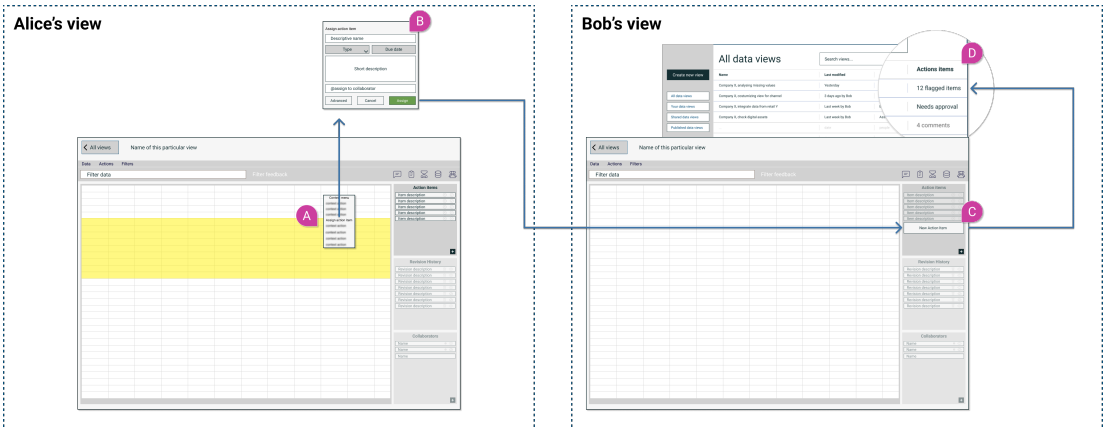


Collaborative tooling with tabular data

- **Action items** supports different roles and tasks
- **Revision history** supports shared track changes and accountability
- **Collaborator pane** supports awareness and social navigation

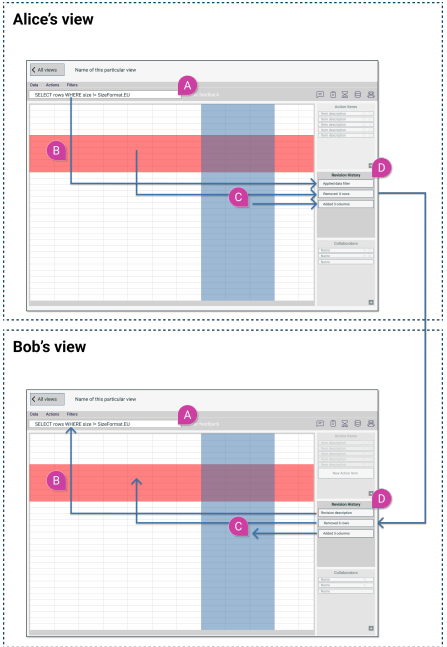


Assign action item to collaborators



Revision history as key collaboration support

- Data operations as the replicated objects (CRDT)
- Support task resumption, accountability and finding stuff
- Support experimentation – you can always roll back changes
- A set of operations can be applied to other data views (macros)



THANK YOU