UX ARCHITECTURE FOR DATA COLLABORATION

Stibo Systems Case Presentation

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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
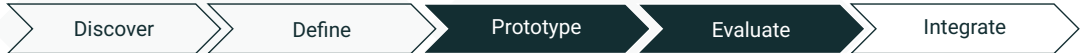
Discover ⟩ Define ⟩ Prototype ⟩ Evaluate ⟩ Integrate

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

| Discover | Define | Prototype | Evaluate | Integrate |

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 be easy and 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

Bob's view list
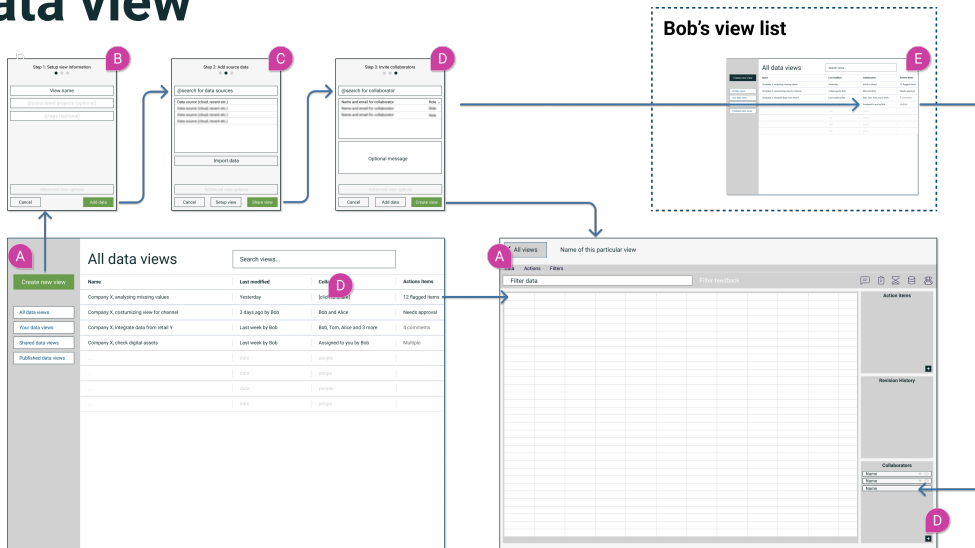
Collaborative tooling with tabular data

► **Action items** supports different roles and tasks

► **Revision history** supports shared track changes and accountability

► **Collaborator pane** supports awareness and social navigation
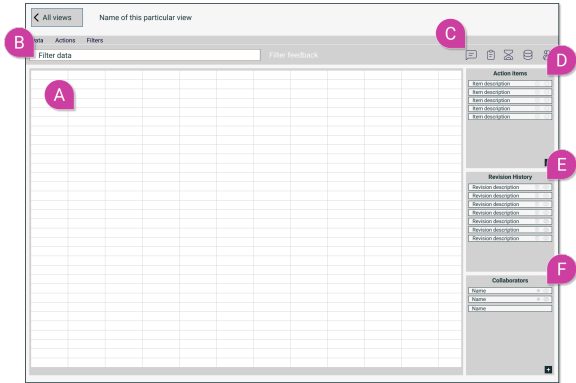
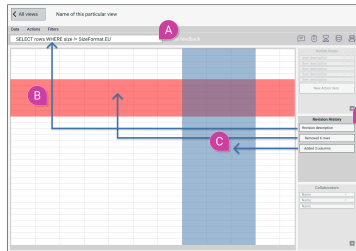# Assign action item to collaborators

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)

Alice's view

Bob's view

THANK YOU