

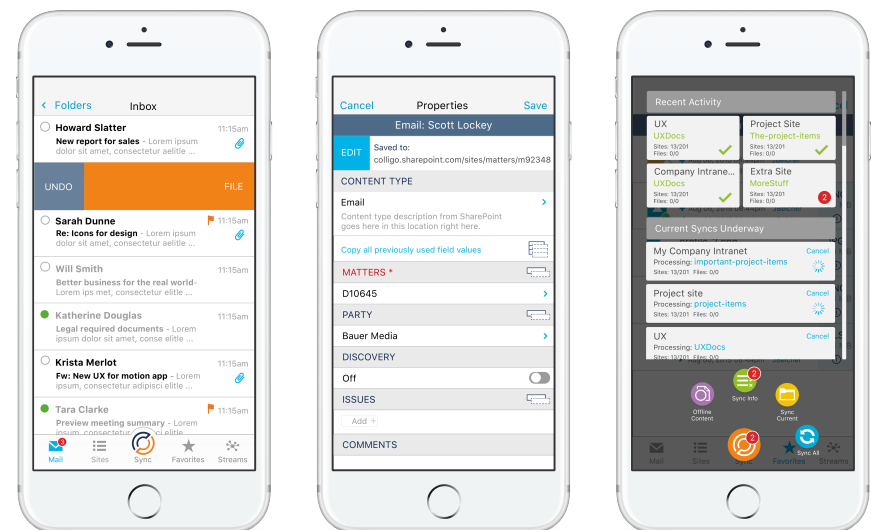
Project: Motion

Market Opportunity

Colligo was a market leader in desktop Email Records Management
High percentage of email is read and sent on mobile, iOS in particular
Few competitors in the Email Records Mgt space
Colligo had an established iOS app

Project Status

SaaS Platform as Foundation
New Sync Engine Untested
iOS Project Underway



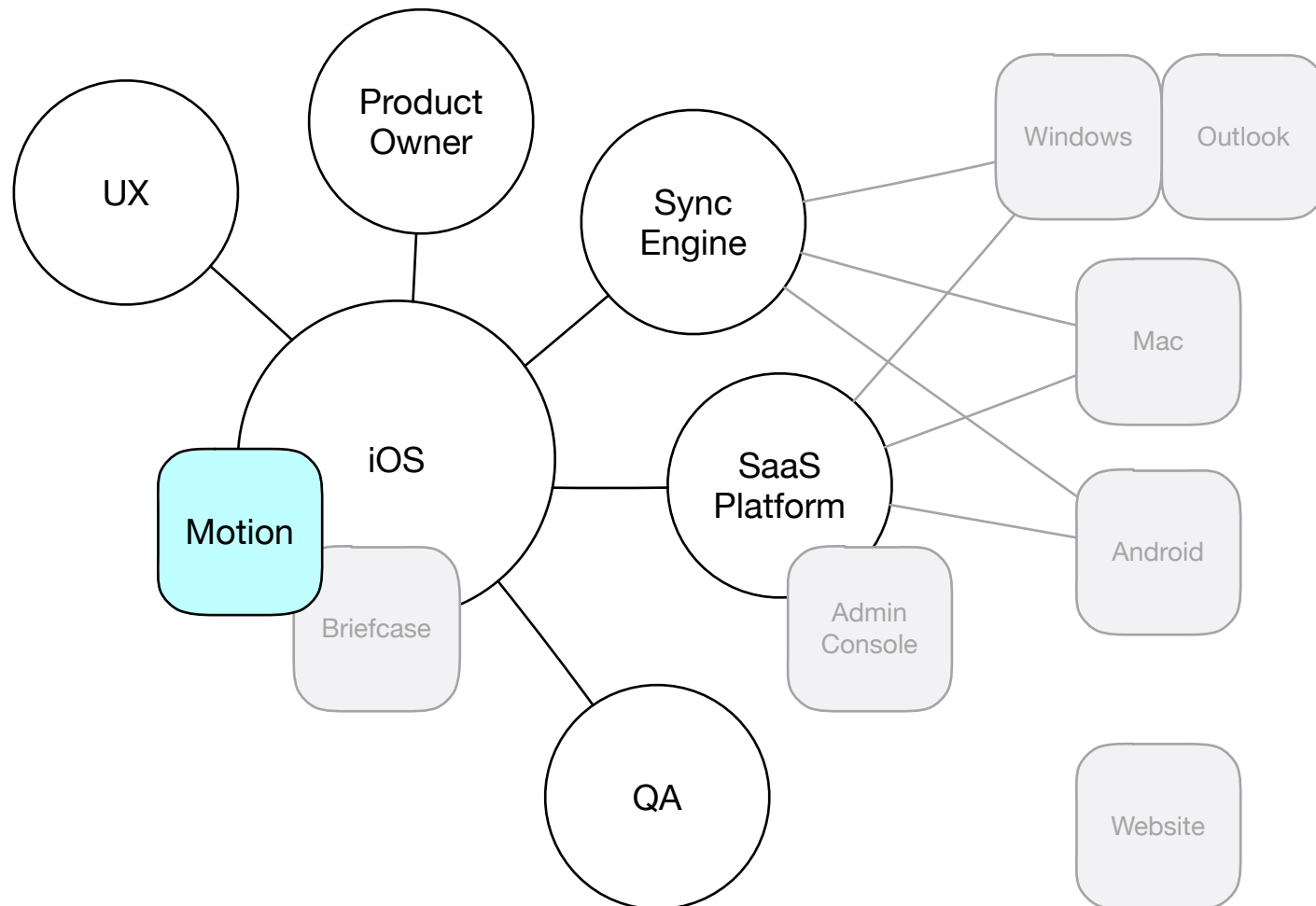
Company

My Role

UX Manager &
Interaction Designer

Design Team

Myself & One UX Designer
Portfolio of 8 Projects



Needs Identification

Objectives

File Email to SharePoint on Mobile iOS

Attaching Files from SharePoint when Sending Emails

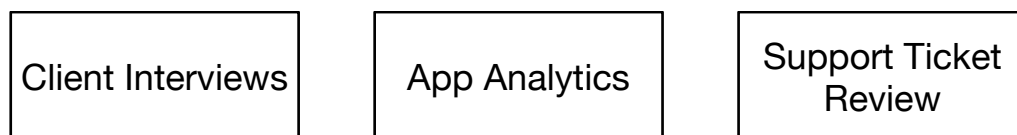
Leverage the capabilities of the new Sync Engine

Authenticate and Configure centrally via the SaaS Console

Internal Interviews to Gather Assumptions



Validation Strategy

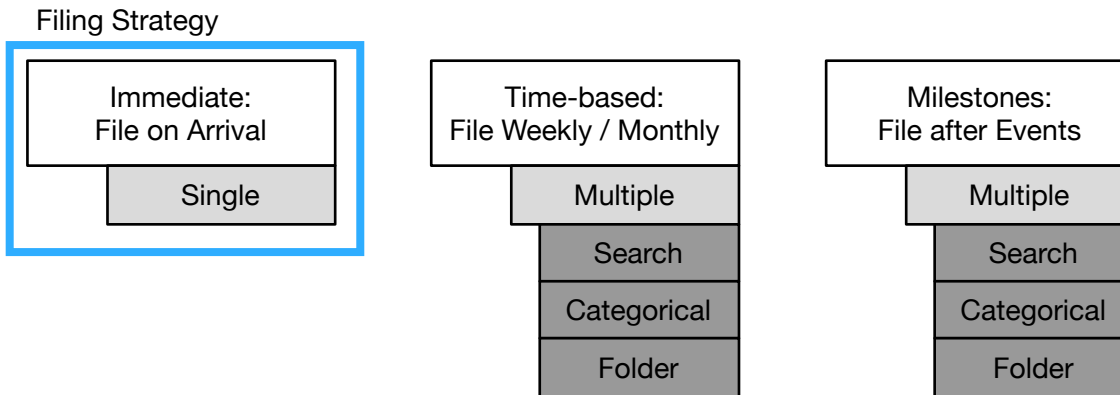


Users & Journey

Target Personas

Legal: Lawyers & Legal Assistants

Sales: Reps & Contract Agents



Pain Points

Finding the correct Folder for Filing

Entering Metadata

Quirks

Users navigate to the filed folder after filing to verify

Users navigate to folders to verify synced status

Client Interviews

Interview Opportunities

Product & Sales historical interview notes

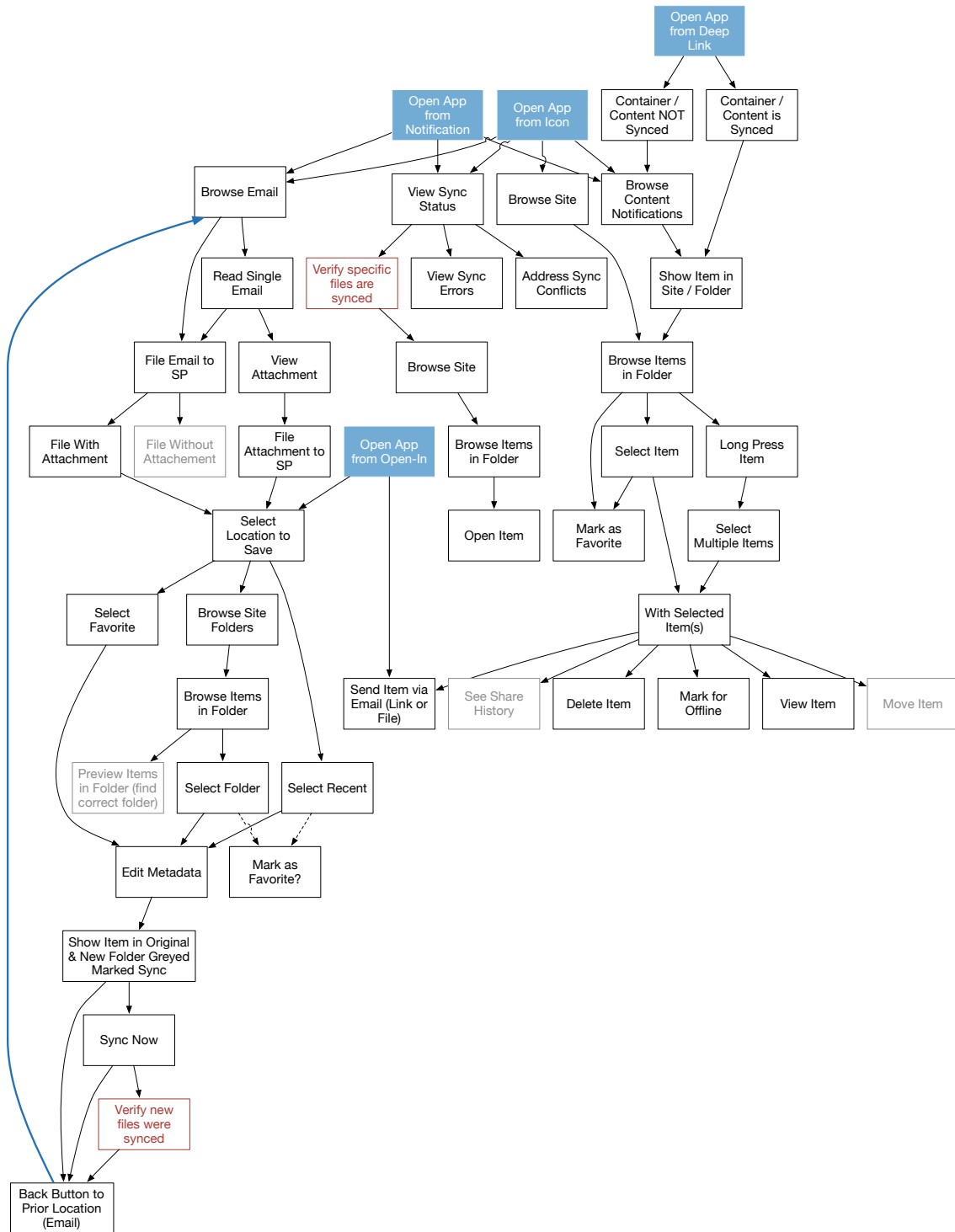
VIP program of scheduled interviews with IT and Records Mgrs

Ongoing Goals

Validate assumptions about end-users, process, environment

Discover contextual elements, user knowledge, existing tools

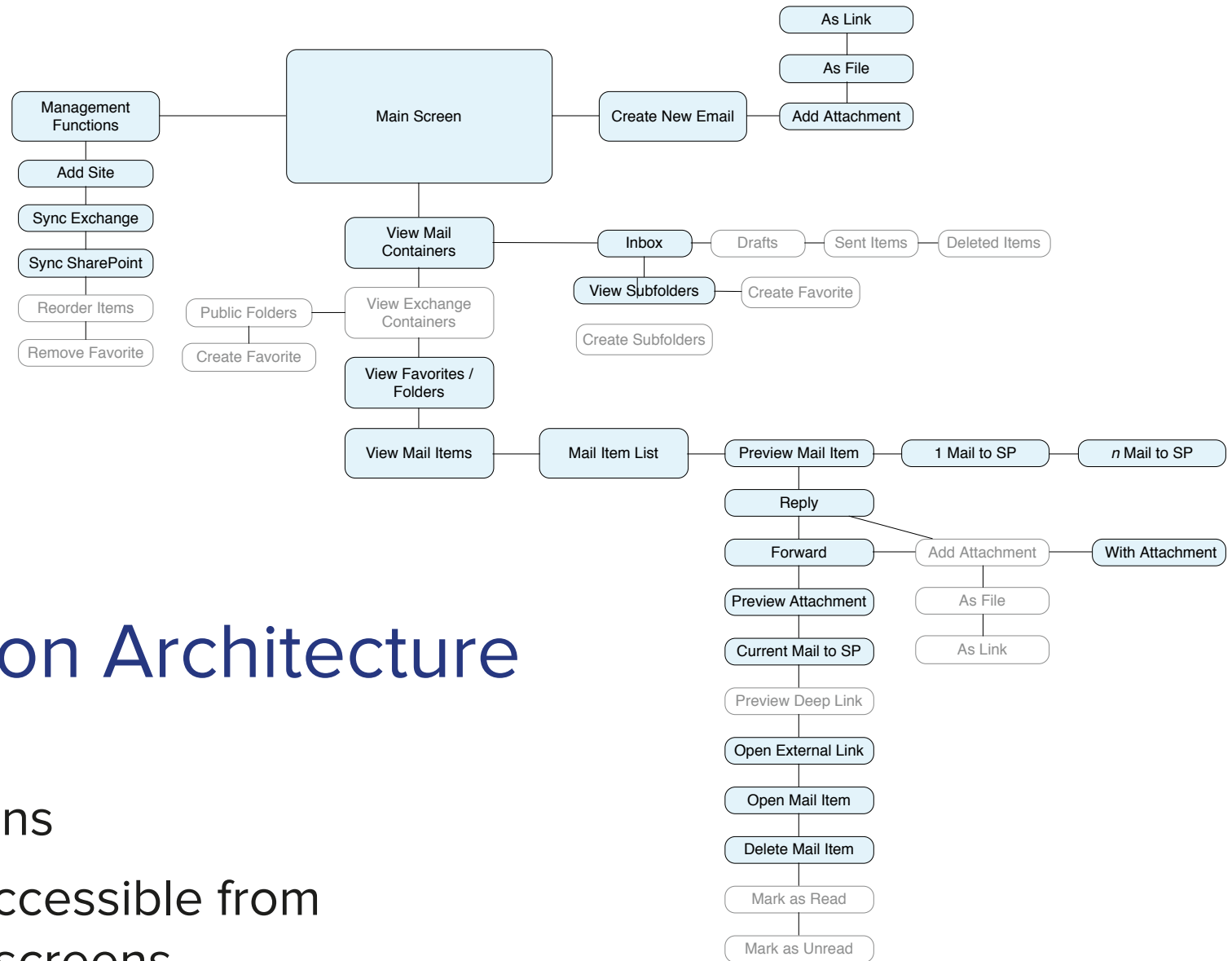
Participatory design and design validation with wireframes



Task Flow

Goals

- Understand the Process
- Clarify Order of Operations
- Define Critical Path
- Highlight User Needs & Identify Gaps



Information Architecture

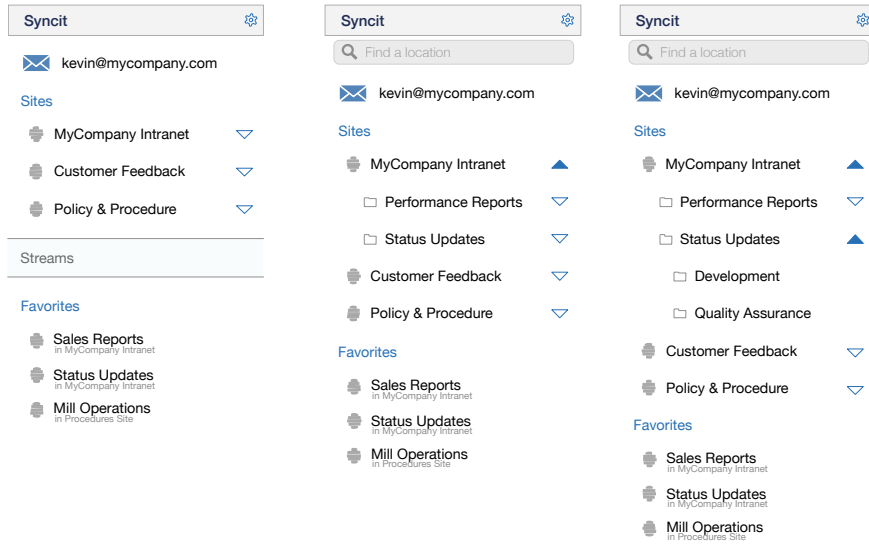
Goals

Simplify options

Make tasks accessible from appropriate screens

Identify interface challenges

Wireframing



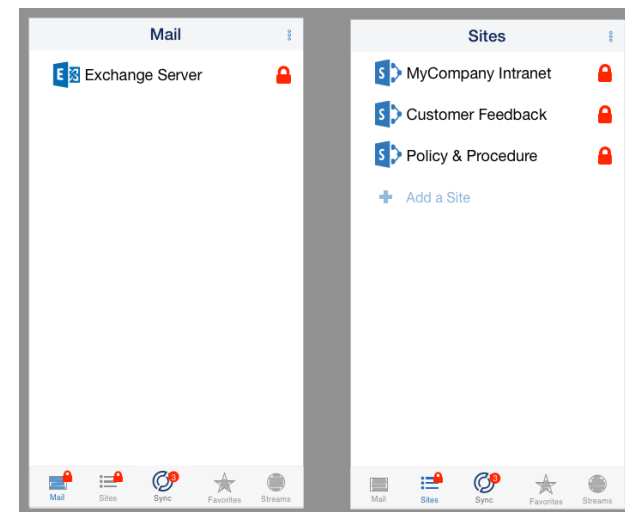
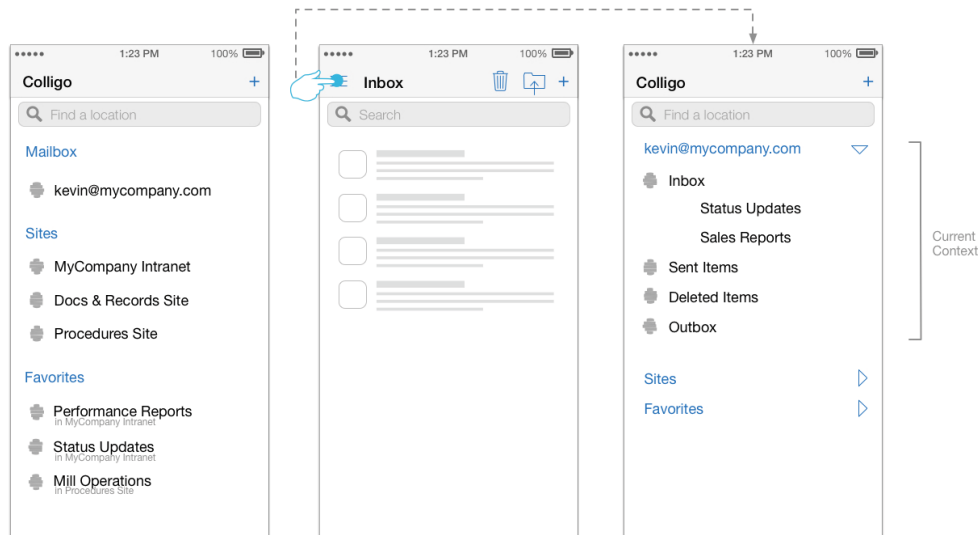
Focus on Challenges

Access to Top Level Elements

Email, File System, Favorites

Navigation of the File System

Multi-context Authentication



Usability & Participatory Design

Ideation & Usability

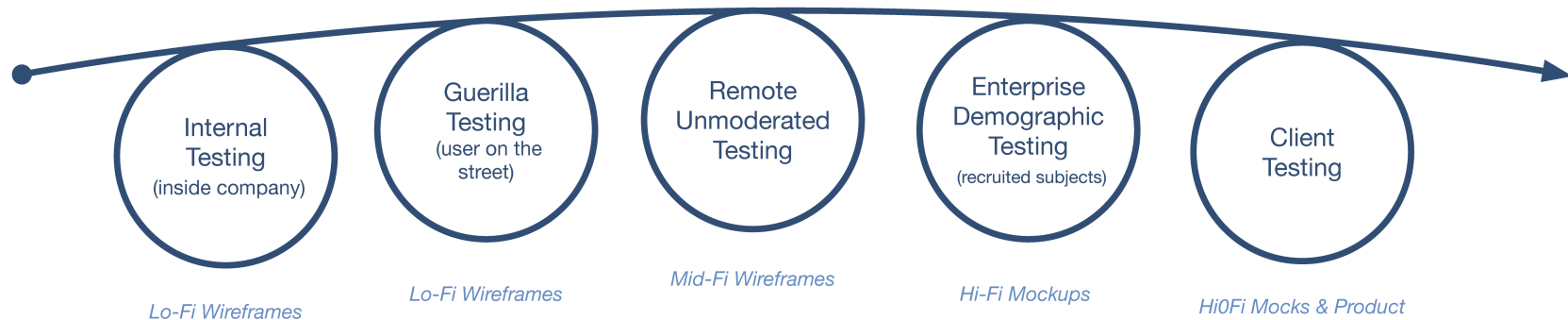
Continuous interface evaluation ensures fresh ideas and challenges are coming into the Design process

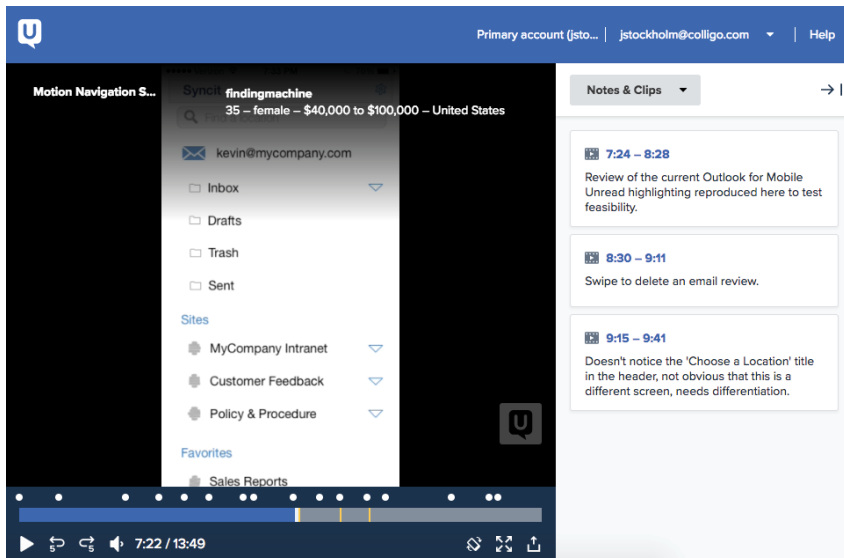
User evaluation isn't just about usability and task KPIs but also discovery of missing concepts from being too close to the design

Design & User Resources

Investment in User Evaluation costs money or time

Known resources like clients can get burnt out or consumed and become unusable





Remote Testing

Goals

Baseline usability with existing apps

Identify usability issues and knowledge gaps

Iterate to improve task completion & time-on-task

Demonstrate UX value to Product and Engineering

Mentorship

Test introduction

Script writing

Evaluation & Write-up

Iteration & Solutioning

UserTest 15-04-24 Navigation View

Syncit ← Some users seemed disoriented when the nav panel and contents panel showed similar folders OR when the nav panel was used to select a location to save a file, title not enough - needs better differentiation

Find a location

← All users immediately accessed mail via the nav panel mail link

kevin@mycompany.com

Sites

- MyCompany Intranet ▲
- Performance Reports ▲
- Installation ▼
- Sales ▲ ← All users understood the open / close buttons for folders in the nav panel
- 2015 Q1 ▲
- 2014 Q4 ▲
- Status Updates ▼
- Customer Feedback ▼
- Policy & Procedure ▼

← Some users experienced disorientation after they clicked back to the Nav Panel because they couldn't tell which folder they were viewing in the Content Panel - maybe highlight the current folder

← One user identified that in folders with many children that navigation of this view would be problematic - maybe add ... show more

Favorites

- Sales Reports ▲ ← The majority of users clicked Favorites locations to quickly get into named folders
- Status Updates ▲
- Mill Operations ▲

← All users easily clicked directly on folders to access the contents view

← 2 users expressed concern that Favorites was at the bottom of the view and recommended moving it up

Internal Challenges

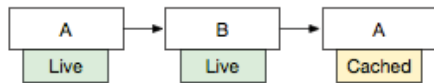
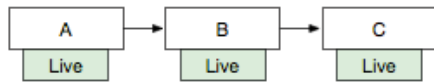
Workshopping & Alignment

Issues arose between internal teams

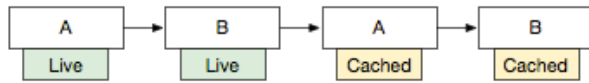
UX ran workshops and alignment sessions with visual presentation

User Navigation

First Visit

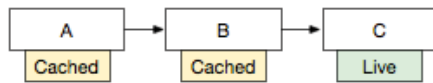


Cache exists for returning to parent folder



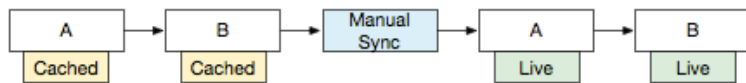
Cache exists for all return visits

Revisit



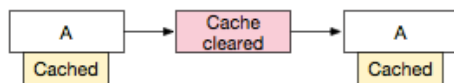
Complete cache expires and is removed on next interval sync (or timeout)

Manual Sync Triggered



Manual sync clears cache for all children
Manual sync forces a re-sync of the current location

Cache Clearing



Cache will need to be retained if the user is currently viewing / paging in a location

Cache Optimization

Types

- (1) 1 Node: conflicts on the same entity
- (2) 2 Nodes: conflicts between multiple entities

Resolutions

- Local Wins
- Remote Wins
- Revert Both
- Split: Rename
- Merge: Folders only current

	Client	Server	
Type 1	A*	A*	Update on both client and server (very common)
	A ^x	A*	Delete on client, Update on server e.g. Delete folder and 1 node in it is changed
	A*	A ^x	Update on client, Delete on server e.g. Remote delete just deletes local Local delete round trips Recreate tree on server recursively
Type 2	A ⁺	A ⁺	Two different files, same name
	A ⁺	B > A	Create a file locally, rename file on server to same name as new local file
	B > A	A	Renamed file to an existing filename on the server
	B > A	C > A	Filenames changed to same name on client and server
	B > C	B > A	File changed to 2 different names on client and server No Conflict: File is renamed to A Questionable result - needs review

Sync Conflict Mapping

Design System

Goals

Brand Identity

Design Consistency

Interaction Patterns

Reduce Design Involvement

Actionable Specifications

Process

Brand Guidelines Rework

Research Design Systems

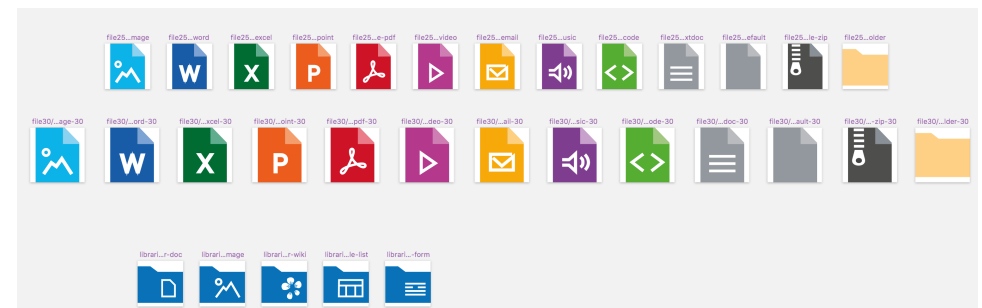
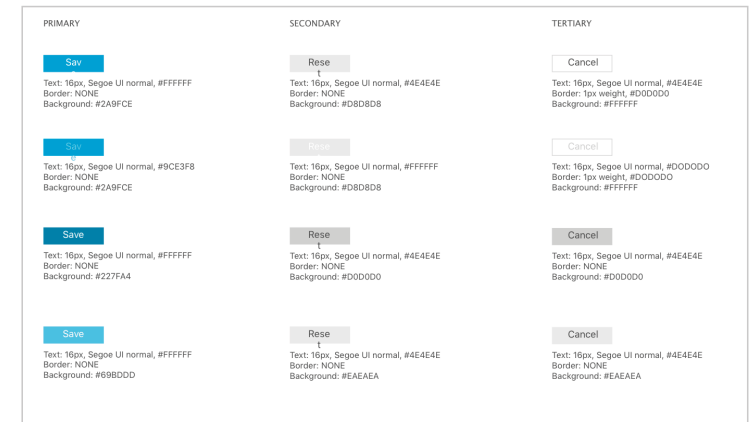
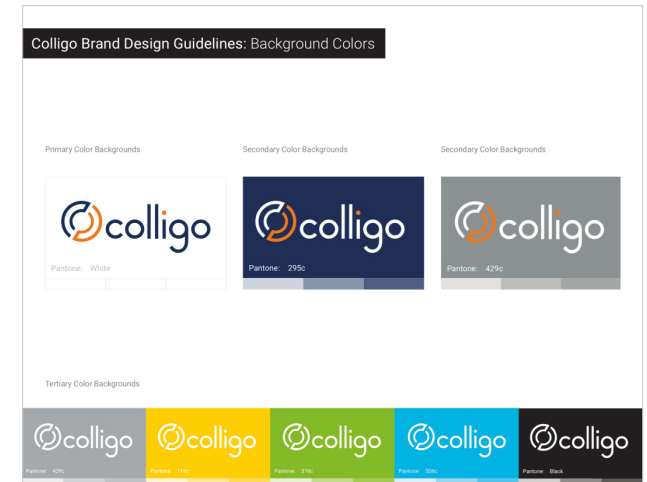
Target Obvious Patterns

Button Styles

Common Dialog

Authentication Path

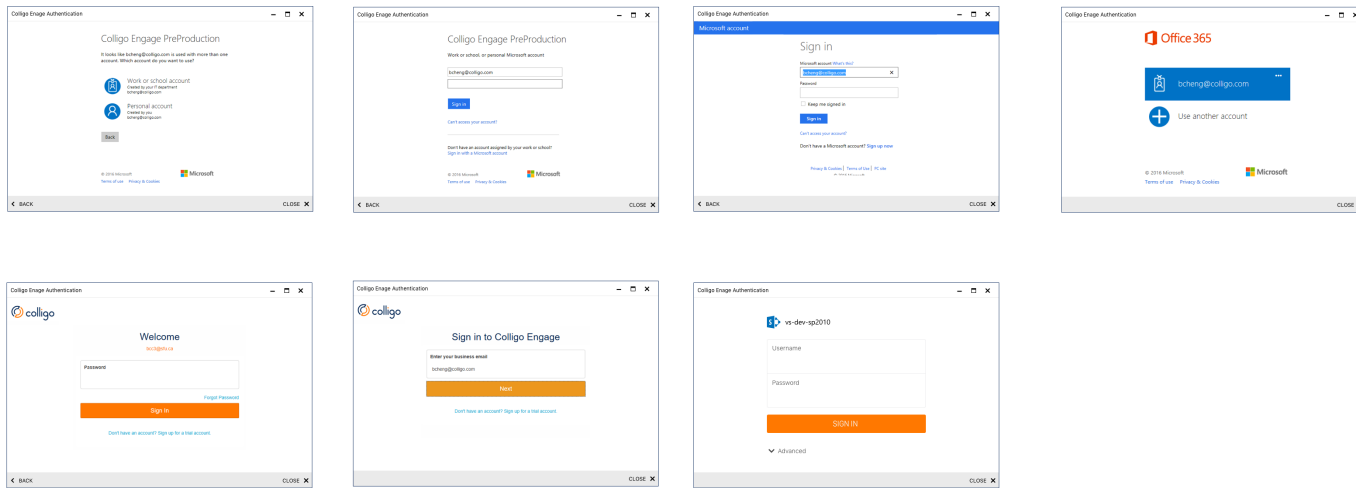
Upload Flow



Dialog Patterns

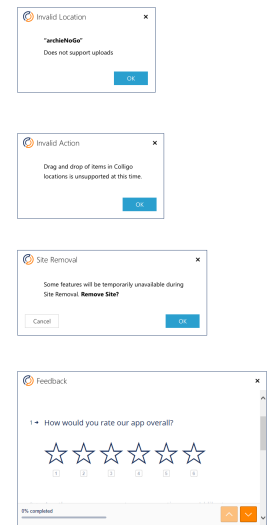
Authentication windows

These are kept plain and do not include the Colligo icon, this is because it would double up on 'Welcome' and 'Sign to Colligo Engage' windows.



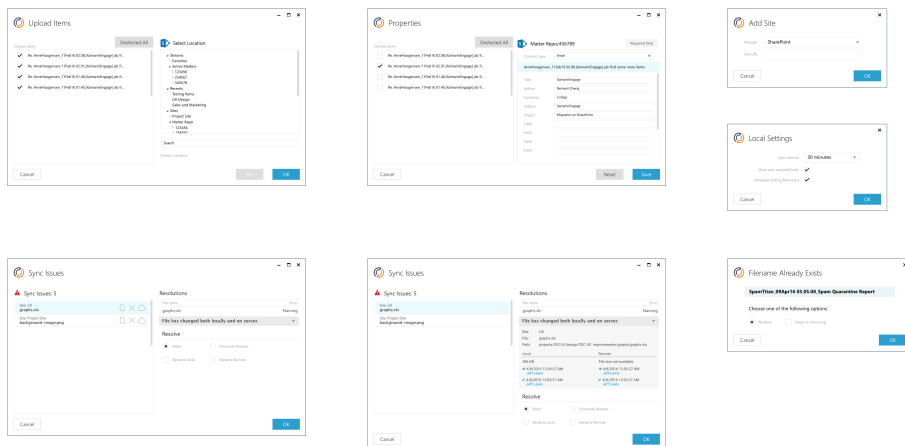
Information windows

Colligo logo and header text are slightly smaller than the 'user action windows'.



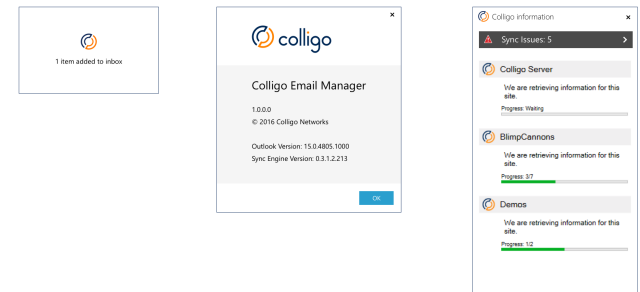
User action windows

These windows require an action from the user. Colligo logo and header text are consistently the same size.



Additional windows

These windows require their own unique styling. However the Colligo information window is consistent in logo/text size as per the information windows.



Prototyping

Interactive Flow

End-to-end Evaluation

Information Architecture

Interaction Design

Specifics

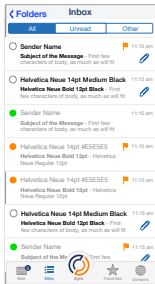
Tab Bar Navigation

Filing Ease-of-use Features

1 Mail View

Email List: Default resting screen, should have sample content not font names (lorem ipsum for subject/body is fine, get rid of file). Show some with attachments, flags, Read/Unread, Empty/Green/Orange dots.

Should show unread dot on Mail in Tab Bar, an equal # of unread in the list view

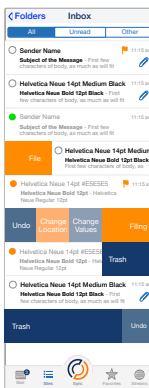


2 Swipe to Trash

3 Swipe to File First Time

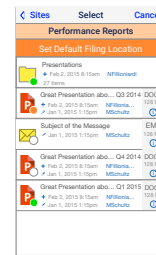
7 Swipe to File Follow-up

Email List: Need to show 3 slide states (all full width, not partial slide):
- Trash
- File with Undo
- File with Undo and Change Location
Items which we'll make swappable should have no dot



4 Select Filing Location

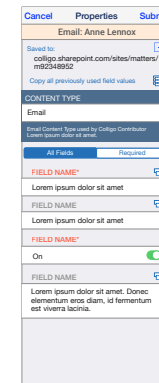
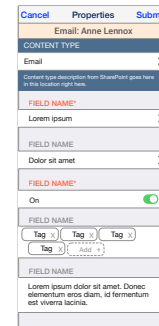
Check with Leo for current implementation - I think it has changed a bit from this wireframe.



5 Set Metadata No Defaults

8 Set Metadata with Defaults

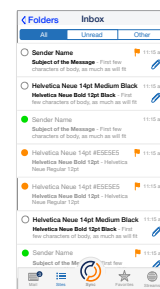
Include ease of use buttons to copy previous values on follow-up only



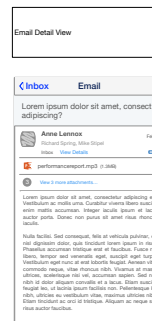
6 Email View with Orange

9 Email View with Orange

Screen after item pushed to Sharepoint should show that same item with an Orange icon



10 Open Email



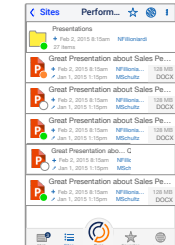
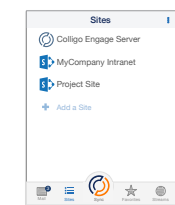
11 Sites View

12 Sites Nav 1

Navigation into a site view that has 2 folders in it, one offline (green), one not offline (empty circle)

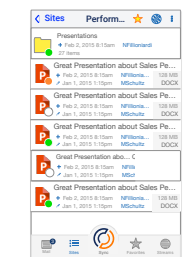
13 Sites Nav 2

Navigation into the folder that is NOT offline (empty circles)



14 Favorite Location

One of the Nav screens should have an alternate view with the Favorite star active



16 Take Offline

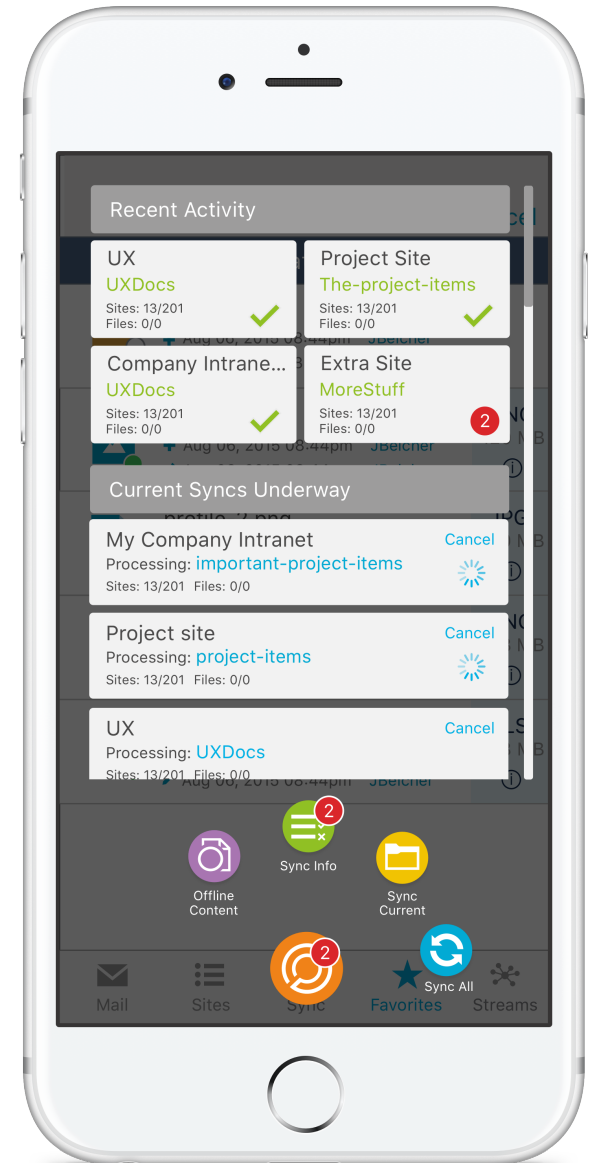
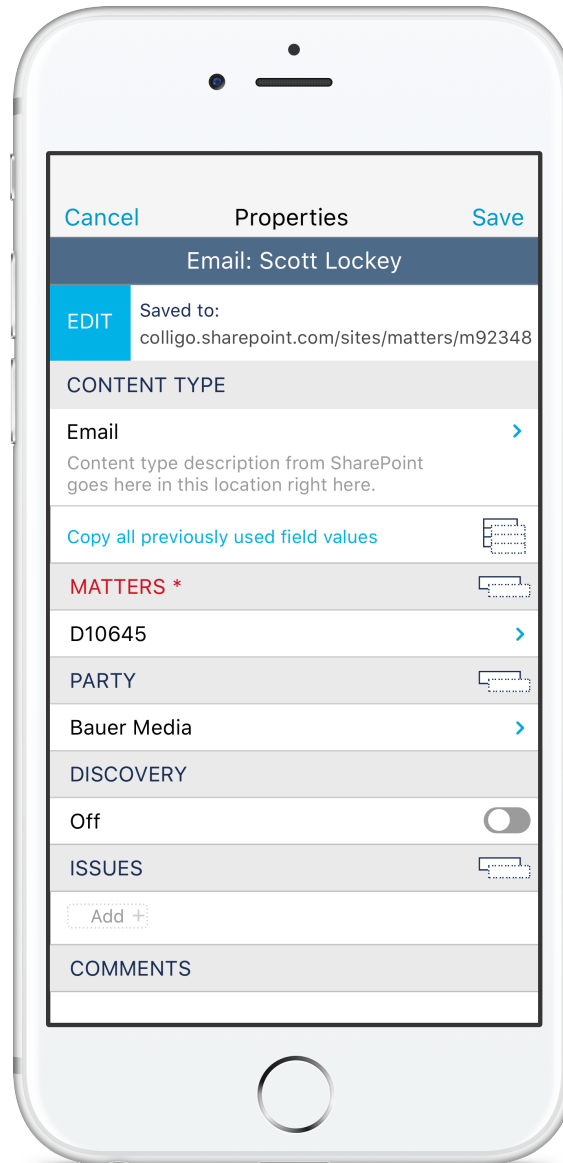
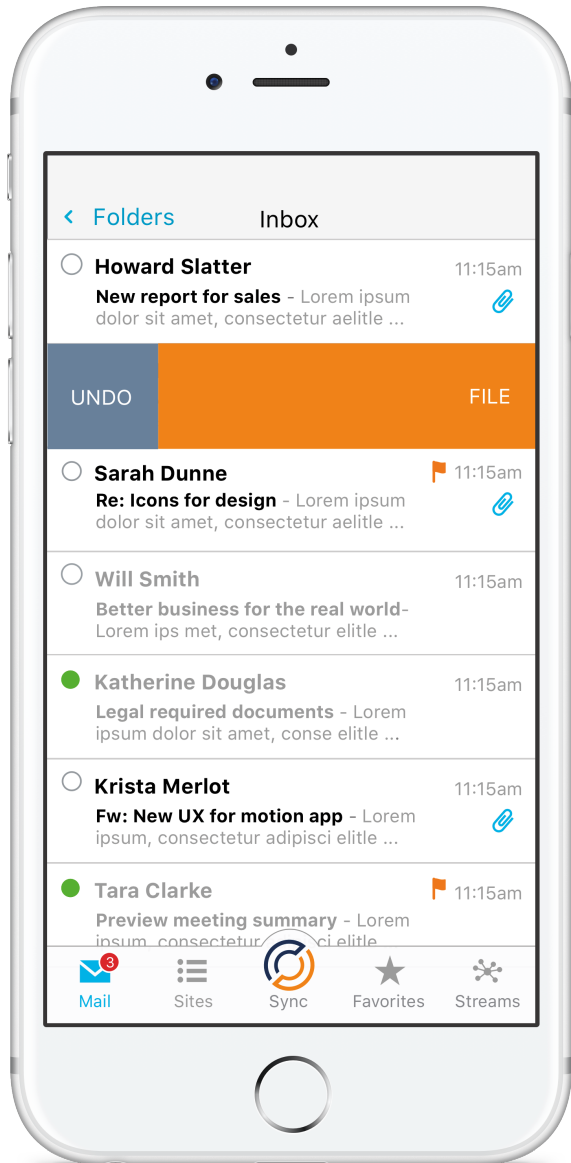
User can click the Offline button on SiteNav2 to take that folder offline - This view is a SheetNav2 with all items having orange dots

16 Select Item

Long press select one item - should show Select mode toolbar:
- Send to
- Delete
- Take Offline



Result



Critical Problem

Environmental Constraint

Microsoft had just bought Acompli and integrated it with Outlook

IT Mgrs relied heavily on Outlook integration

Users primarily used Outlook in enterprise email

Feature Set Challenge

Outlook offers: Contacts, Calendar, Tasks, Exchange folders, etc.

Motion offers Mail Only

The Pivot

Revealing the Issue

Reporting interview results

Consensus with Product Mgt

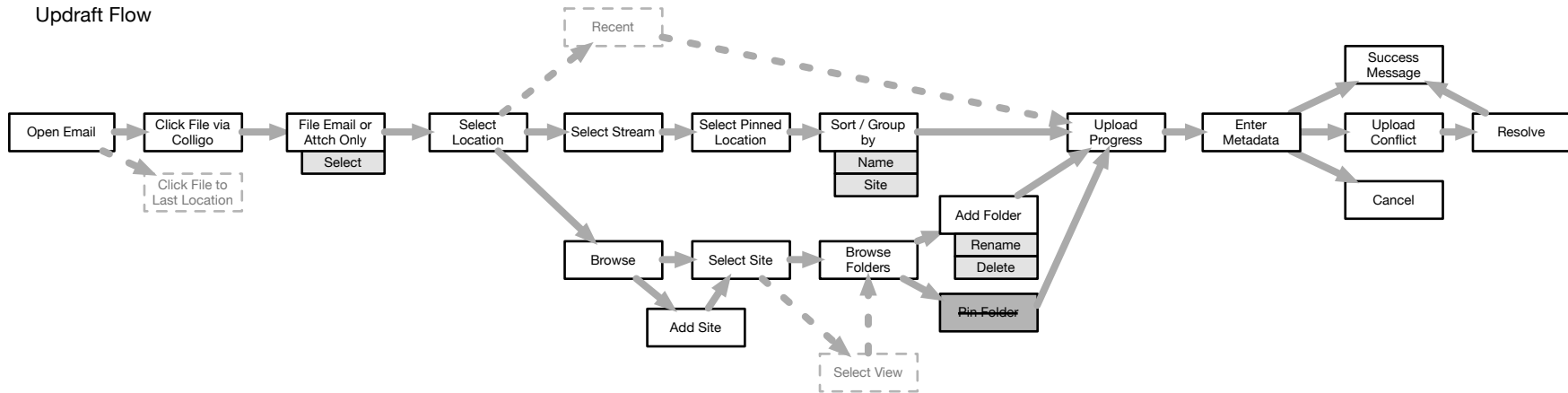
Exposing pervasiveness of problem to Engineering

Alternatives

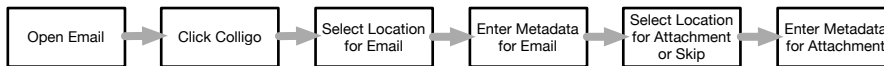
Companion App

Outlook Integration

Updraft Flow



Simplified Flow



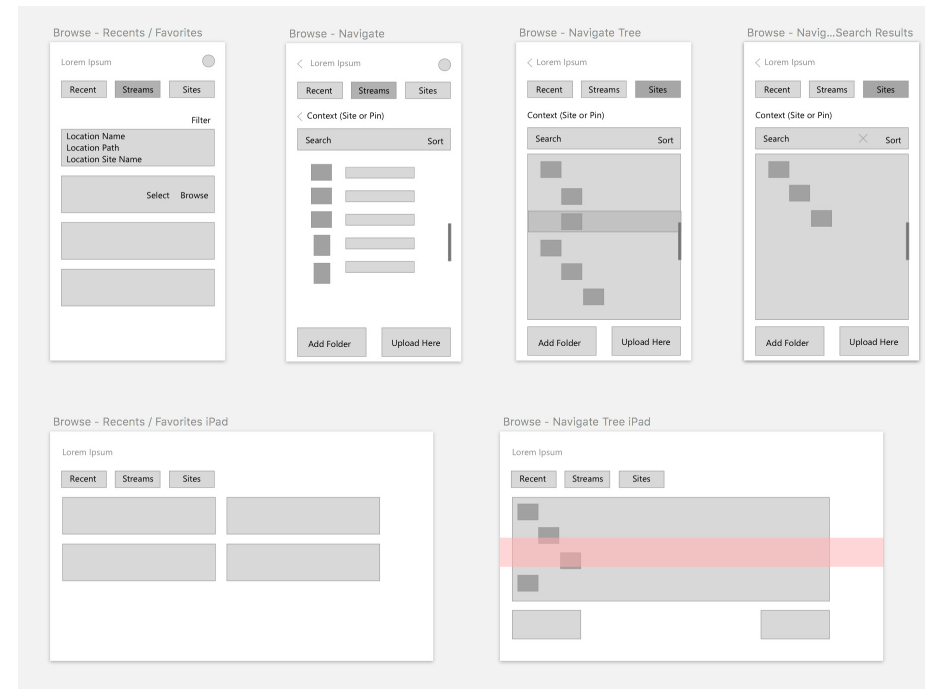
Project Rework

Redesign

Only a single email upload

Responsive to ALL platforms

Add-on opens and closes



Proof of Concept

Initiation

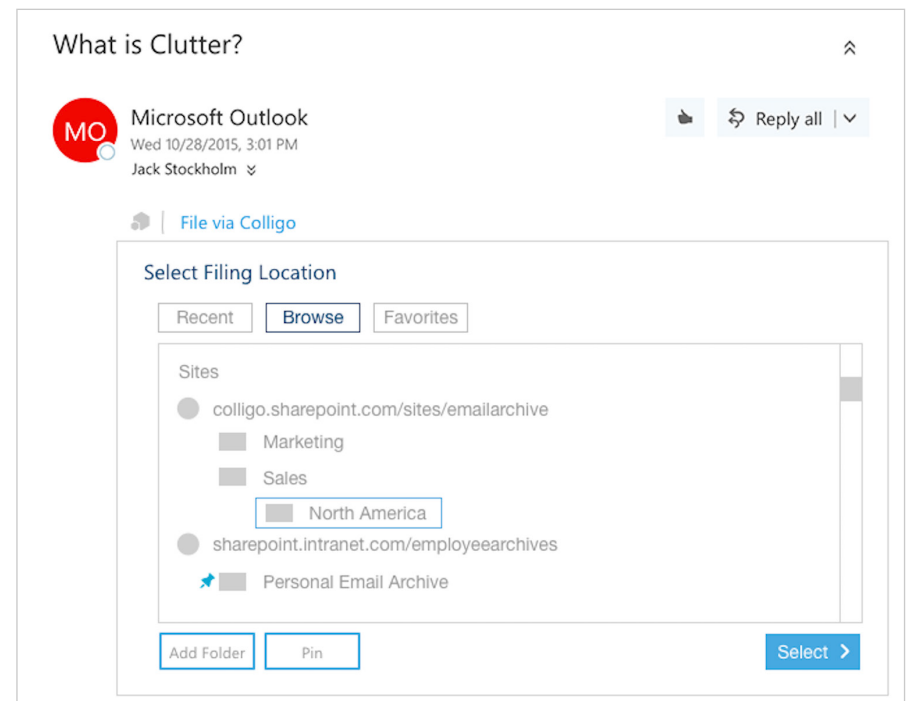
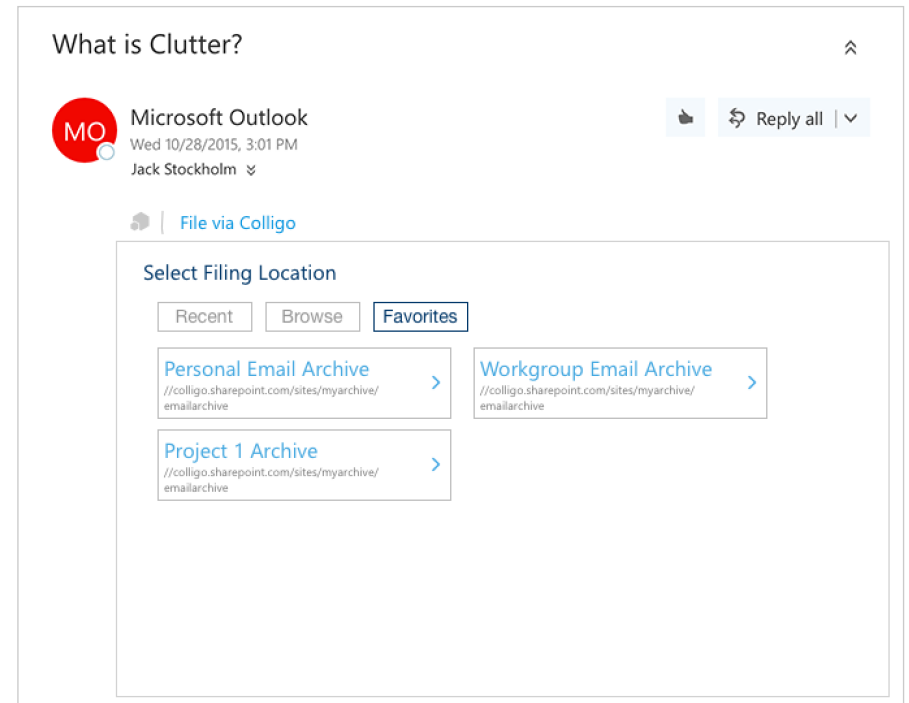
Client-driven Request

Design and Implementation in
One Month

Validation

Client Exposure

Remote Unmoderated Testing

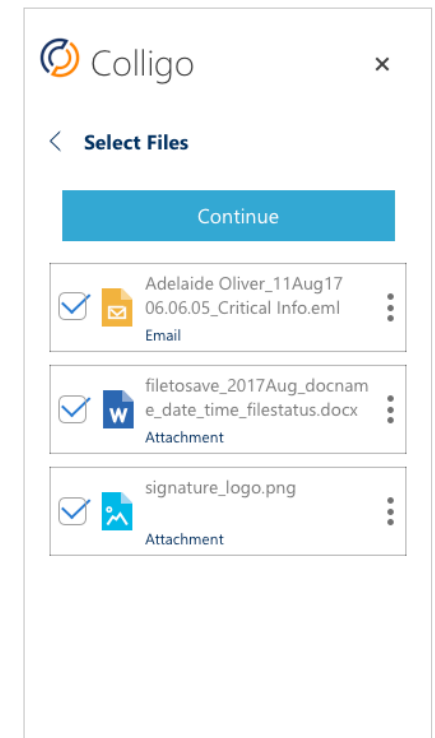
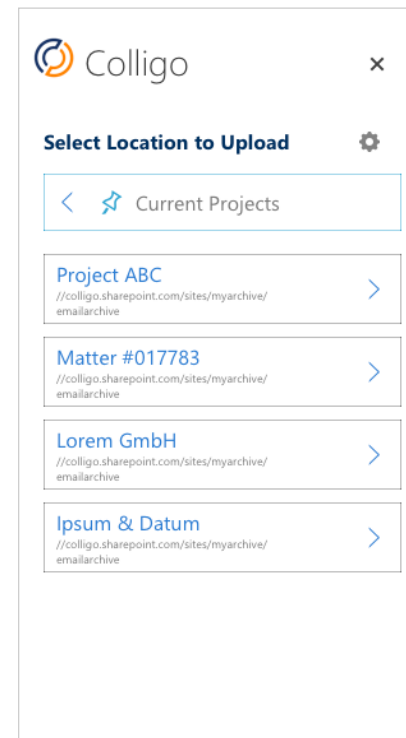
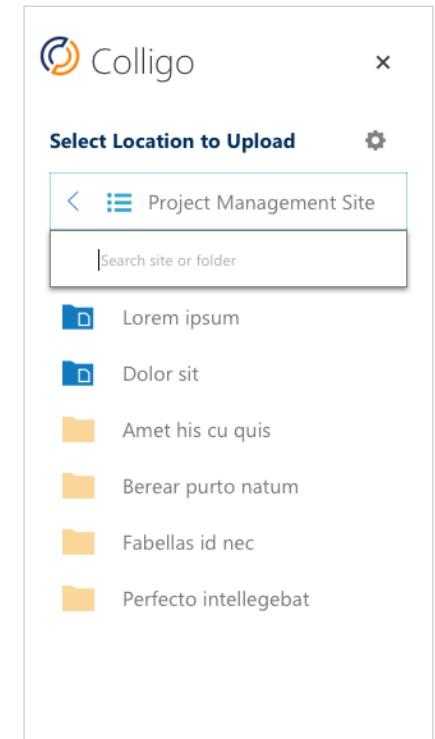
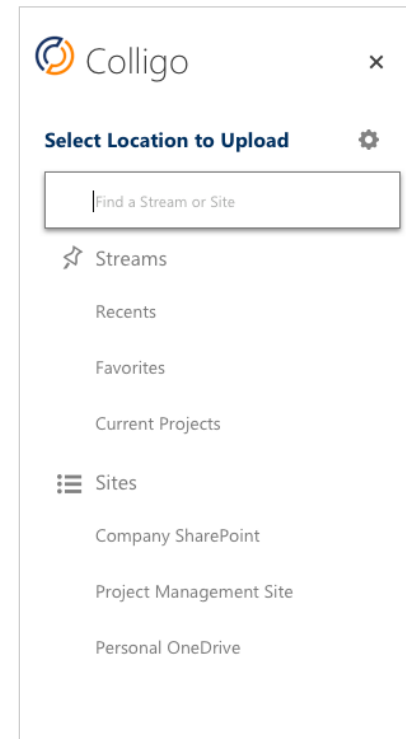


Product Release

Development

Product & Design negotiated a specification document for offshore development

Product was completed in 3 months

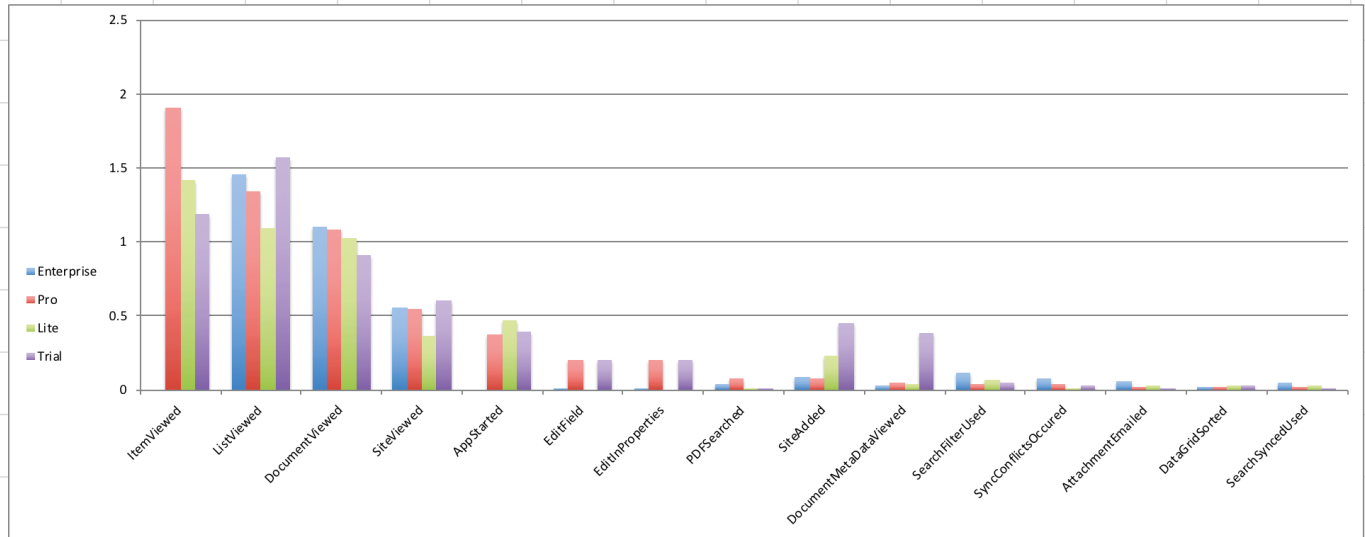


Analytics

EVENTS PER SESSION	Enterprise	Pro	Lite	Trial
ItemViewed		1.91	1.42	1.19
ListViewed	1.46	1.34	1.09	1.57
DocumentViewed	1.1	1.08	1.03	0.91
SiteViewed	0.56	0.55	0.36	0.6
AppStarted		0.37	0.47	0.39
EditField	0.01	0.2		0.2
EditInProperties	0.01	0.2		0.2
PDFSearched	0.04	0.08	0.01	0.01
SiteAdded	0.09	0.08	0.23	0.45
DocumentMetaDataViewed	0.03	0.05	0.04	0.38
SearchFilterUsed	0.12	0.04	0.07	0.05
SyncConflictsOccurred	0.08	0.04	0.01	0.03
AttachmentEmailed	0.06	0.02	0.03	0.01
DataGridSorted	0.02	0.02	0.03	0.03
SearchSyncedUsed	0.05	0.02	0.03	0.01

* Grey fields are empty data

* Note that zeros are an effect of Flurry only reporting to 2 significant digits and do not necessarily indicate that these features aren't used.



Persona Example

Field Service Engineer - Power



Work Environment

- Overtime work
- Night work
- "I have been exposed to a wide range of protective relays and applications"
- 4-10 years same company
- * Works in groups on site

Sites

- Power generation
 - Substations
- Hospitals
- Data Centers
- Mines, Oil wells

Tasks

- Installation
- Maintenance
- Testing Installed Systems
- Critical Systems Work (high availability)
- Time Management
- Customer-based technical assistance
- Shutdown Management
- SAFETY work practice
- Quality Control
- Training Junior Techs
- Program and test relays
- Fault Analysis
- System *Design?*

Average Age: 34
Gender: All Male

Education

- BCIT Electrical Engineering B.Eng. / BSc Bachelor / Diploma
- Power Engineering
- Journeyman / Apprenticeship Electrician
- Skills courses: Transformer Design, HV Testing, Power System Safety, Protective Relays, OSHA / Worksafe BC
- First Aid Cert
- Electrical Technologist
- Industrial Training
- Codes & Standards

Certifications

- FSR-A High Voltage
- First Aid
- Red Seal Class 'A' Field Safety
- Certified for voltage class (eg. 24V to 550kV)
- Ironworkers Red Seal Journeyman

- Group Work
 - Led by a supervisor on site
 - Extensive Ongoing Education
 - Electrical Engineering
 - Power Systems BS
 - Trade School
 - Certifications & Renewals
 - Apprenticeship & Mentorships
 - All Male
 - Safety Procedure is Primary Concern
 - Mostly mid Career, lots of junior apprentices on site
-
- Still a lot of machismo & peer pressure
 - Eschew safety protocols
 - Don't double check written info if they are expected to know it
 - Highly innovative at subverting control & monitoring processes
 - Part of the social contract
 - Helping each other subvert
 - Looking the other way to violations
 - Resistant to change
 - They all learned things in their way
 - Overworked and tired, long days
 - Pressure to get the job done quick and cheap
 - Generational Issues less a factor, everyone uses consumer phone / tablet apps