Portfolio

Informatica Cloud Connector

Amit Sen

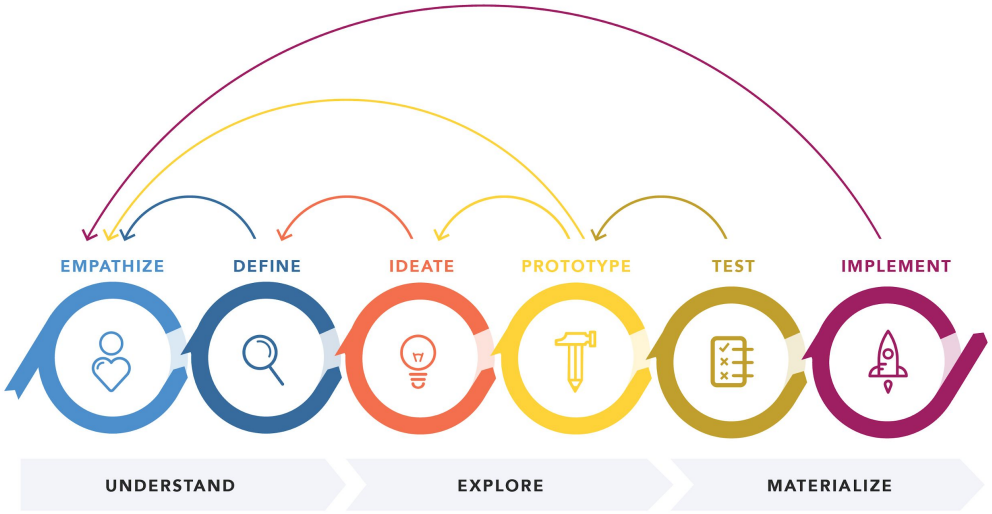
Informatica Cloud Connector

- Easy to use and configure with high reliability and optimal performance.
- Connect data and apps in minutes.
- Reduce Total Cost of Ownership with connections to efficiently build data pipelines.

Problem Statement

- Configuring Data Connectors are a critical step in building data integration, data quality, data governance and any data warehouse solution. **Informatica's previous data connector framework was difficult and confusing to use, resulting in loss of customers and revenue.**

Design process



DESIGN THINKING 101 NNGROUP.COM

+

- Company Goals
- Company Brand

Persona

Data Steward

- Maintains data quality
- Maintains security & governance
- Organizes data

John Gates

I'm a database nerd focusing on data governance and compliance.

Demographics

Age: 35

Gender: Male

Marital Status: Married

Location: Santa Clara, California

Defining Traits

1. Self-motivated
2. Creative
3. Enthusiastic

Professional Background

Education

B.S. in Computer Engineering, U. California at Davis

Company / Job Title

Data Architect at Crossmovies, Inc.

Work Experience

I make sure all incoming data at CrossMovies is scalable, searchable and of high quality.

I also make sure all data adheres to our company and international compliance and governance policies.

Personal Preferences

Interests

Reading, Writing, Blogging, Yoga, Music and Meditation.

Favorite Brands & Products

Target, Sony, Apple

Psychographics

Values

Efficiency, responsiveness and clear communication, work-life balance

Goals

- Help organize and maintain high quality data for all teams

Challenges & Frustrations

- Connecting to data sources take forever and is a slow process. Process is confusing as well.

Communication Style

Casual — Professional

General — Technical

Persona

Data Analyst

- Explores data insights
- Builds reports
- Enables data-driven decision making

William Reynolds

I'm a Data Analyst. I help organizations make data-driven decisions!

Demographics

Age: 43

Gender: Male

Marital Status: Married

Location: Los Angeles, CA

Defining Traits

1. Creative
2. Risk-taker
3. Inventor

Professional Background

Education

B.S. in Electrical Engineering, U. Oregon

Company / Job Title

Senior Data Analyst at AdvantEdge IT

Work Experience

After graduating with a bachelors in EE, William began his career as an IT Systems Engineer.

Personal Preferences

Interests

Video gaming, AR/VR, mentoring, hiking, mountain climbing

Favorite Brands & Products

Google, Nike, BMW

Psychographics

Values

Efficiency, responsiveness and clear communication, work-life balance

Goals

- Collect and analyze data and build in dashboards and reports for the organization.

Challenges & Frustrations

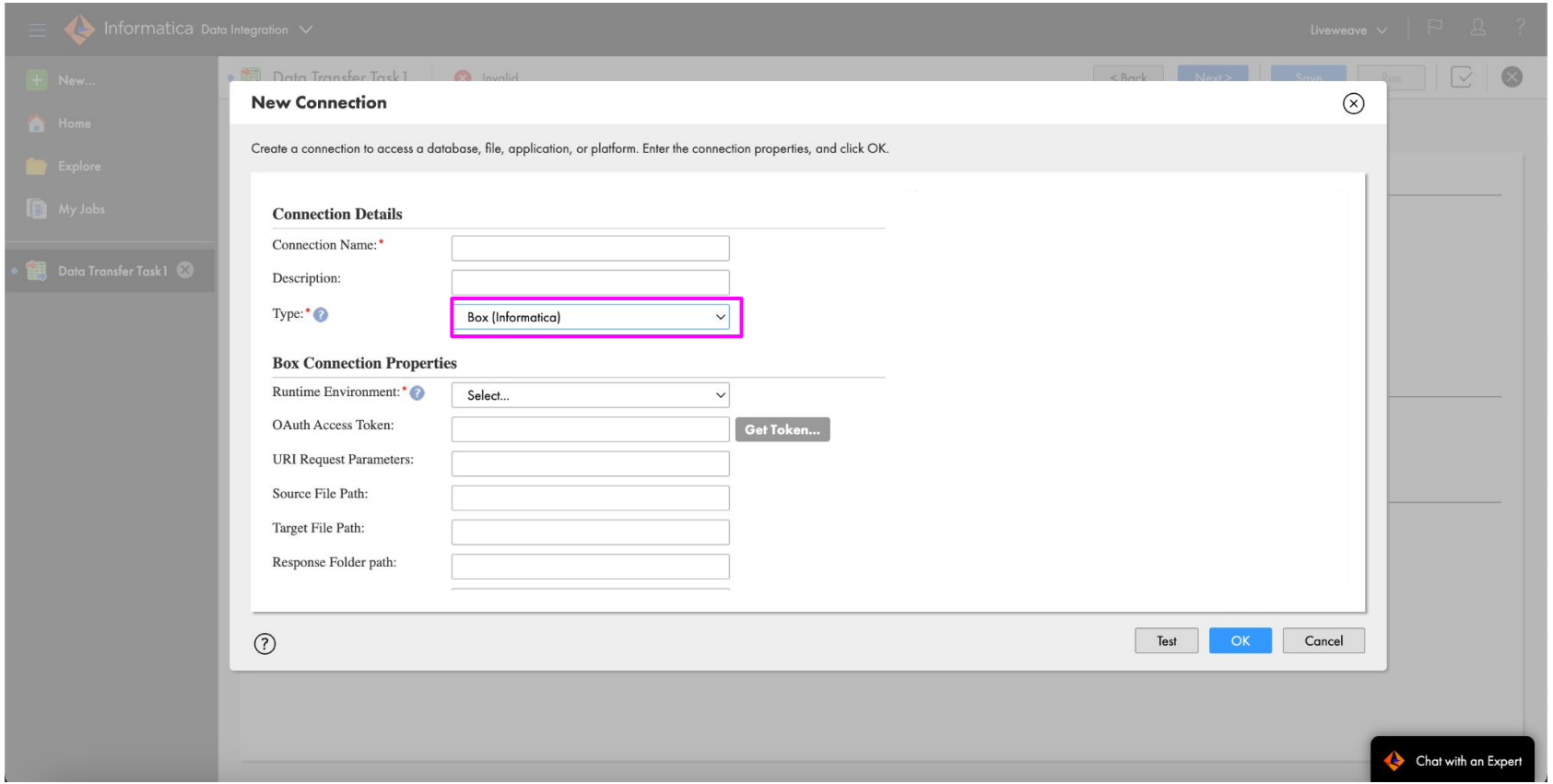
- Connecting to data sources is complex and requires a lot of time.

Communication Style

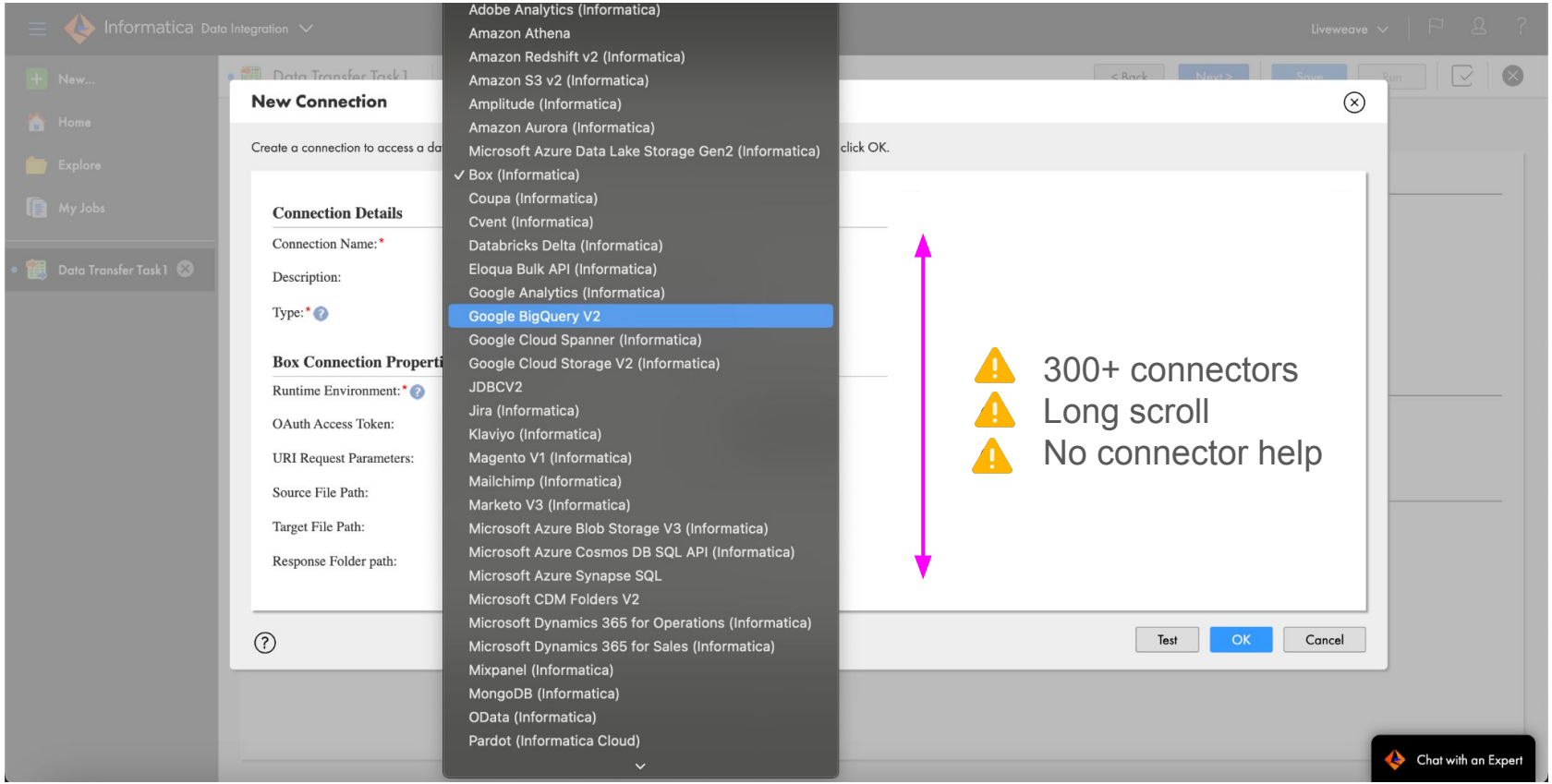
Casual — Professional

General — Technical

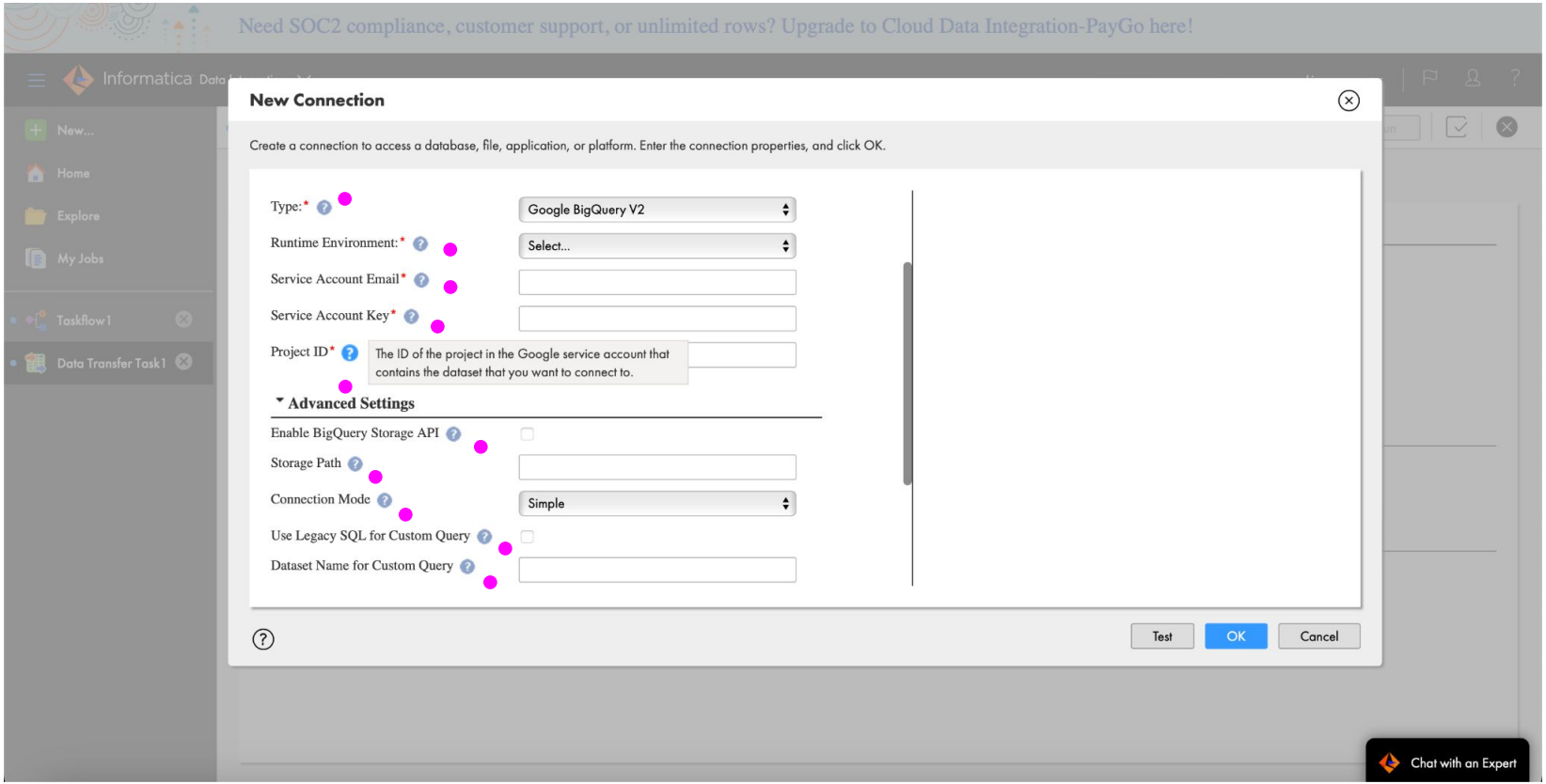
Legacy Product Issues - *No available help*



Legacy Product Issues - *Long connector list*



Legacy Product Issues - *Excessive use of tooltips*

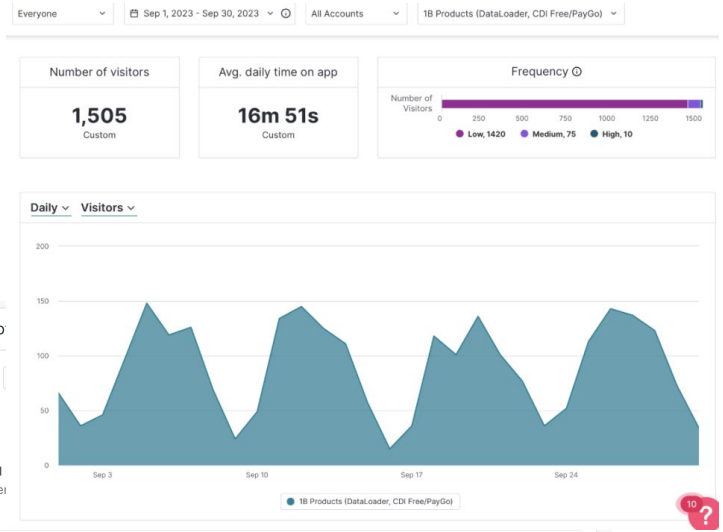


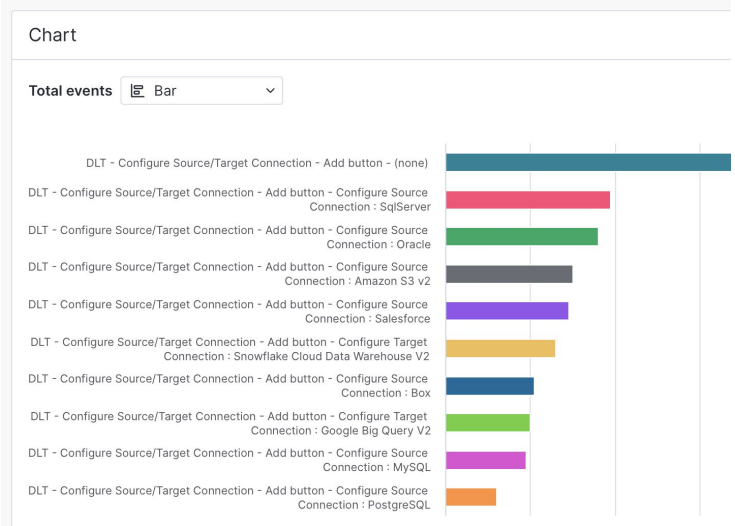
Competitive Analysis

- Review similar use cases
- Explore gaps and opportunities
- Review secondary research data
- Look for inspirations

Web Analytics Data (Last 6 months)

- Most widely used data connectors
- Least used data connectors
- Average time spent on connector pages
- Determine “drop-off” points and rates





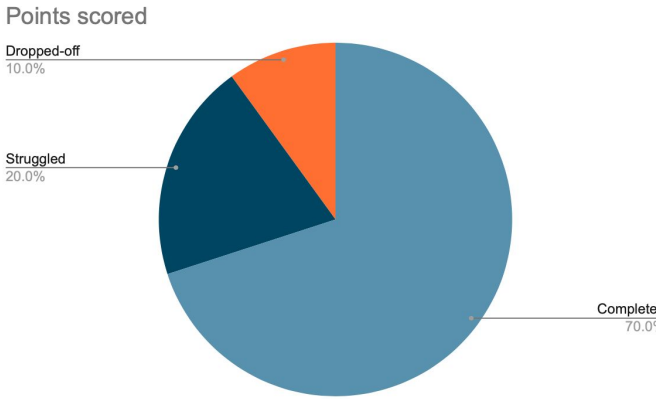
User Research

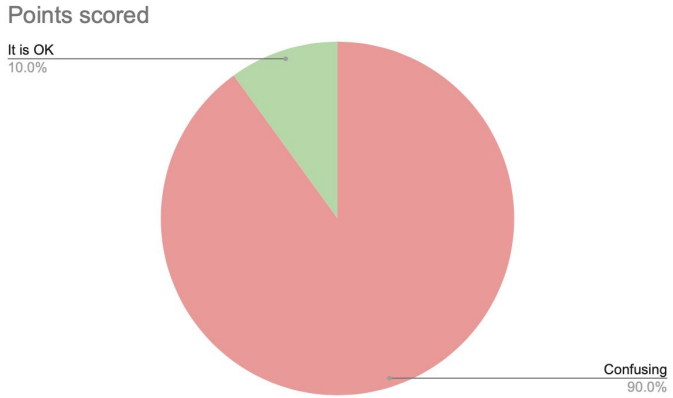
Interviews with users and focus groups

- Duration over 4 months
- 60+ users (data stewards, data analysts)
- At least 60% users were technically strong
  - Background in data analysis, data management and data connectors
- At least 90% users were knowledgeable about Informatica products
  - Background in Data Integration, Data Governance, Data Quality and Administrator products
- 20+ customers/companies
- Partnered with customer outreach and Global Support (GSO) teams
- User research data was based on both individual users and occasionally focus groups (3+ users)

User Pain Points & Insights

- ⚠ Difficult to configure
- ⚠ User will have to search online for the data connector to learn more
- ⚠ A lot of times user will use trial-error for the configuration
- ⚠ Very minimal tutorials available in Informatica documentation
- ⚠ Difficult to search for the right connector





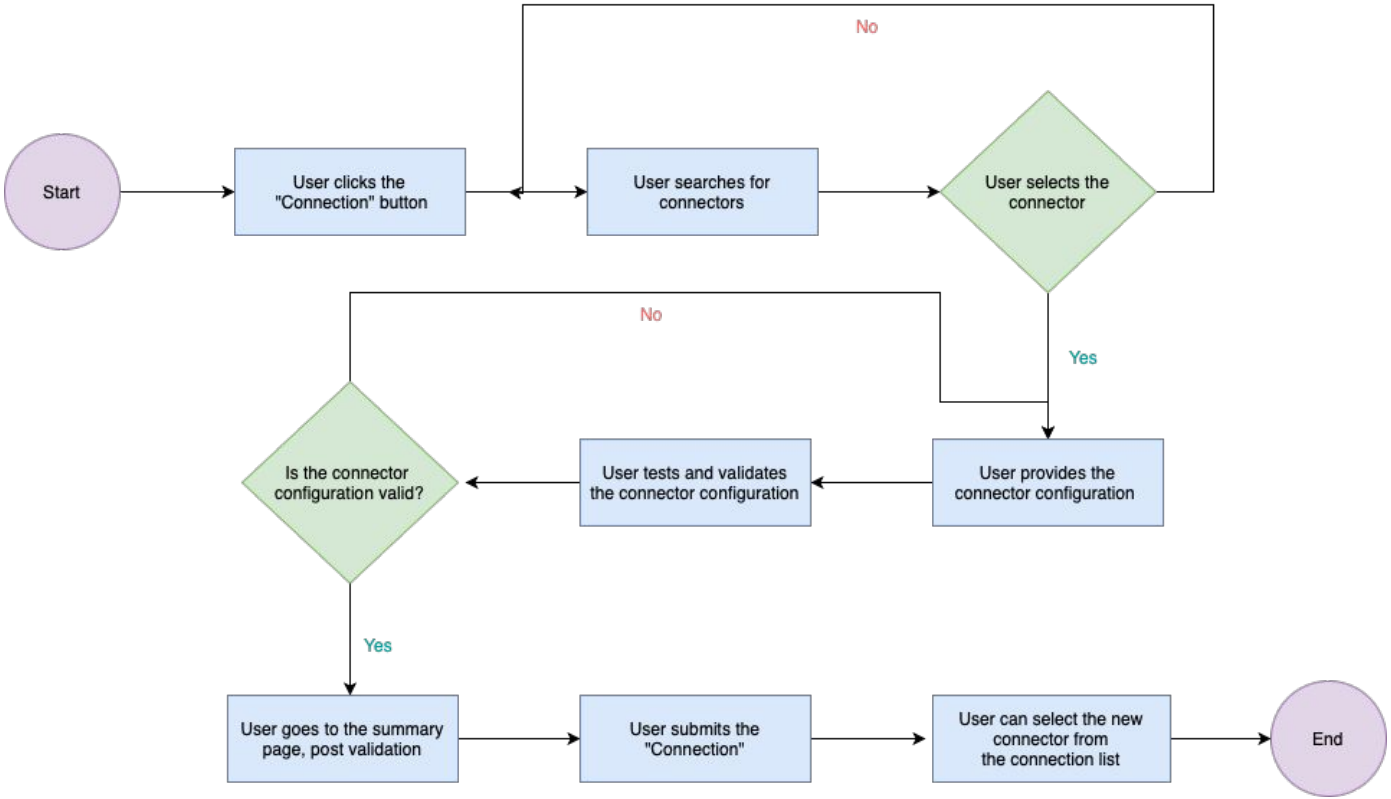
300+
Total # Connectors

6000+
Total # Parameters

Define

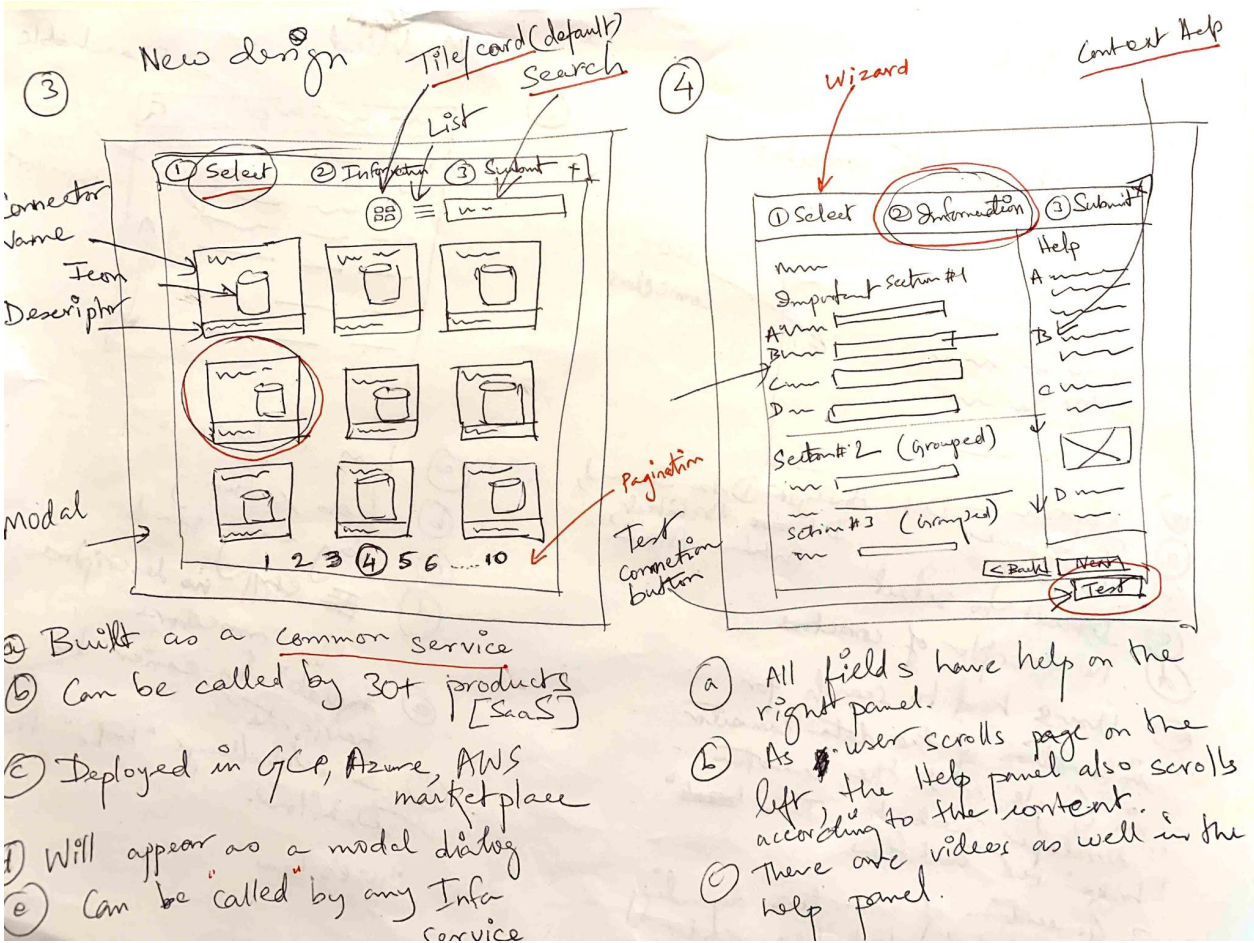
- Brainstorming with all Product Managers
- Review initial user research data with Product Managers
- Review whether user goals align with Informatica

User flow


No
Start
User clicks the "Connection" button
User searches for connectors
User selects the connector
No
Yes
Is the connector configuration valid?
User tests and validates the connector configuration
User provides the connector configuration
Yes
User goes to the summary page, post validation
User submits the "Connection"
User can select the new connector from the connection list
End

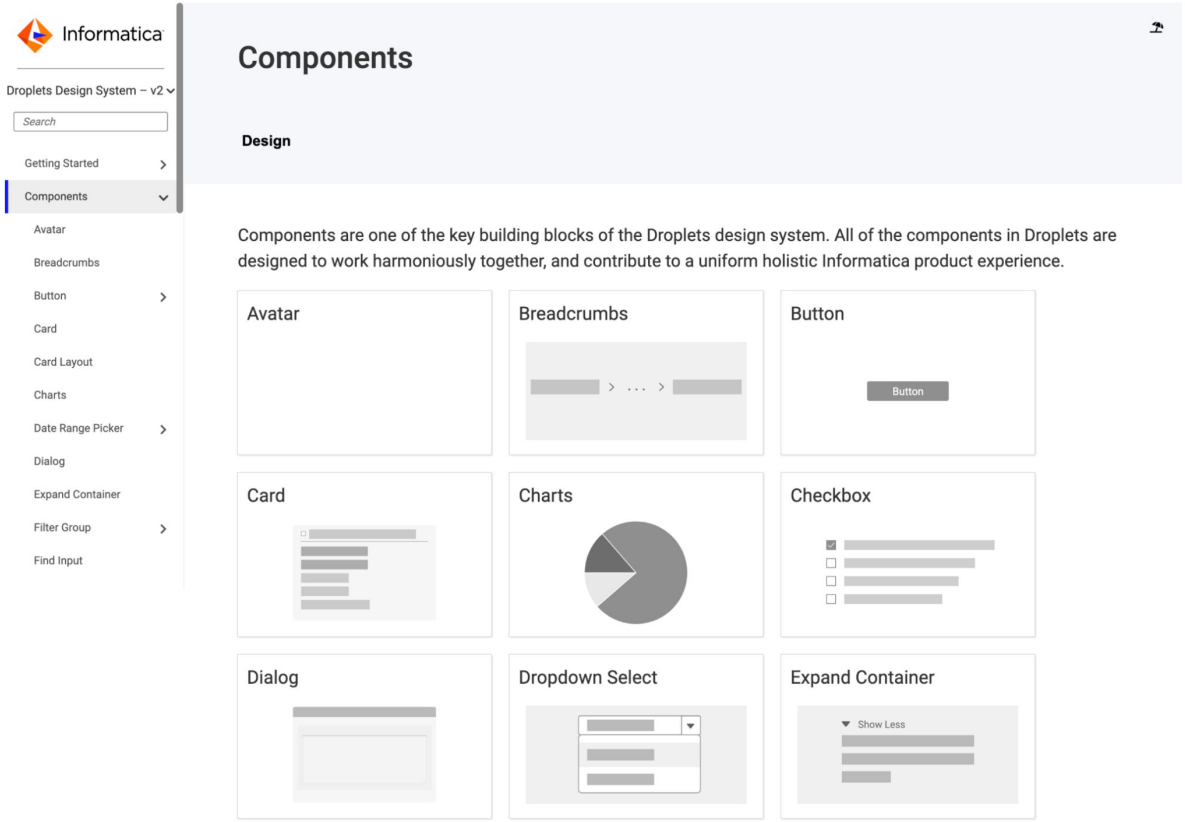
Ideation

- Basic paper prototyping
- Focus on the interaction design, not visual design

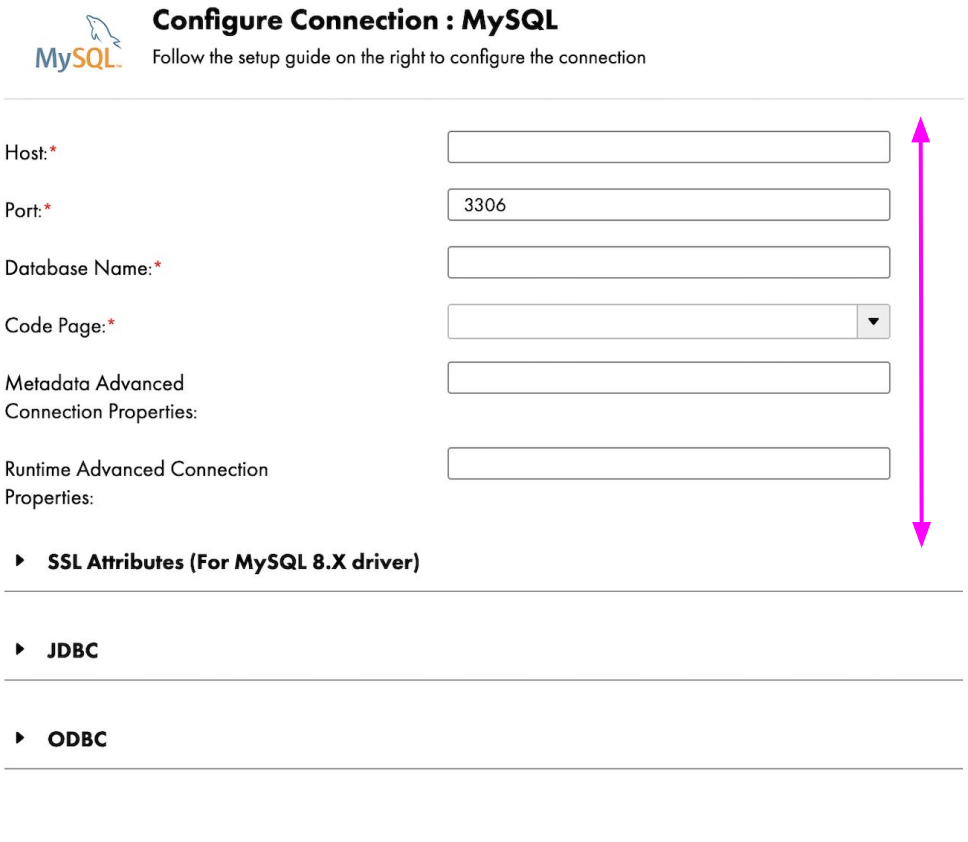


Design Systems - “Droplets”

- Ensure all UI components are available
- Collaborate with the Design System team if not
- Ensure all UX artifacts comply with the Design System guidelines
- 50+ UI components based on ReactJS
- Advanced micro-interactions
- **I am the Product Manager for Informatica’s Design System and coordinate with almost 30 product teams.**



Information Hierarchy



Priority 0

Priority 1

Priority 2

Priority 3

300+
Total # Connectors

6000+
Total # Parameters and form fields

Fields not often used were placed under collapsible sections

1 Select data connector — 2 Configure connection & test — 3 Submit & save

Search connector...

Filter By Category

Sort By

ActiveCampiagn

Read data from the ActiveCampaign data

Active MQ

Read data from the ActiveMQ datasource

Adabas

Read data from the Adabas datasource

Adaptive Insights

Read data from the Adaptive Insights application

Adobe Analytics

Read data from the Adobe Analytics application

Adobe Experience Manager

Read data from the Adobe Experience Manager application

Amazon Aurora

Read data from the Amazon Aurora

Amazon S3 v2

Read data from the files or directories in

Next

Select data connector — 2 Configure connection & test — 3 Submit & save

Configure Connection: Microsoft Azure Data Lake Gen 2

Follow the setup guide on the right to configure the connection

Connection Name *

Runtime Environment * Informatica Cloud Hosted Agent

Account Name *

Authentication Type Service Principal Authentication

Client ID *

Client Secret *

Tenant ID *

Account Key

File System Name

Setup Guide

Microsoft Azure Data Lake Storage Gen2 connection properties

When you set up a Microsoft Azure Data Lake Storage Gen2 connection, configure the connection properties.

The following table describes the Microsoft Azure Data Lake Storage Gen2 connection properties:

Property	Description
Connection Name	Name of the connection. Each connection name must be unique

Back Test Add Cancel

Select data connector — Configure connection & test — 3 Submit & save

Configure Connection: Microsoft Azure Data Lake Gen 2

Follow the setup guide on the right to configure the connection

Connection Name *	MSFT DLG2 Connector
Runtime Environment *	Informatica Cloud Hosted Agent
Account Name *	MSFT-DLG2-CON
Authentication Type	Service Principal Authentication
Client ID *	6779ef20e75817b79602
Client Secret *	**********ae78728739
Tenant ID *	abf988bf-86f1-41af-91ab-2d7cd011db46
Account Key	
File System Name	

Setup Guide

Microsoft Azure Data Lake Storage Gen2 connection properties

When you set up a Microsoft Azure Data Lake Storage Gen2 connection, configure the connection properties.

The following table describes the Microsoft Azure Data Lake Storage Gen2 connection properties:

Property	Description
Connection Name	Name of the connection. Each connection name must be unique

Back | Submit | Cancel

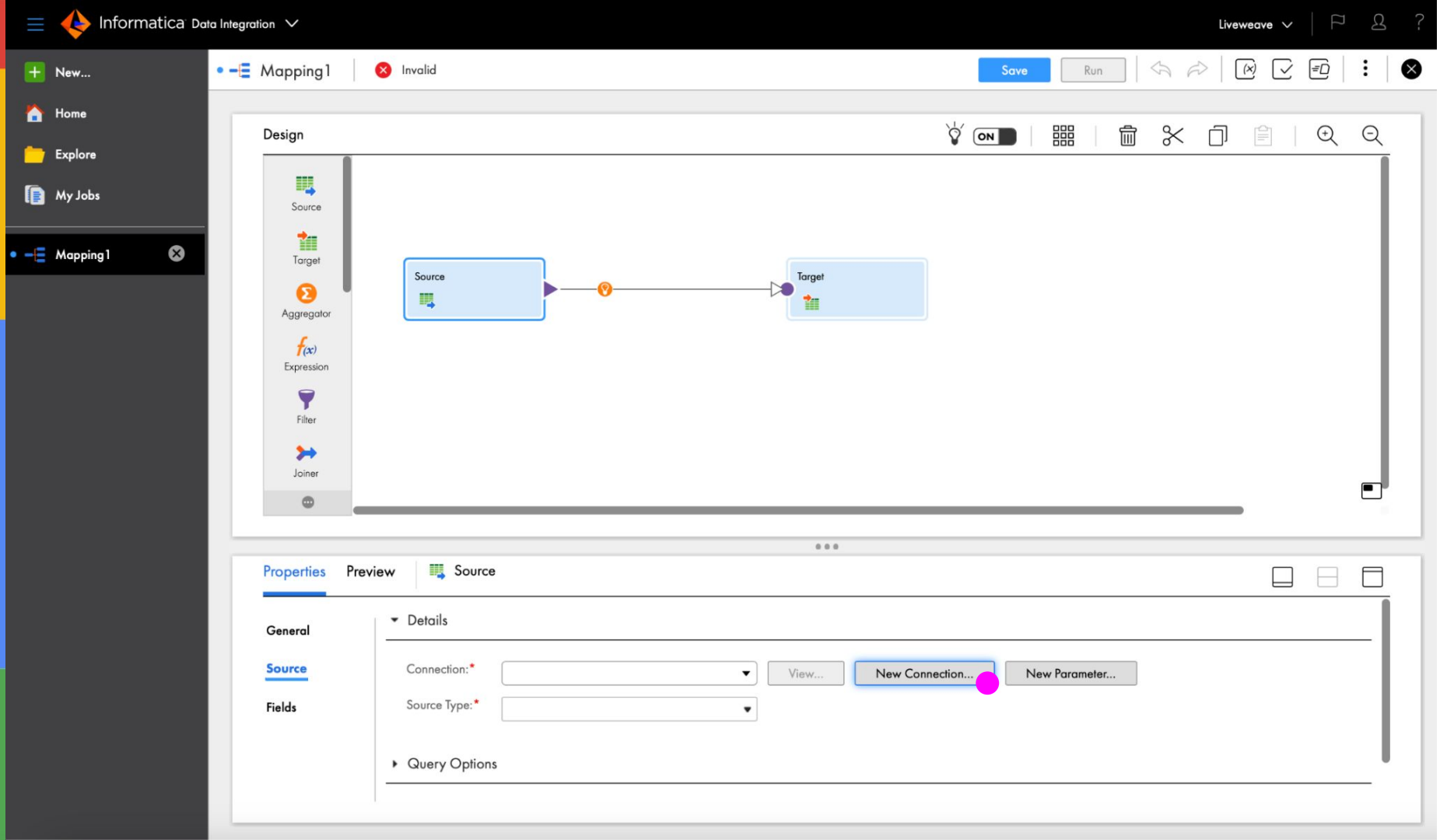
Select data connector — Configure connection & test — Submit & save

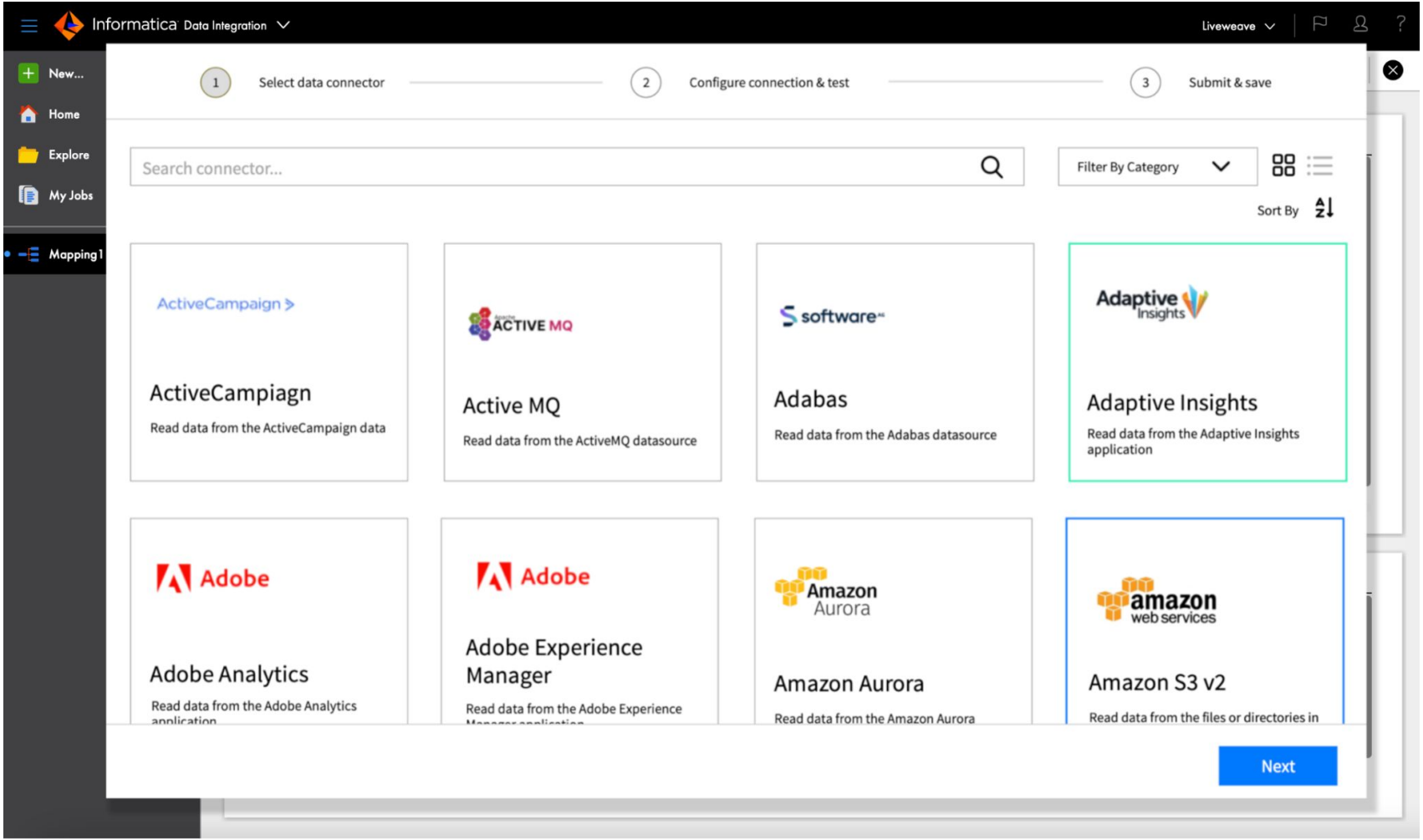
MSFT DLG2 Connector has been created!

You can now access the connector from the list of connections

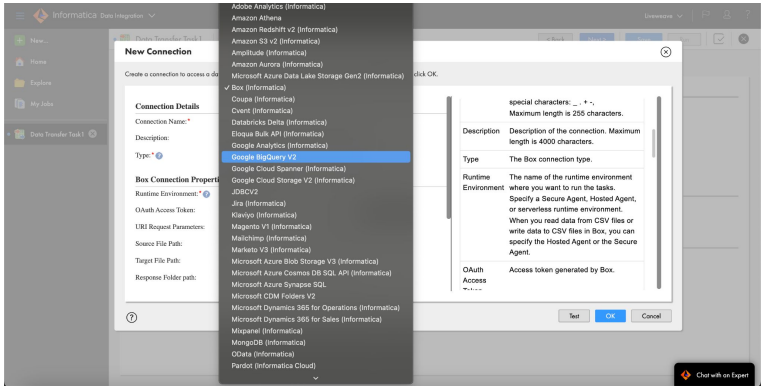
If you would like to make changes to this connection, you can do so from the connection list. All users in your org will be able to make changes to the connection as well. To prevent that, you change the permisssion level as needed.

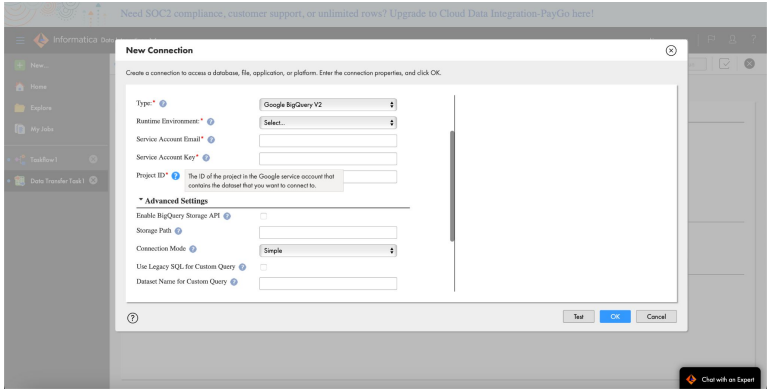
Close


Informatica Data Integration
Liveweave
New...
Home
Explore
My Jobs
Mapping1
Mapping1
Invalid
Save
Run
Design
ON
Source
Target
Aggregator
Expression
Filter
Joiner
Source
Target
Properties
Preview
Source
General
Source
Fields
Details
Connection:*
View...
New Connection...
New Parameter...
Source Type:*
Query Options

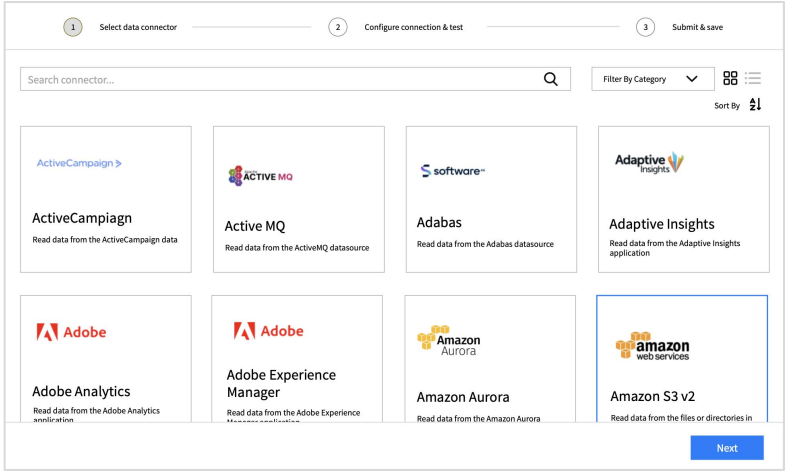

Informatica Data Integration
Liveweave
New...
Home
Explore
My Jobs
Mapping1
1 Select data connector
2 Configure connection & test
3 Submit & save
Search connector...
Filter By Category
Sort By
ActiveCampaign
ActiveCampiagn
Read data from the ActiveCampaign data
ACTIVE MQ
Active MQ
Read data from the ActiveMQ datasource
software
Adabas
Read data from the Adabas datasource
Adaptive Insights
Adaptive Insights
Read data from the Adaptive Insights application
Adobe
Adobe Analytics
Read data from the Adobe Analytics application
Adobe
Adobe Experience Manager
Read data from the Adobe Experience
Amazon Aurora
Amazon Aurora
Read data from the Amazon Aurora
amazon web services
Amazon S3 v2
Read data from the files or directories in
Next

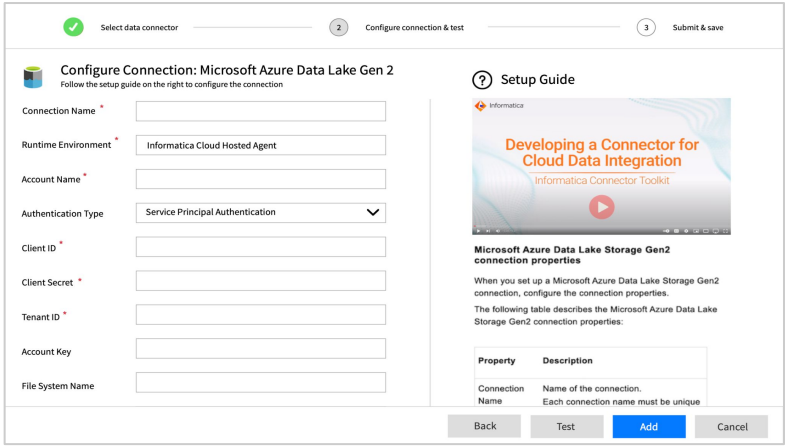
Before





After





Outcome of the new design

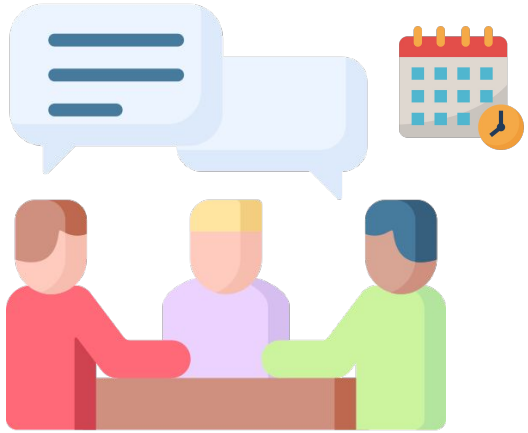
- Much easier **wizard-based** and guided approach
- **Better descriptors**, images, icons for easier understanding
- Realtime **search capability**
- **Context sensitive help** and guidance that includes videos
- Much **better scalability**
- **Optimized information hierarchy** for easier understanding

User Testing

Total participants 10+ users

- List of specific tasks given to the users with no guidance
- **Task Success Rate** is 100% in less than 3 mins
- **Qualitative Research**, 1:1 User Interviews via Zoom/Teams call
- **A/B Testing**, with 2 variants
  - Form fields grouped differently
  - Different labeling in complex forms
  - Inclusion of more icons, images

Implementation - Meetings with Engineering, PMs



Engineering Meeting

- Review meetings with Engineering teams every week or bi-weekly
- Make minor modifications based on Engineering feedback and technical feasibility
- File UI defects
- Review changes and fixes made by Engineering
- Review Accessibility

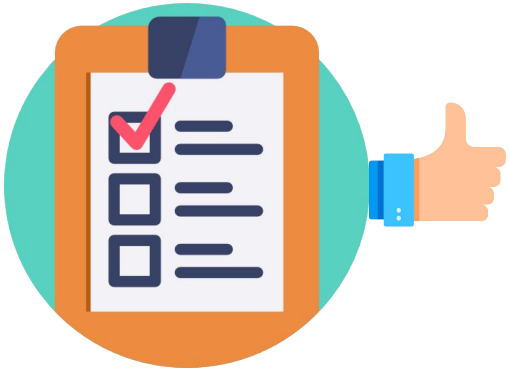
Product Management Meeting

- Review meetings with PMs every week or bi-weekly
- Make minor modifications based on PM feedback

Conflict of a solution or design

- If there are gaps between Engineering and PMs, or there are disagreements on scope, review them with both teams.
- Based on a decision, review or change/update design or user flow.

UX Review of Product UI and Product Launch



Feedback to Engineering

- Test development and UAT
- File UI defects
- Review changes and fixes made by Engineering
- Review Accessibility

Feedback from other PMs and UX Designers (outside teams)

- Are there any similarities with other company products?
- Can other product teams consume any part of this product?
- Could we have designed the user flow or design differently?

Post Launch

Total participants 50+ customers, 3 months after launch

- System Usability Score (SUS) came to be 85 (out of 100)
- Surveys had 10 questions with 5 responses (strongly agree to strongly disagree)
- Additional user feedback/expressions

Thank you!