

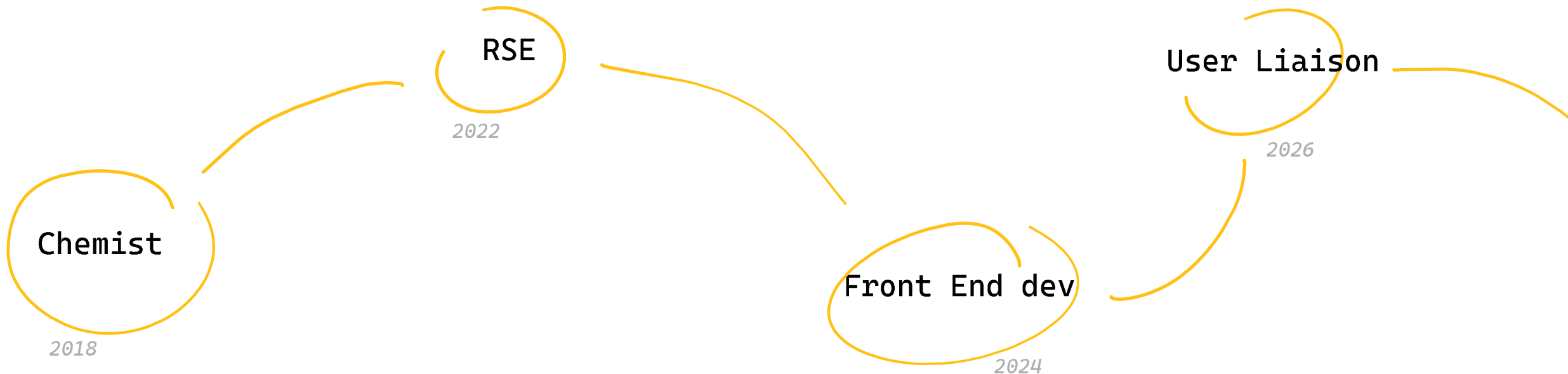
Five Lessons from Developing and Supporting the DAFNI Research Platform

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\$ whoami

--current
Building DAFNI @ STFC

--mission
Making complex research
simpler to use and share.



Data and Analytics Facility for National Infrastructure (DAFNI)

The screenshot displays the DAFNI Web App interface. The browser address bar shows the URL `public-facility.secure.dafni.ac.uk`. The application has a dark blue sidebar on the left with a 'MENU' section containing links for Home, Data, Models, Workflows, Visualisations, and Pages. Below this is a 'MANAGE ASSETS' section with links for Public, Groups, and My Pages. The main content area is titled 'Welcome to DAFNI' and features four cards: Data (Find and add data to help build products and services), Models (Find and publish models to DAFNI), Workflows (Create a sequence of steps and visualise results), and Visualisations (View and manage visualisation instances). Each card has a corresponding 'View' button. Below these cards is a 'Release notes' section with a 'View all release notes' button. The release notes are dated 15th July 2026 and 30th June 2026, each with a 'New' or 'Improvements' section containing bullet points.

MENU

- Home
- Data
- Models
- Workflows
- Visualisations
- Pages

MANAGE ASSETS

- Public
- Groups
- My Pages

Welcome to DAFNI

Data
Find and add data to help build products and services
[View data](#)

Models
Find and publish models to DAFNI
[View models](#)

Workflows
Create a sequence of steps and visualise results
[View workflows](#)

Visualisations
View and manage visualisation instances
[View visualisations](#)

Release notes [View all release notes](#)

15th July 2026

New

- Introducing DAFNI pages, a new way to publicly share the work done by you/your group/your project on the DAFNI platform. You can navigate to the new public pages catalogue via the 'Pages' button in the sidebar - here you can see all of the approved public pages. Interested in creating your own page? You can find your personal pages catalogue via the 'My Pages' button in the sidebar, where you will be able to view any pages you have created or are an administrator of. From either catalogue you can click the 'Create Page' button, found to the top right of the page, to start creating your own DAFNI page! Highlight key assets, link out to external sites, list publications and affiliations, list contact points, upload optional logo and banner images, and optionally base the page off of a group to pre-populate a list of linked assets. And when your page is ready, let us know by clicking the 'Make page version public' button so we can get our data curation team to review it before it goes live! Finally, once your page is live, it will have a fixed url even if you need to make changes, to ensure sharing is as easy as possible.

Improvements

- Added a warning when navigating away from any creation form to prevent accidentally deleting inputted data

30th June 2026

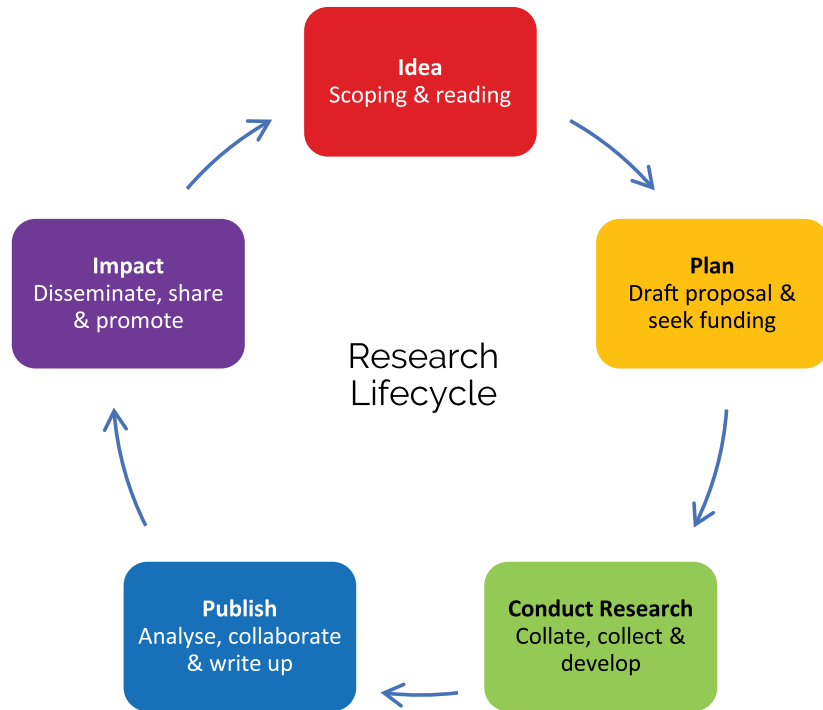
Improvements

- Added a comma delimiter when providing keywords for datasets and workflows. This will automatically detect any commas entered into a single keyword entry and separate the entry into multiple keywords
- Updated our urls to use route parameters instead of query parameters. Urls previously of the format `'data/details?version_id=12345'` are now simplified to `'data/12345'`. Any old format urls will automatically redirect to the new format urls, meaning any previously shared links will still work as expected

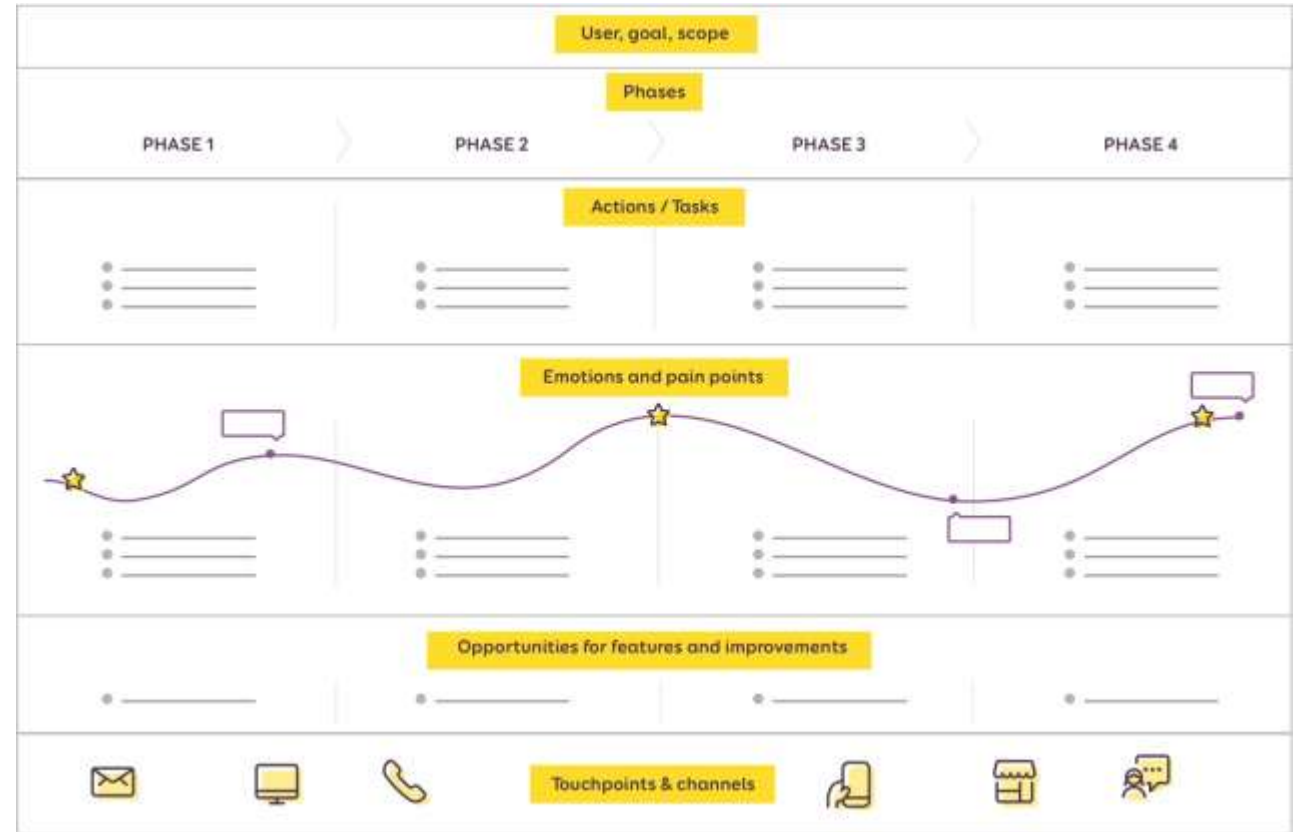
Fixes

- Fixed an issue causing previous geospatial coverage to not load into the data edit form when updating dataset metadata

Thinking beyond the software



Ref: <https://www.ncl.ac.uk/library/academics-and-researchers/lrs/research-metrics/>



Ref: <https://stephaniewalter.design/blog/an-introduction-to-user-journey-map-pdf-templates/>

Lesson 1. Don't build what users ask for (always)



Can we have a better sharing feature?

What is difficult today?



I can put assets in a group, but people still don't understand what the research is or why it matters.



What would success look like?



One place where people can understand the whole project.



The real problem was
not sharing files,
but communicating the
narrative.

AFTER:

Solution on DAFNI

BEFORE:

Home / Groups / OpenCLIM

OpenCLIM

Group actions

Details

Owners: Craig Robson, Fergus McCrean, Elizabeth Mannix
Created: 13th November 2020
Description: The OpenCLIM project (Open Climate Impacts Modelling Framework) is designed to support UK assessment of climate risks and adaptation, including future Climate Change Risk Assessments and National Adaptation Programmes, by developing and applying an integrated impact assessment model.

Assets

Manage group access to datasets, models and workflows.

Datasets		Models		Workflows	
Delete dataset	Add dataset				
Name	Access	Publication date	Version message	Actions	
☐ Existing Urban areas	View and read	11th May 2022	Initial Dataset version	Edit permissions	
☐ UDM Outputs - GB - SSP3 - 2005 - Default Flood Constraints	View and read	24th April 2023	Final	Edit permissions	
☐ Developed areas - North West	View and read	31st May 2022	Initial Dataset version	Edit permissions	
☐ Flood-Zone Coverage - Great Britain	View and read	8th December 2022	Initial Dataset version	Edit permissions	
☐ Local Authority Areas - Wales (PA)	View, read and update	7th May 2022	Initial Dataset version	Edit permissions	

Items per page: 5 1-5 of 896 16 < > > >

Users

Manage group users and assign roles. [View roles](#)

Name	Users role within group
☐ Craig Robson Group owner	Administrator

“Every feature request hides a deeper problem”

Home / Pages / OpenCLIM. Open Climate Impacts Modelling framework

OpenCLIM. Open Climate Impacts Modelling framework



About

OpenCLIM, the Open Climate Impacts Modelling framework, was a project developing an integrated assessment framework that brings together existing models for highlighting the impacts of climate change across a number of sectors providing an evidence base for climate risk and adaptation needs at national and place-based scales.

In its current form, OpenCLIM considers the implications of climate change on agriculture, biodiversity, heat stress, flooding, drought and water supply. It incorporates both climate change and changes to urban landscapes driven by population growth through the use of the UK Shared Socioeconomic Pathways (SSPs) and UK climate projections (UKCP18), giving a broad picture of how risk across the aforementioned sectors changes over time across different potential futures.



Highlighted assets

View the highlighted models, workflows and datasets associated with this page.

Heat mortality (UKCP18 bias corrected RCMs), SSP2 2080, 4 °C

Dataset

Publication date: 23rd May 2023
HEAT-HARM loop output for OpenCLIM

SHETran

Model

Publication date: 5th March 2024

Public assets

View the pages's published datasets, models and workflows

Datasets		Models		Workflows	
Title	Summary	Publication date	Contact		
Crop suitability	Crop climatic suitability scores for a baseline (1...	13th July 2023	Matt Brown		
CropNet Potential Yields	Modelled UK potential yields for wheat, grass and ...	13th July 2023	Matt Brown		
Potential wheat yields for East Anglia 1980-90	Potential wheat yields for East Anglia 1980-90 pro...	2nd February 2023	Matt Brown		
OpenCLIM Clyde Case Study Boundary	Boundary area of the Clyde case study area for the...	16th November 2021	Craig Robson		
HARM PreProcessedData	Some pre processed data forHARM, including default...	28th February 2023	Alan Kennedy-Asner		

Items per page: 5 1-5 of 146 < > > >

Contact details

Adam Smith [@](#) [@](#)
Dr. Craig Robson [@](#) [@](#)
Prof. Robert Nicholls [@](#) [@](#)

Related links

[Tyndall Centre – OpenCLIM Project Page](#)
Official name from the Tyndall Centre for metrics for heat stress, drought and flooding, biodiversity, and crops, at approximately county-scale.

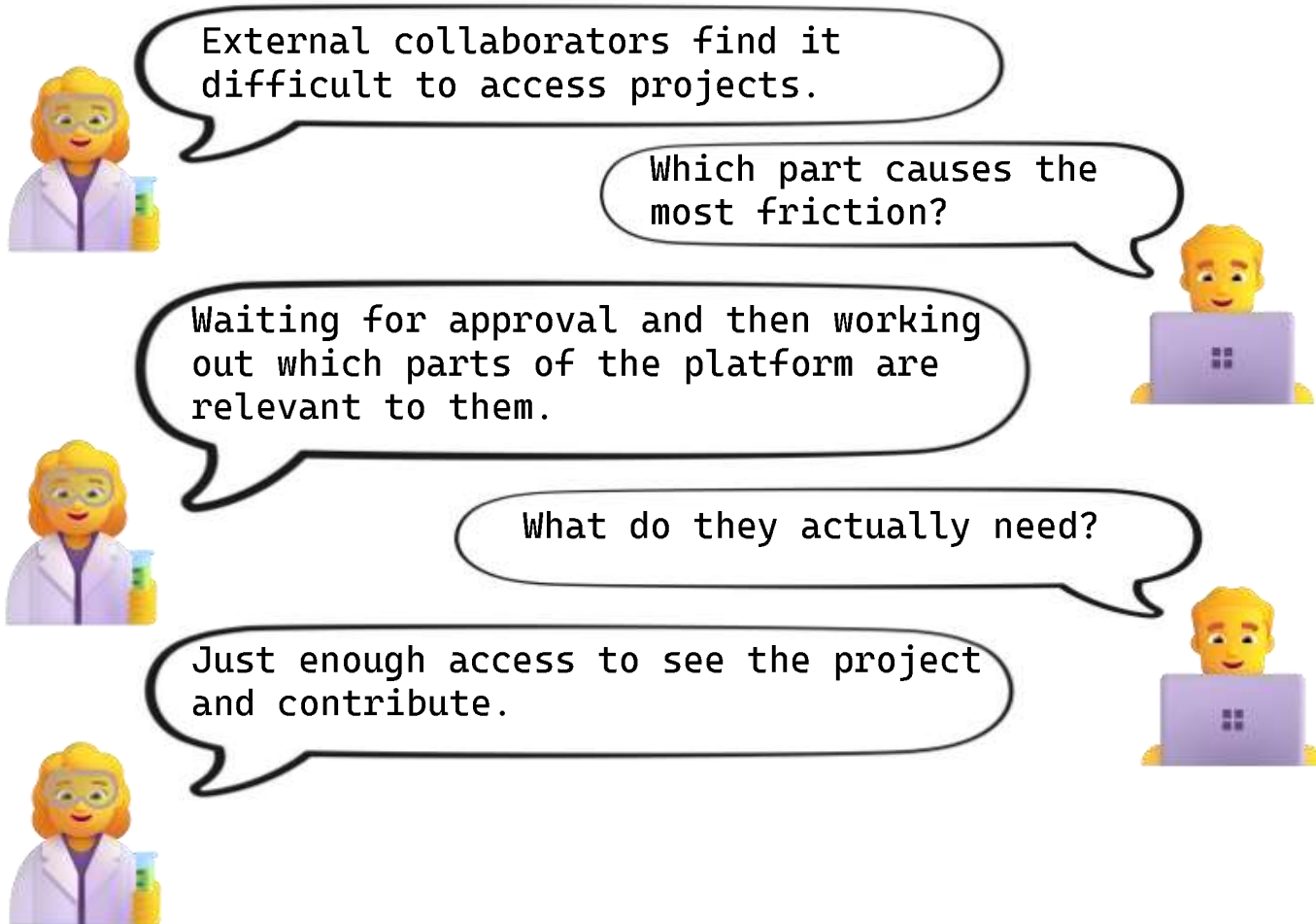
[Maximising UK Adaptation to Climate Change \(MACC\)](#)
Visualisation tools developed under the MACC project showcasing outputs from OpenCLIM project.

[Tyndall Centre – OpenLAND Project Page](#)
An extension of the capability of OpenCLIM project, targeted to develop and validate a novel framework for the effective land-use interventions upon carbon storage, particularly focusing on soil carbon and soil health evaluation.

Additional details

Subject: Climatology / Meteorology / Atmosphere
Keywords:

Lesson 2. Reduce unnecessary friction

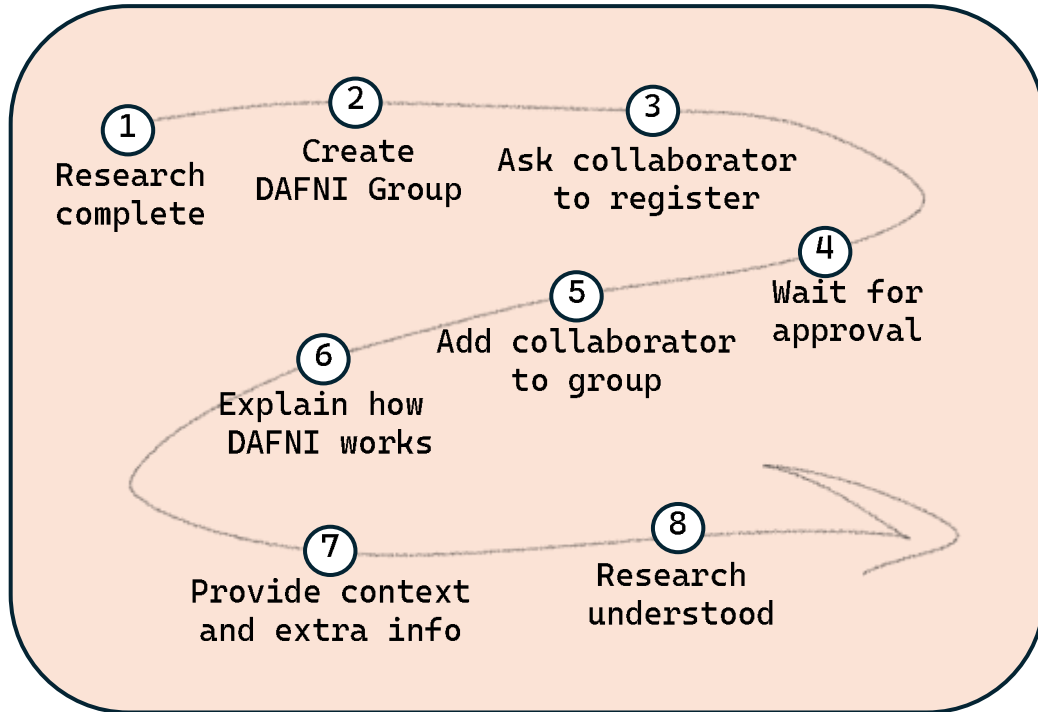


The real problem wasn't approval.

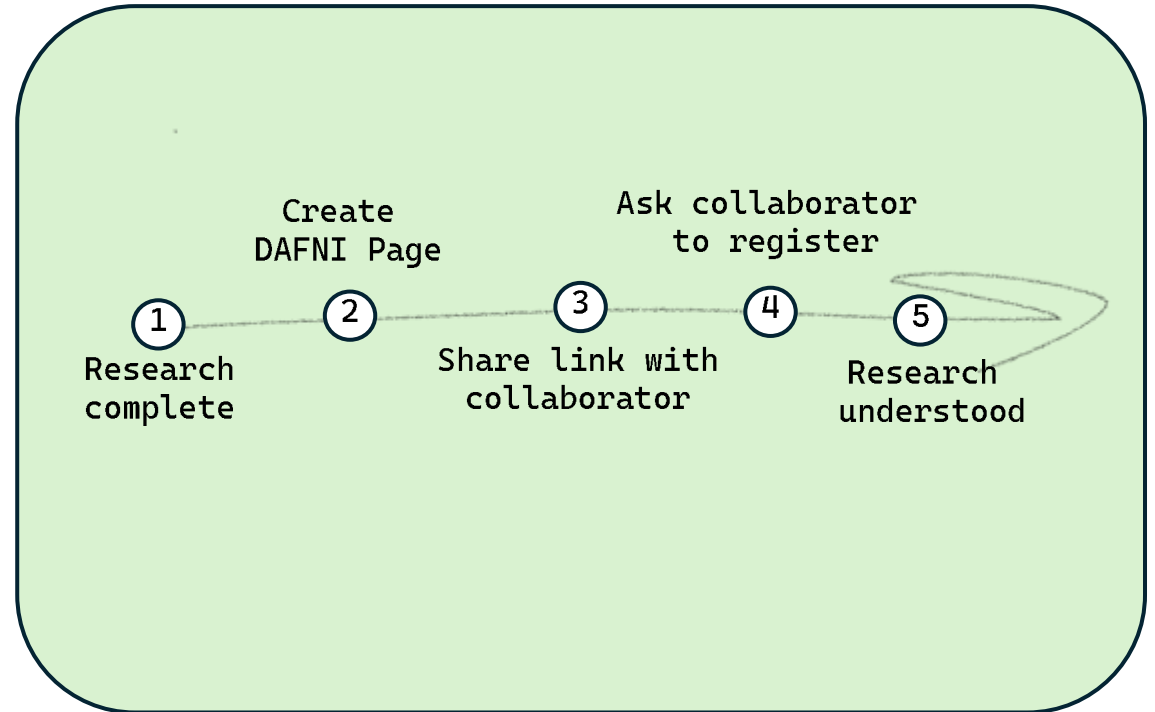
It was making every user navigate unnecessary complexity.

Lesson 2. User journey before and after

BEFORE:

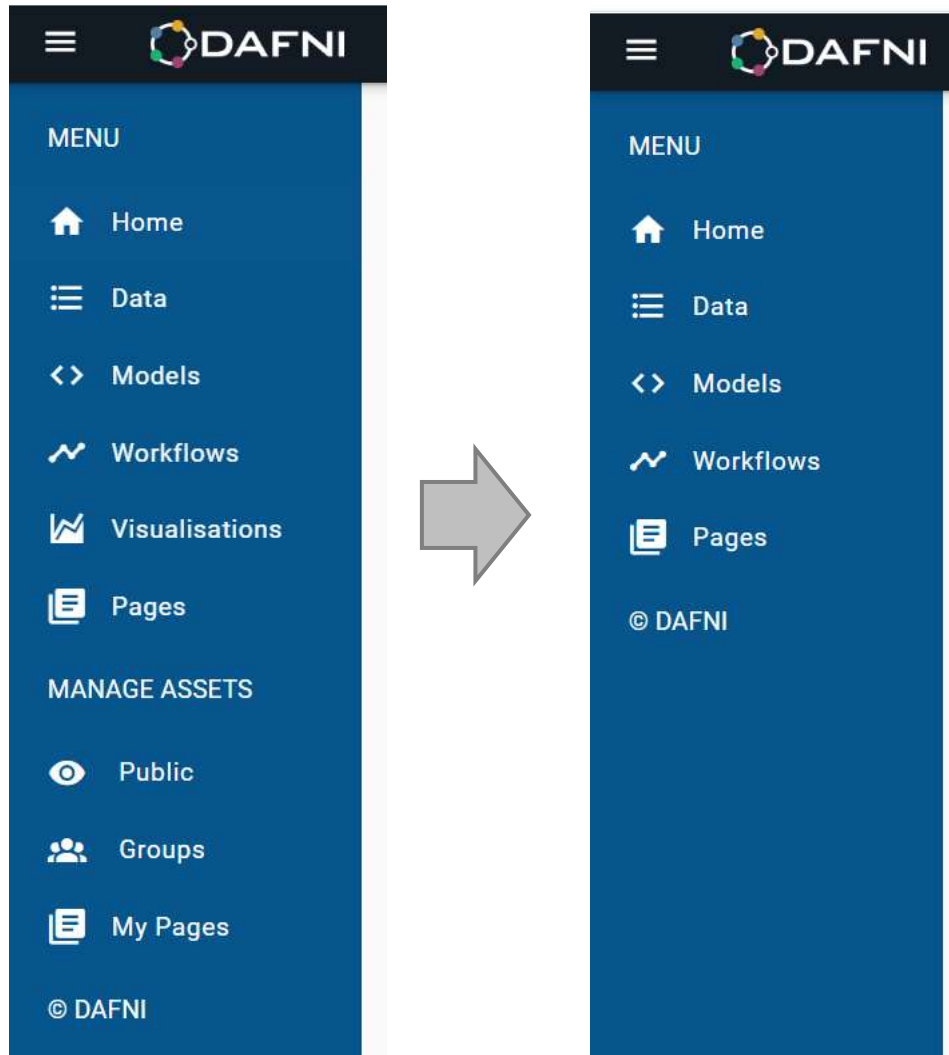


AFTER:



Solution on DAFNI

“Every extra step takes researchers away from their work”



Apply for a DAFNI account
Please choose how you would like to access DAFNI

Standard

A **Standard DAFNI account** grants you read only access to:

- ✓ Data Catalogue and Dataset Details
- ✓ Model Catalogue and Model Details
- ✓ Workflow Catalogue and Workflow Details

Select

Expert

An **Expert DAFNI account** grants you access to:

- ✓ Everything in Standard
- ✓ Upload your own assets
- ✓ Run Models within Workflows, uploading any results as Datasets
- ✓ Explore Datasets in Visualisations
- ✓ Create groups to allow you to share your assets with select users

Select

Lesson 3. Help users help themselves



Can someone check whether I set up my workflow correctly?

What are you unsure about?



My model produced different results, but I need to see the run logs.



How do you access those today?

I have to raise a ticket for the platform team to retrieve them.

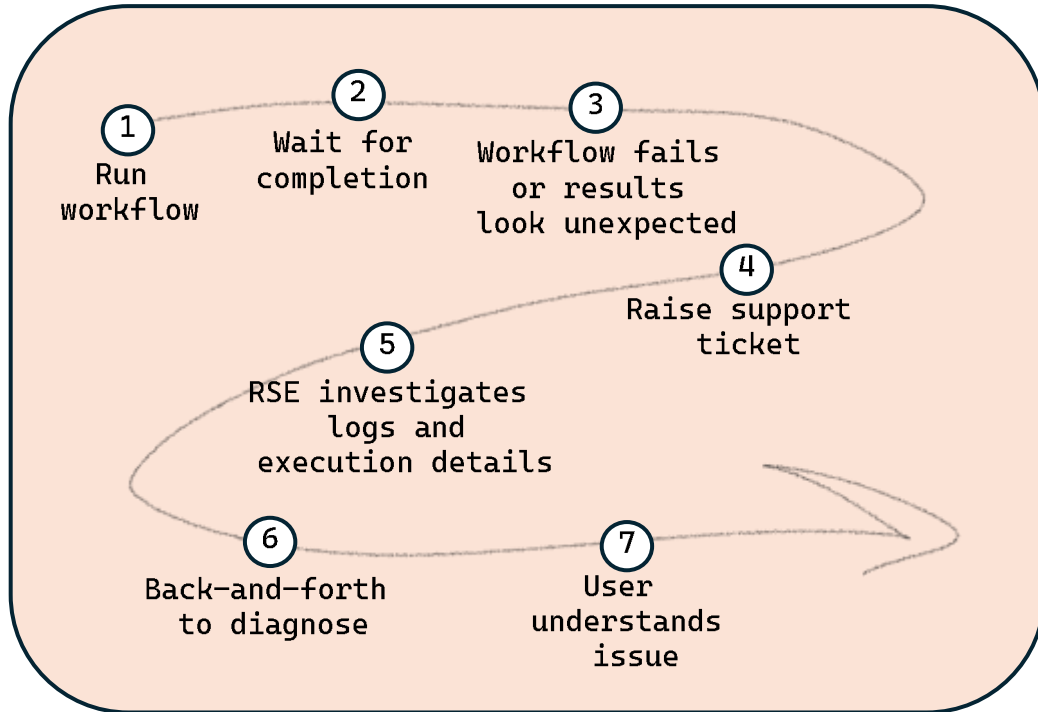


The solution was not more support.

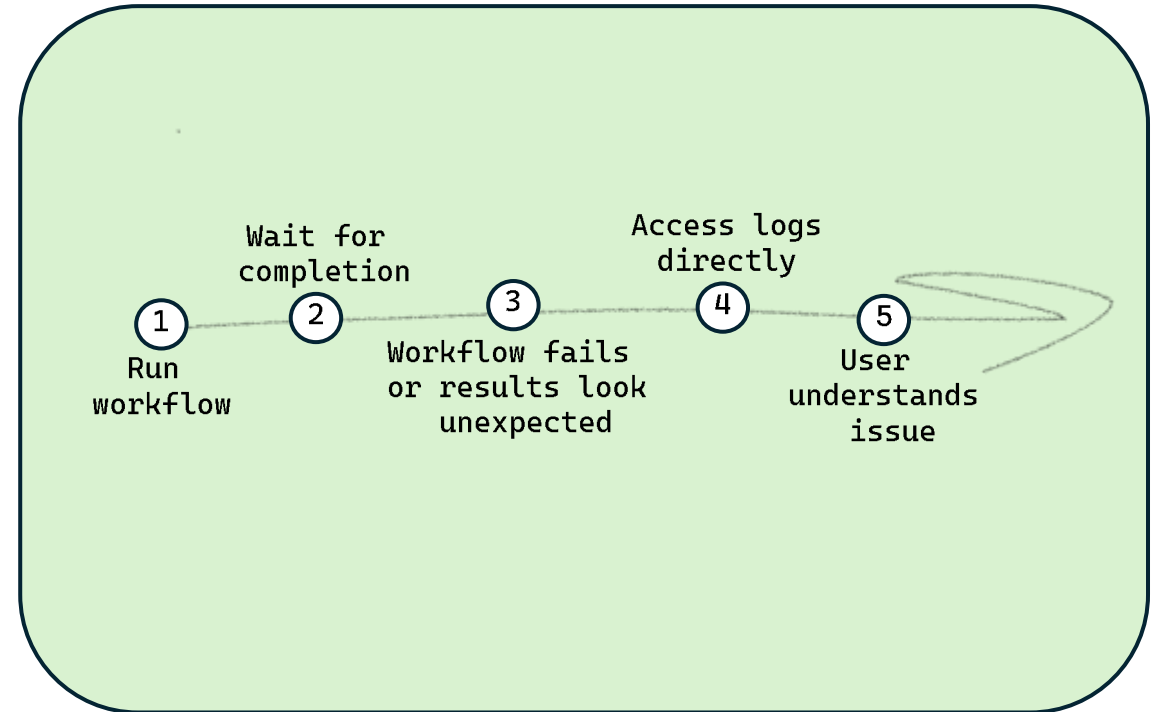
It was giving researchers direct access to the information they need.

Lesson 3. User journey before and after

BEFORE:

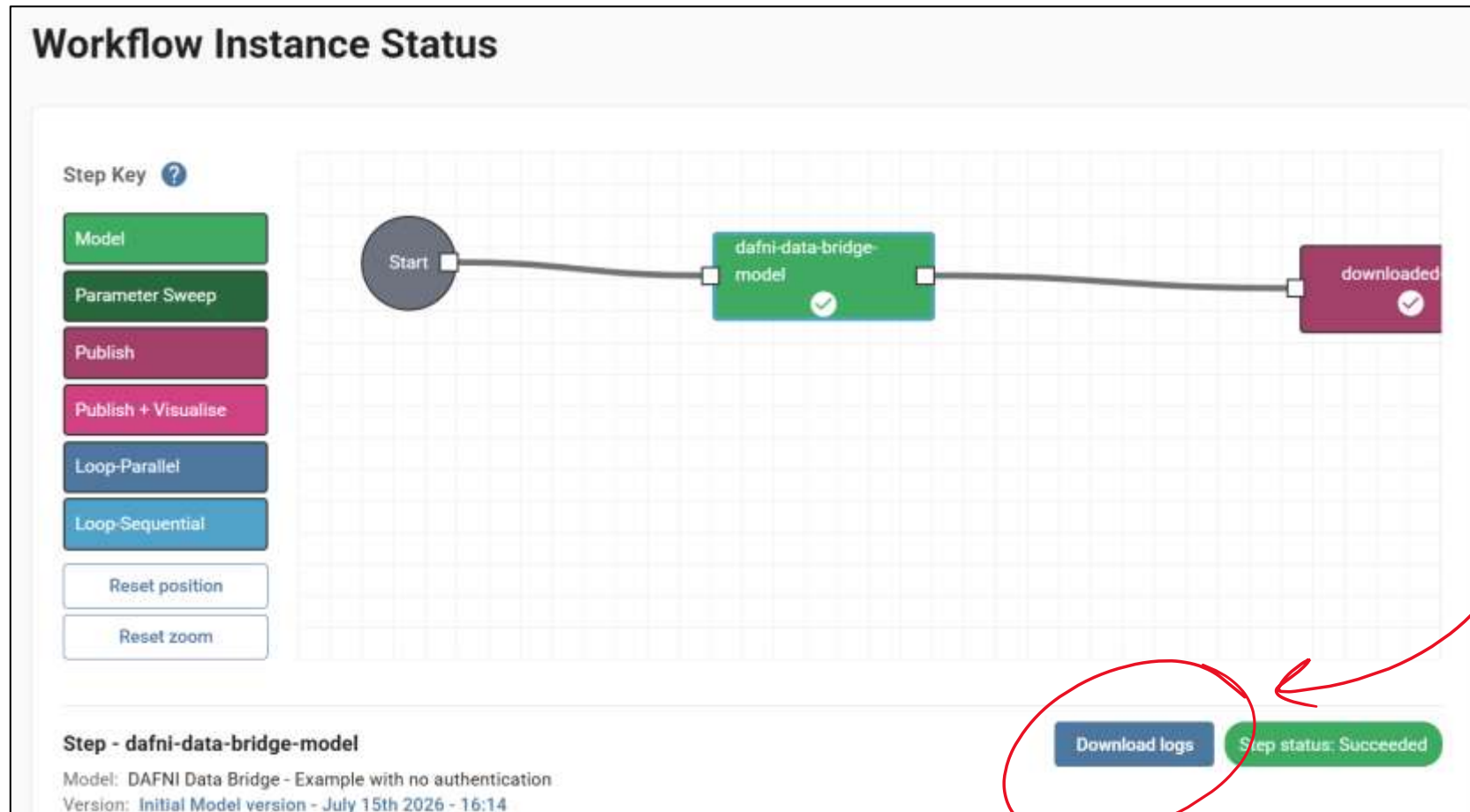


AFTER:



Solution on DAFNI

“Design software that supports users,
even when we are not there”



Lesson 4. Prevent mistakes before they happen



I spent time completing my dataset upload, but it wouldn't submit.

What stopped it from being uploaded?



One of the metadata fields wasn't valid.

Where would feedback have been more useful?



The platform could validate the metadata as I entered it.



The timing of feedback matters.

A good system identifies problems at the earliest possible point.

Solution on DAFNI

“Good defaults and validation are better than good error messages”

Version message
Add a short message to let other users know what you've added in this version.

Version message *

Field is required

Contact point
Point of contact for queries about this dataset.

Name *
Karen Tomlinson

Email *

Field is required

Continue

Add Data

1 Data entry

Drag and drop files here

or

Browse files

You have not added any files to upload. A dataset needs at least one file to be uploaded. Please add the files you wish to upload and try again

Datasets with a large number of files or large file sizes could take a long time to upload.

Cancel

Continue

Data files to publish

To select all files in a folder use wildcard "*". To recursively select all files and folders in a folder use wildcard "**/*". e.g. "outputs/*" or "outputs/**/*"

Step to include data file from *

File path *
outputs/**/*

Includes all files recursively in this folder

Lesson 5. Measure success by researcher outcomes

NOT WHAT WE BUILD:

- ✗ Features delivered
- ✗ Bugs fixed
- ✗ Tickets closed
- ✗ Documentation written
- ✗ Code coverage increased



WHAT THEY ACHIEVE:

- ✓ Faster time to first result
- ✓ Greater confidence in results
- ✓ Collaboration enabled
- ✓ Policy informed
- ✓ Less time fighting software

My 5 lessons

1. Don't build what users ask for.

Every feature request hides a deeper problem.

2. Remove unnecessary friction.

Every extra step takes researchers away from their work.

3. Help users help themselves.

Design software that supports users, even when we are not there.

4. Prevent mistakes before they happen.

Good defaults and validation are better than good error messages.

5. Measure success by research outcomes.

Success is not just what we build, it is what researchers can achieve.