Education skills and funding agency

Submit learner data

User research and service design by Elizabeth Hitchins

How did it all start?

The Data collections service enables public funds to be distributed for further education via publicly funded colleges, training organizations, local authorities and employers.

The collection and submission of learner data was an extreme burden for further education providers.

The service needed to be more agile to meet user needs and costs needed to be reduced. The trust in the Education and Skills Funding Agency was very low.

My role and the team

The team

I was the lead researcher and service designer in a blended team consisting of a:

- Delivery manager
- Business analyst
- Technical architect
- Service owner
- Product owner
- Content designer
- Interaction designer

Ways of working

The team ran the project in an agile way over 16 months, in two weeks sprints. During these sprints the team conducted sprint planning, sprint reviews, show and tells and retrospectives.

The team used various planning software during this time, mostly linked to the dev/qa team for ease.

The users

Learners and providers

Learners are individuals undertaking a training/education/apprenticeship program with their chosen provider.

A **provider** is an organisation who wants to deliver further and higher education skills and vocational training funded by the Education and Skills Funding Agency.

The providers used the data collections service to submit their learner data and receive funding, these were our main user groups.

Personas

Admin Adil

Adil is 18. He has just finished his apprenticeship in Business Administration and this is his first role.

He has **low-moderate sector knowledge** but is 8 **on the digital scale**.

He wants to move into the Data science team so is eager to get involved.

Data Debbie

Debbie is 37 and has been working with data submission for 9 years. She has **high sector knowledge** and **9 on the digital scale**.

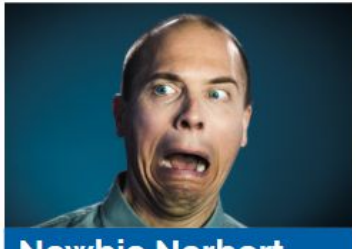
She was recently promoted to manage the growing team when the provider started working with Apprenticeships.

Financial Frida

Frida is 56. She has been managing the financial projections for an FE college for 2 years.

She is involved in the bid for funding each time the contract is renewed with the ESFA.

She has **task specific sector knowledge** and is **7 on the digital scale.**



Newbie Norbert

Norbert is 47. He has been an NVQ assessor for 15 years but decided to take on a new challenge.

He is part of a new provider team facilitating data submission for their company's apprenticeship program. He is very confused and nervous about getting it wrong.

He has **moderate sector knowledge** and is a **7 on the digital scale**.

Learner Lee

Lee is 16 & has started his Diploma at college. He failed his English GCSE so has to retake it while studying.

The data collections team were getting all the complaints!

Fix the pain

As the data collections service was the barrier to providers getting paid, that was the point where the data science department felt the most investment should be made. The business case was made around this service being the problem.

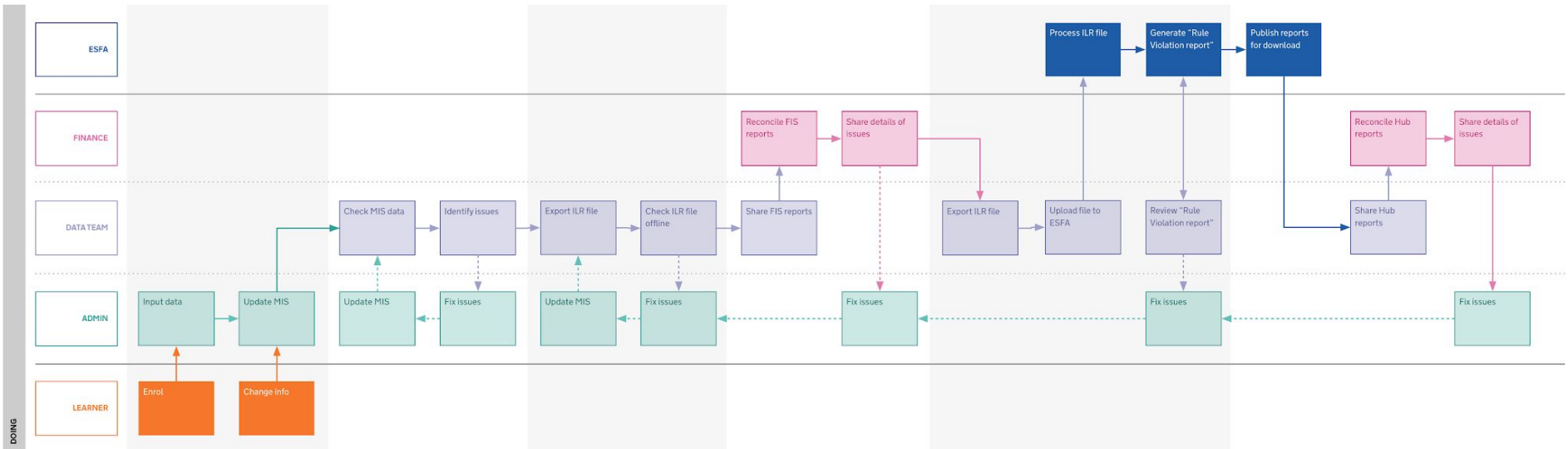
During the discovery and alpha phase it became clear that this service was merely a speck in a larger landscape, and not were the problems originated. It was where the problems were first felt.

Service user needs

"As a provider, I need to tell the Education and Skills Funding Agency about my learners so I can claim funding for their education"

"As a provider, I need to have visibility of my financial outlook from the Education and Skills Funding Agency so I can plan my business activities effectively"

STAGE	INPUT DATA	"CLEAN" DATA	OFFLINE VALIDATION	RECONCILE & CORRECT	DATA SUBMISSION	RECONCILE FUNDING DATA
DESCRIPTION	Students enrol and their data is sent to the admin team who enter it in to the organisation's Management Information System (MIS). Enrolled learners may also update their data, which must be reflected in the MIS.	The Data team regularly check the MI system to ensure that data entered by administrators is accurate. Detail about any issues identified is passed between the Data team and the Admin team. This process is referred to as "cleaning".	Once data in the MIS is clean, the data manager exports collected learner data as an ILR file and imports it in to the Funding Information System (FIS), a desktop program maintained by the ESFA. "Running the file through FIS" outputs a report showing a list of errors and warnings with the data file. Any issues found are corrected in the MIS and the process is repeated until the file is "clean" and free from errors.	Reports from FIS are regularly shared with the Finance team, who carry out a number of reconciliation checks as well as forecasting. If any significant discrepancies are found between what was expected, or if data can be optimised to maximise funding, then data in the MIS is updated by the Admin team.	Around 2-4 days before the return period closes for submissions, the data manager exports the "final" ILR file from FIS (or sometimes the MIS) and uploads it to the Hub to be processed. The hub quickly generates a "Rule violation report" which contains details of any issues found in the submitted file. The data manager downloads this report and, if there are any serious issues, share the report with the administrative team so they can fix them. Usually the submitted file is clean and free from errors but my sometimes contain warnings.	The ESFA system takes some time to complete the funding calculations as there are hundreds of rules that must be checked and validated. Once the submitted file has been processed, the data manager downloads a zip file containing all 26 reports. They usually only look at 3 reports, which are shared with relevant team members.



Understanding the data

The users were all very high on the digital scale but had different barriers to the service.

We determined that the following 3 factors most impacted how the users used the service as a whole:

- Knowledge - what do they know? What information is available to them?
- Comprehension - what do they actually understand or infer from the information they have read?
- Application - how do they apply their understanding to their own learners in order to meet their obligations, be compliant and achieve their goals?

Leveraging the skills within the ESFA

Most of the stakeholders for this service were data scientists and those involved in policy.

They understood this world, as they created it and we needed them to help us make sure the users did too.

It got so big

That an entire service design team from Deloitte was eventually bought in to design the entire service due to the targets for the Apprenticeship service.

This kick started an entire programme of work and culture transformation within the data science department.

Sometimes the pain isn’t where the problem surfaces.

Thank you.