

Services and Tools for Repositories

Repo Builders Block 2



Co-funded by
the European Union



UX, Testing, and Metrics

How to design your repository

Pavlína Špringerová, Veronika Němcová, Karolína Menclerová and Illyria Brejchová



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UX team

Veronika Němcová
Product Designer



Karolína Menclerová
UX Researcher

Pavčina Špringerová
Head of Experience
Design and Analytics

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UX vs UI

User Interface (UI)

- **UI is how the product looks and enables people to interact with it.**
- A set of components (e.g., buttons, clickable links) and design elements (e.g., images, icons, headers) that comprise a product such as a website or application.

User Experience (UX)

- **UX is the overall experience and satisfaction a user has when interacting with a product or service...**
- ...not just how a page on a website or a screen within an application looks and behaves.

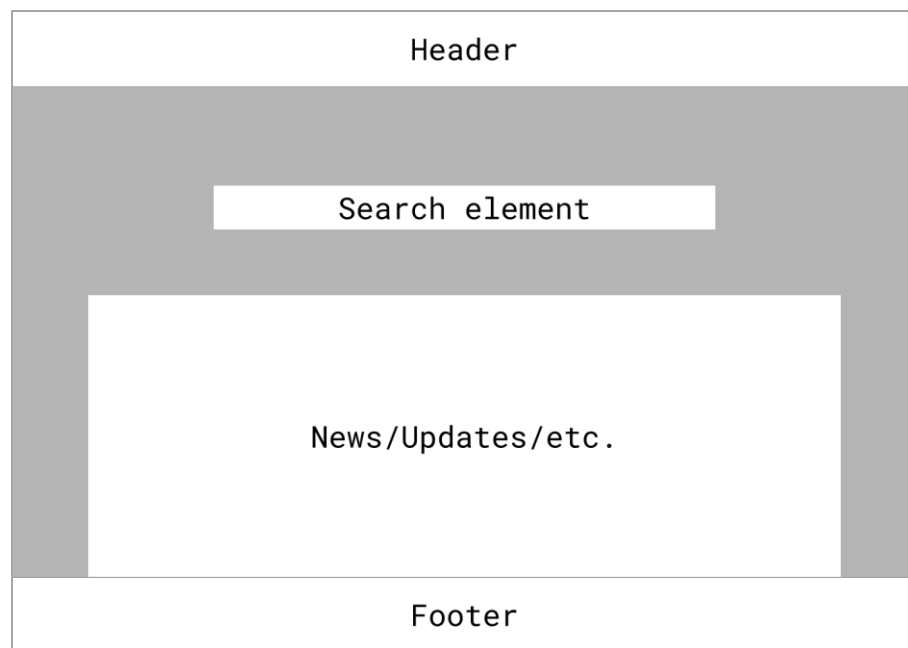
UI vs UX – It can "look good" but It might not work well.

Why UX research is important

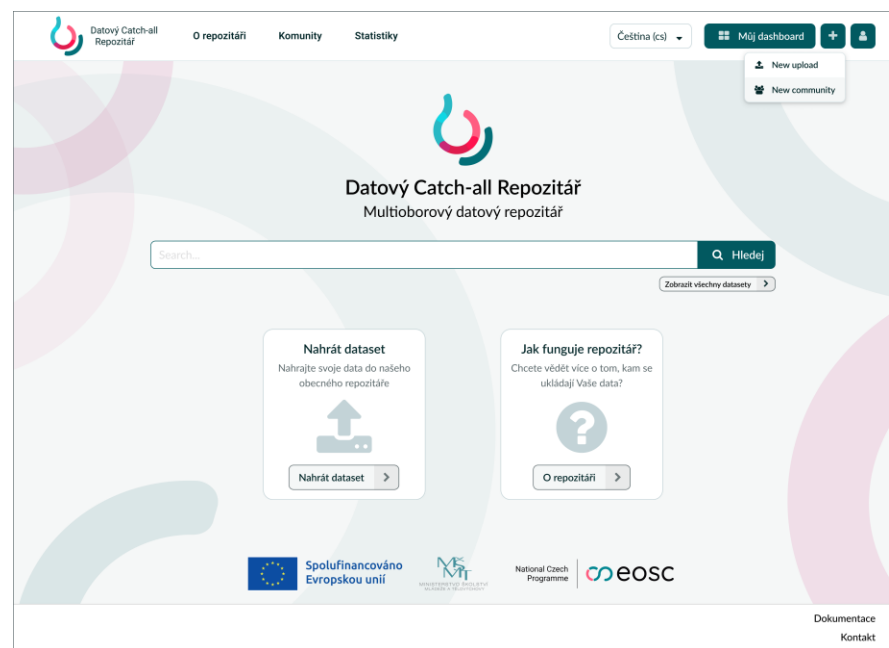




Wireframe (UX)

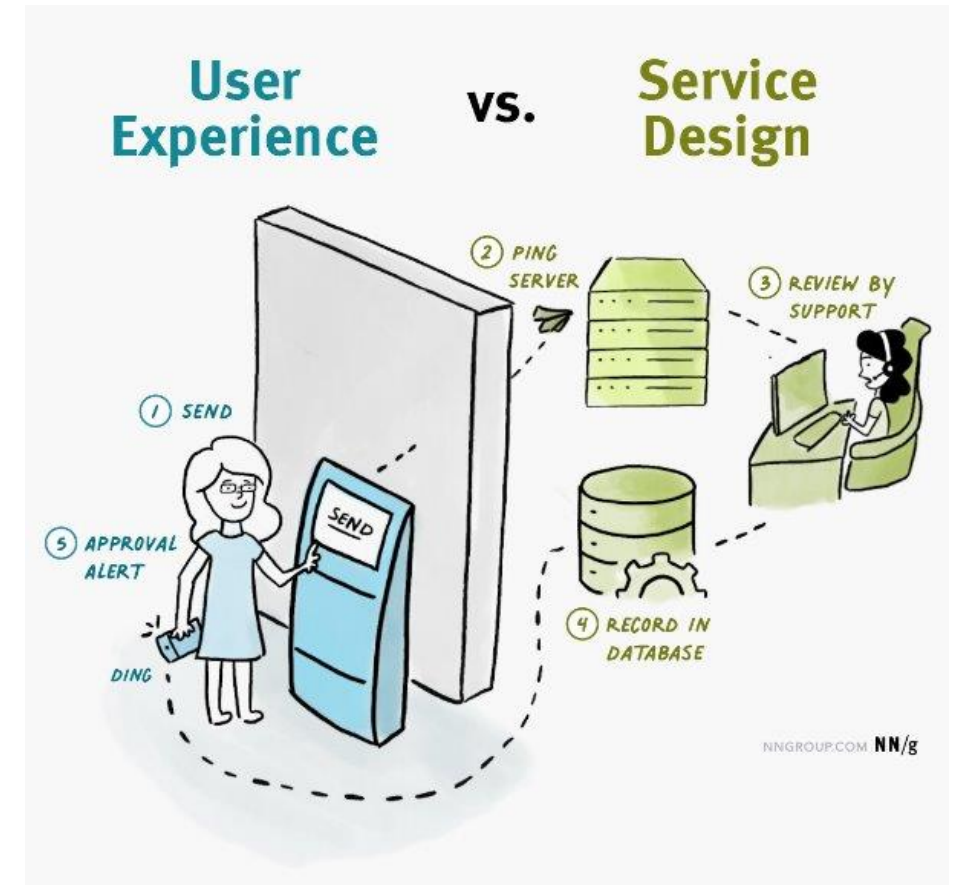


(UI)

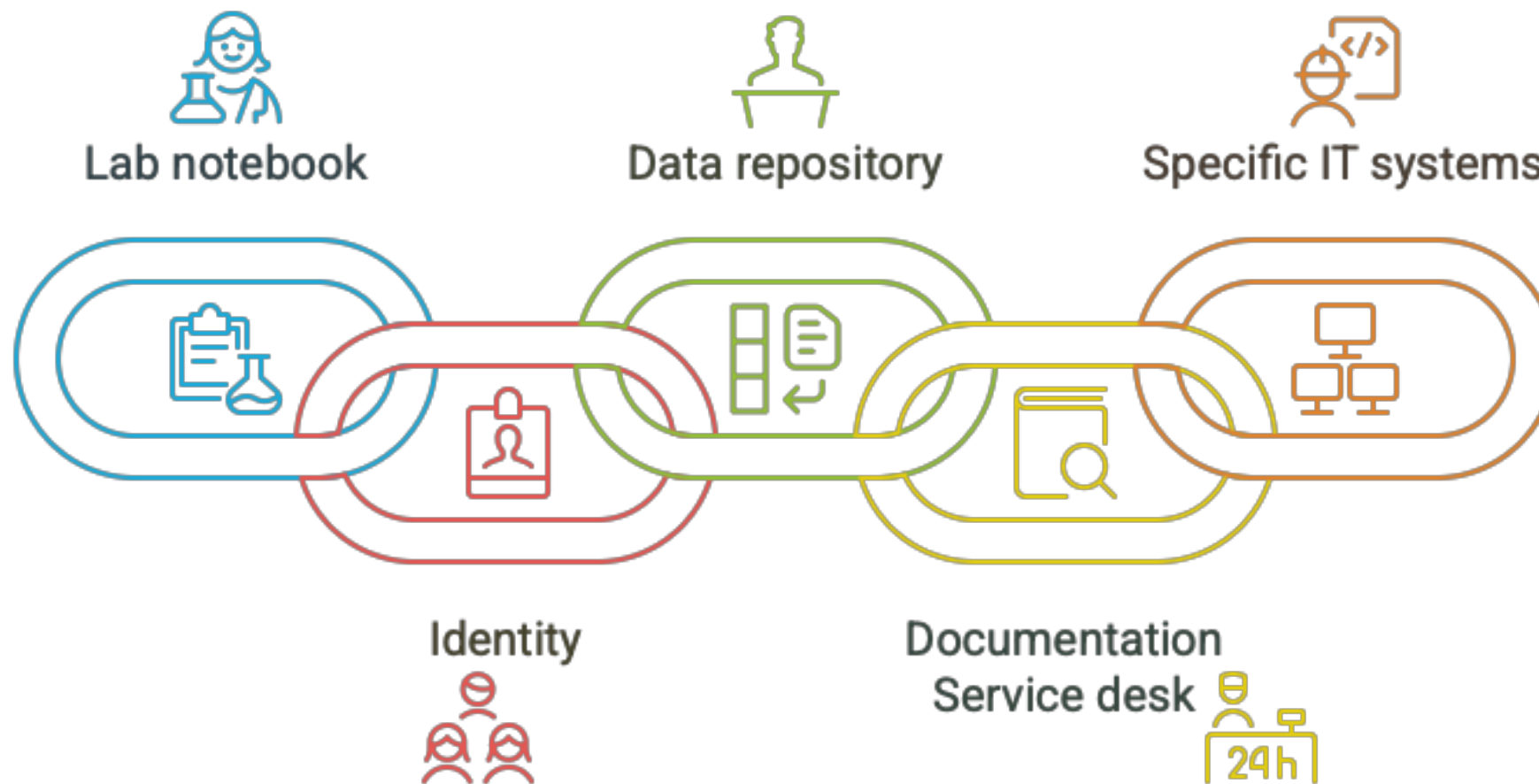


Service Design

- Focuses on designing **entire service experiences** across multiple touchpoints (digital, physical, human interactions)
- Maps out all the behind-the-scenes processes, people, and systems that make a service work
- Deliverables: service blueprints, customer journey maps, touchpoint matrices, organizational process improvements



Wider Repository Context – Build the Ecosystem



YOU ARE THE DESIGNER, We Have the Basics

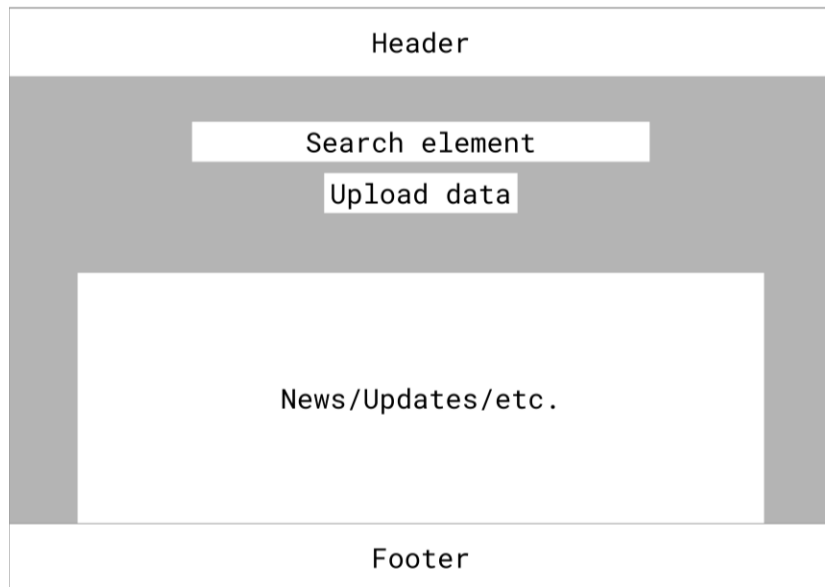
We have repository foundations, so YOU do not have to invent or design from scratch (CCMM based CESNET Invenio) [design only for now]

We provide:

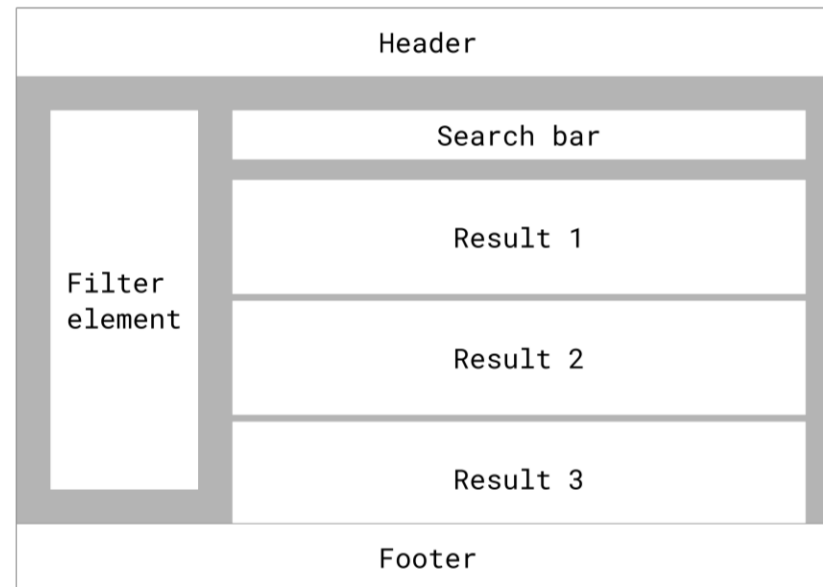
- Wireframes
- Component library (Invenio)
- Service design - document (questions)

And we help with visual identity.

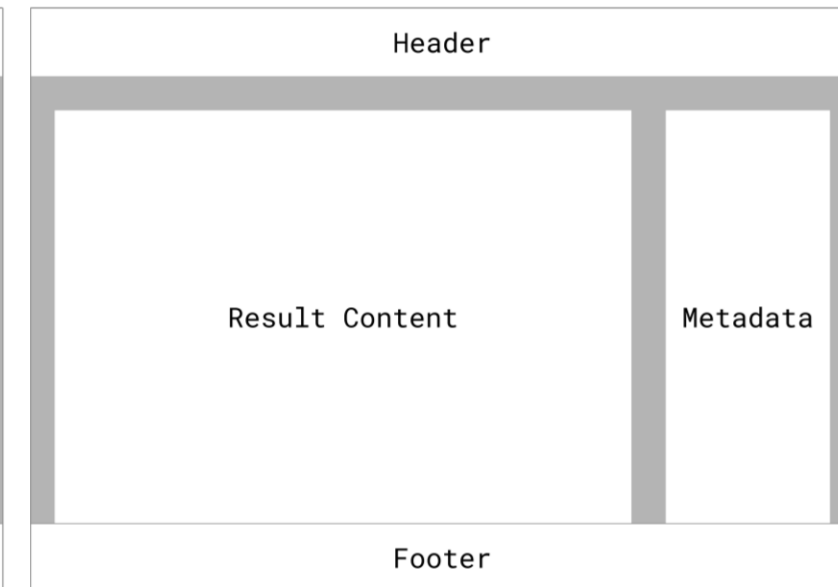
Homepage



List of results



Detail



Build a Repo that Fits Your Community

A good requirement is:

- **Unambiguous** (only one possible meaning)
- **Consistent** (not conflict with other requirements)
- **Specific** (concrete and described in detail)
- **Achievable** (be able to say when it is completed)
- **Modifiable** (Possible to change or add to the requirement later on)
- **Traceable** (Be able to trace back to the source of the requirements e.g. user input)

Examples

Search bar is
not a necessary
requirement
(contained in
the foundation)

Requirement Name	Category	Priority (MoSCoW)	Requirement Detail
Community button on homepage	UI - homepage	Must have	Users require the ability to move directly from HP to the community page
Embargo on dataset	Data access and security	Must have	Users should be able to put an embargo on their data to limit access to a certain date.

10 mins: Forming Good Requirements

- Form groups based on your repo topic (molecular dynamics, archeology)
- Those who do not have one, please join a group which is closest to your interests

10 mins: Forming Good Requirements

QUESTIONS TO ANSWER

- What are the basics your community need?
- How do they search datasets?
- What is important about the datasets we produce?
- What is important for us?
- Who are our users – what's their background, what systems are they used to?
- What are priorities?
- What format will be used for uploading datasets?
- How do you want to visualize the data?

If you're stuck – SKETCH it out! - our technique numero uno

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Repository Requirements

There are different ways of producing requirements:

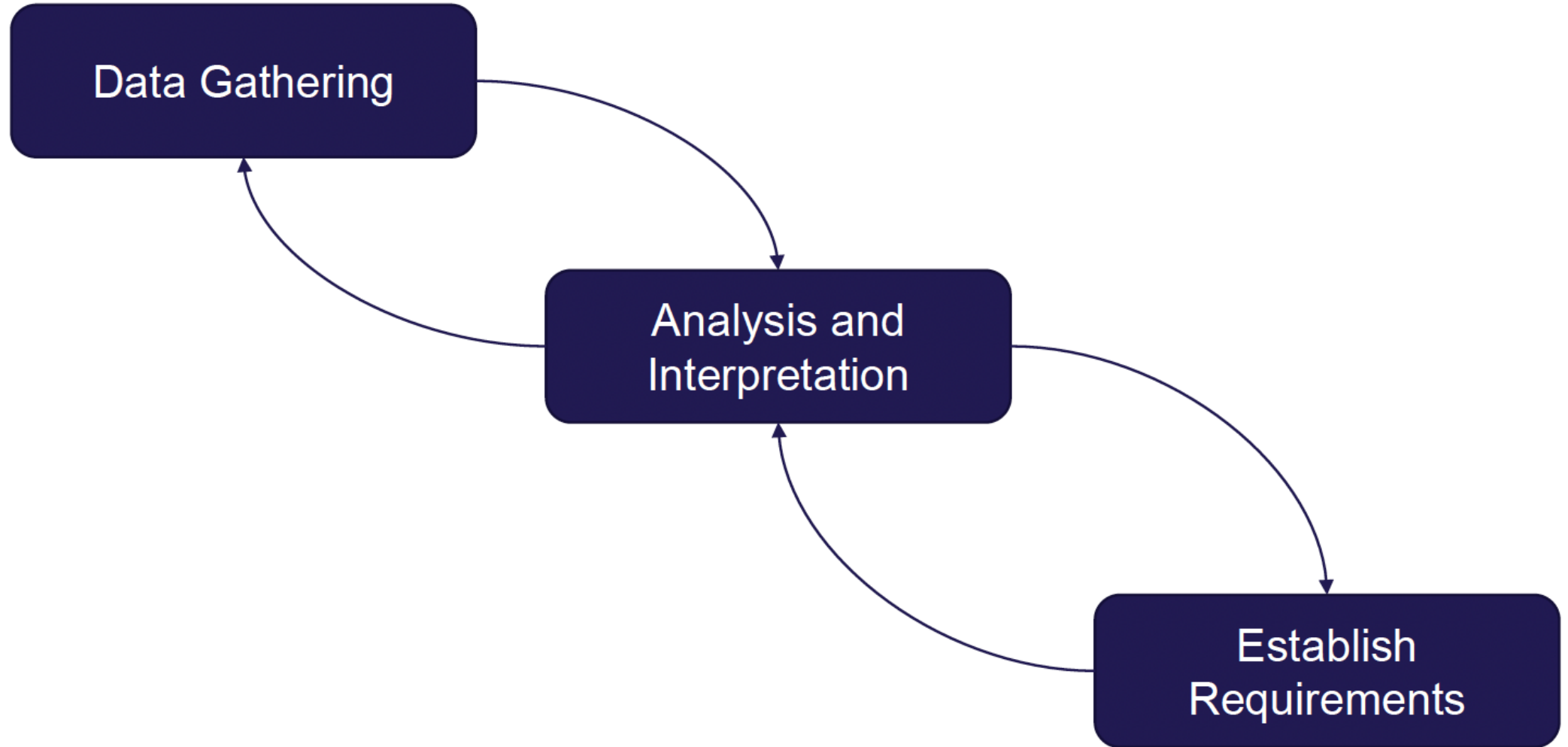
RESEARCH USER NEEDS through:

- Interviews:
 - Good for exploring issues and to understand users
- Focus groups:
 - Good at gaining a consensus view and/or highlighting areas of conflict
- Questionnaires:
 - Good for answering specific questions from a large, dispersed group of people
- Researching similar products:
 - Good for prompting

And construct:

- User flow
- Scenarios
- Use cases
- Personas

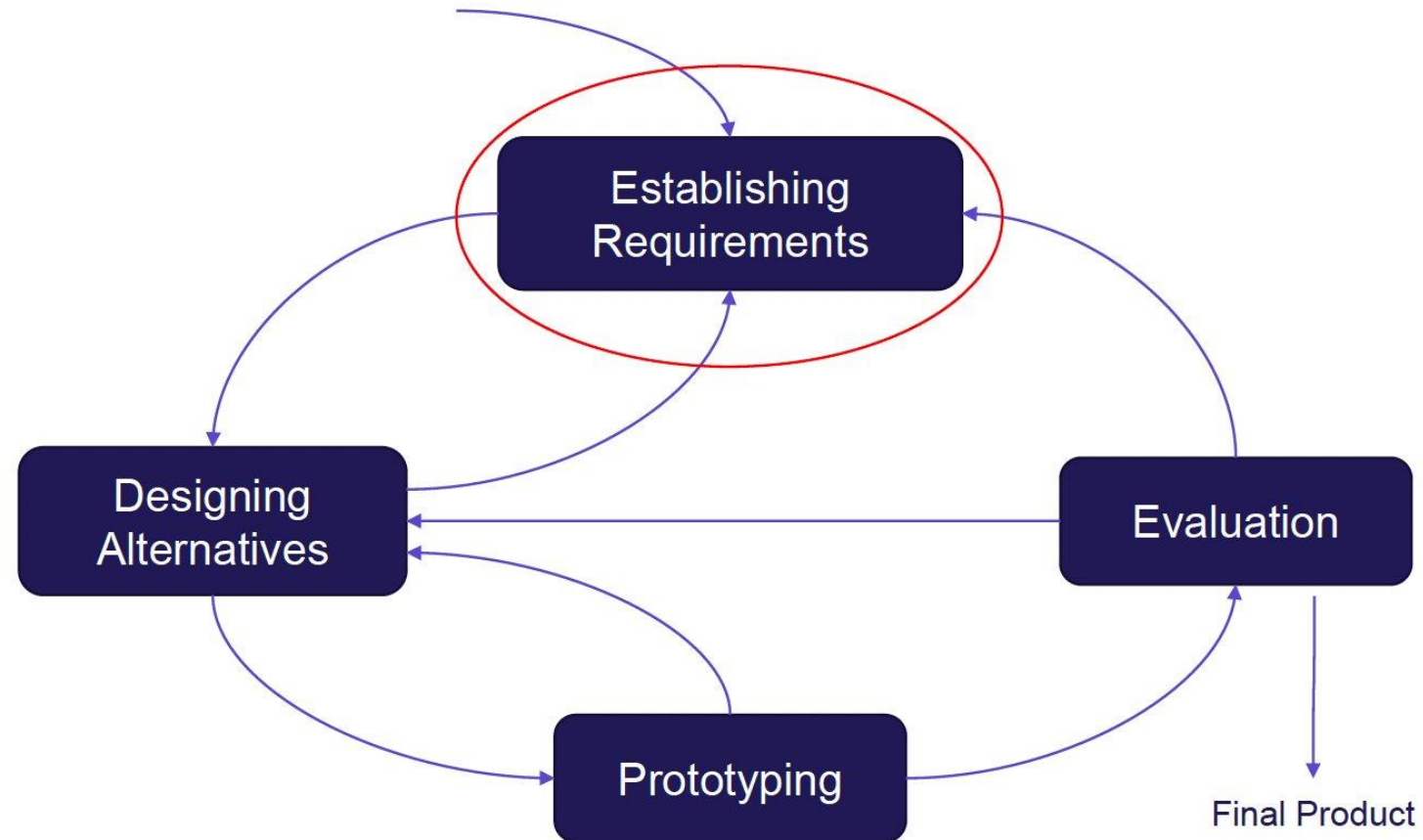
Steps to Requirements



Forming Requirements is an Iterative Process

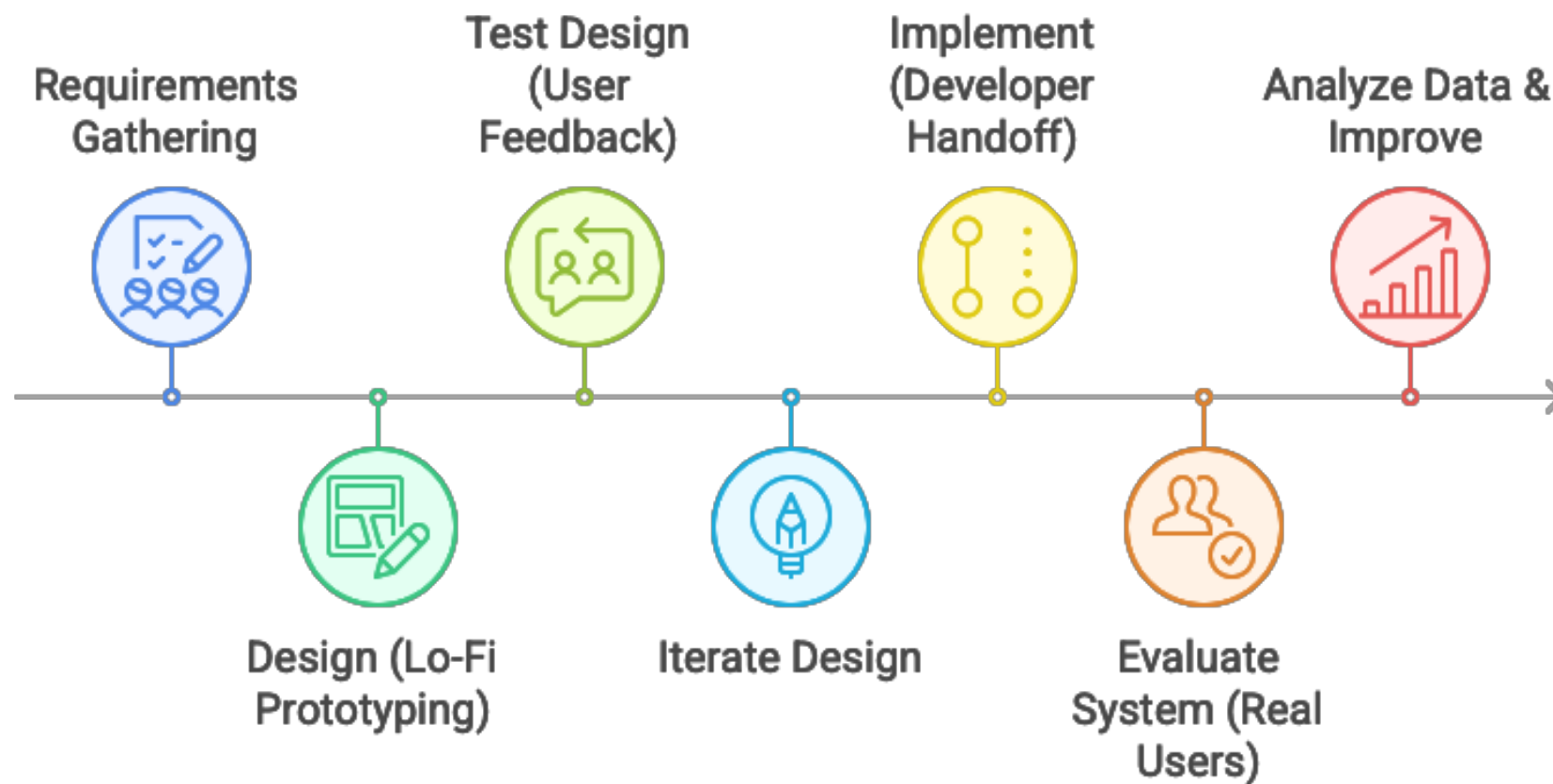
- Non-linear process
- They can change over time
- They will become more specific over time
- If well-formed early on -> easier development

Interaction Design Cycle



What Your (Our) Future Looks Like

- Design – transform your requirements into a UI
 - It's a good idea to start low-fi: for example, we designers often use paper sketches as the first step because it's very low cost on resources
 - Part of this could also be your visual identity -logo, colours etc -but this is not that important leave it as the last thing
- Test your Design – test your design - see if people get what you were going for
- Implement – give your designs and documentation to your developers
- Evaluate your system – with real users ideally
 - Which metrics should we use (can use Matomo – prepared by CESNET, needs your setup)
- **Feel free to contact us during these steps so we can support you**



Made with  Napkin

Types of Testing / Feedback Collection

- A/B testing
- Usability testing
- Q&A testing

TIPS AND TRICKS

- Do not manipulate testing
- Have a plan, follow it with every participant
- Structure
- Mixed methods – collect quantitative and qualitative feedback

Metrics (KPI)

- A. **Basic metrics** – number of downloads, datasets, amount of data stored, number of users
- B. **System data** (traffic, incidents, errors, logs)
- C. **(Recommended) Usability metrics** (e.g. Matomo metrics to improve usability)

Why is it important? - Proof of usage in case of funding

You can argue for the meaning of repo – key for longterm and sustainability of the repository.

Take ACTION – Plan Next Steps and Verify the Requirements

STEP 1 – take notes

Take your noted requirements back to your institution – have a short workshop – let everyone do the same exercise (individually first)

STEP 2 - compare notes together - Define

- **Is it specific?**
- **What is the priority level?**
- **What is the category of the req.?**
- **Is it based on empirical data?**

STEP 3 - plan how you will verify it

- **Test your ideas with your community**

Key Takeaways

What UX in NRP covers and what is not included

- Direct support is provided by the **Repository System Specialists**
- Consultations with UX team are possible
- Training on request – interest poll on Slido
- We will help with making sure your requirements are within scope!

UX

- Gathering user needs
- Creating requirements
- Design
- Testing
- Prototyping