Aalto University

Research digitalization

How to build a **seamless path and process** that best support the research

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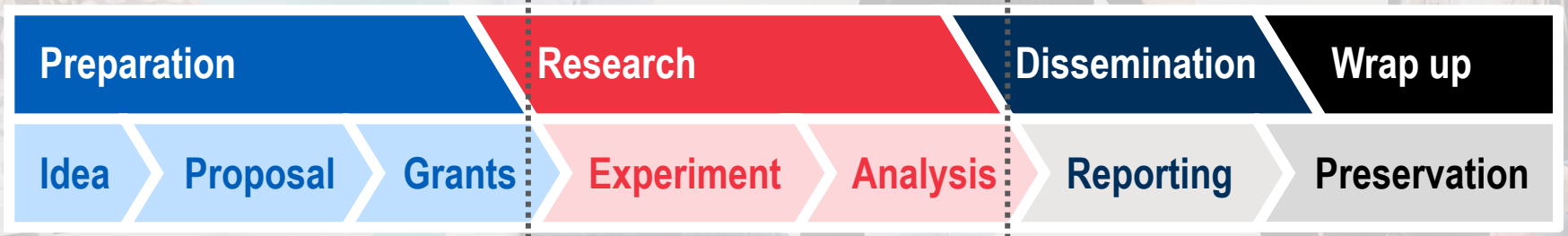
Research process

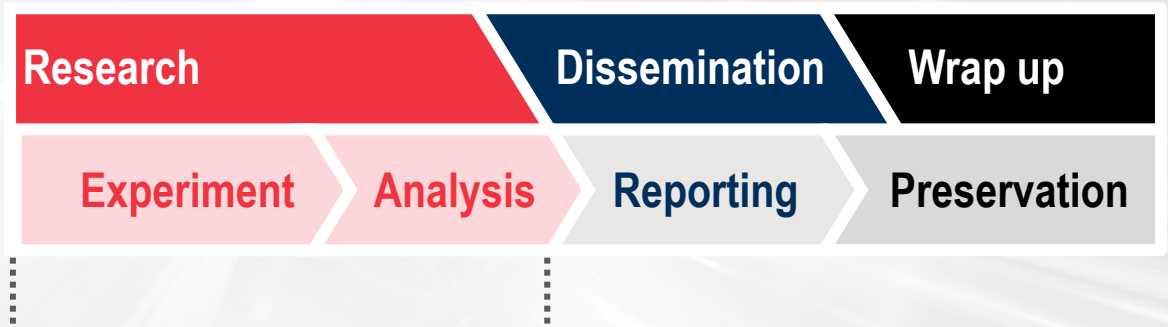


Source: Rahel Manurung - Customer Journey Map for Cloud Services

Researcher's time use

Preparation

35% Grants



Source: TSAMPO research 2016: Tutkijan ajankäyttö nykymuotoisessa tutkimusprosessissa

Researcher's time use

Source: TSAMPO research 2016: Tutkijan ajankäyttö nykymuotoisessa tutkimusprosessissa

Researcher's time use

Preparation

35% Grants

Research

37%

Dissemination

28%

Source: TSAMPO research 2016: Tutkijan ajankäyttö nykymuotoisessa tutkimusprosessissa

Goal
Digitalization

More efficient

Preparation

35% Grants

Research

37%

Dissemination

28%

Minimize time and maximize impact

Source: Juha Juvonen – Digitalization goals for research.

Researcher's Goals

- Find the idea for research
- Funding exploration
- Choose the researchers for project

Researcher's Activities

- Do budgeting; calculate the cost of the researchers need
- Identify the funder/collaborator obligation e.g. data
- Consult support for possible security/ethical aspects

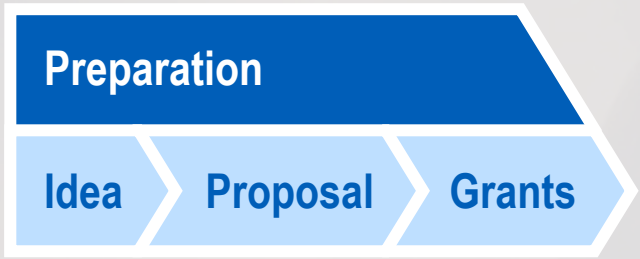
Researcher's Goals

- Find the idea for research
- Funding exploration
- Choose the researchers for project
- Find the theoretical foundation
- Data exploration
- **Final proposal submission** include the budget

Researcher's Activities

- **Do budgeting**; calculate the cost of the researchers need
- Identify the funder/collaborator obligation e.g. data
- Consult support for possible **security/ethnical aspects**
- Look back at the previous project
- Literature review
- Receive the project brief from supervisor or create a new research proposal
- **Recognize and consult** the need of **IT services** and **resources** and contact the supporter

Researcher's Goals



- Find the idea for research
- Funding exploration
- Choose the researchers for project
- Find the theoretical foundation
- Data exploration
- **Final proposal submission** include the budget
- Review and comply with research ethics
- Get funding

Researcher's Activities

- **Do budgeting**; calculate the cost of the researchers need
- Identify the funder/collaborator obligation e.g. data
- Consult support for possible **security/ethnical aspects**
- Look back at the previous project
- Literature review
- Receive the project brief from supervisor or create a new research proposal
- **Recognize and consult** the need of **IT services** and **resources** and contact the supporter
- Find grants
- Arrange the agreement between the researchers and collaborators
- Funders **requirements & obligations** and agreement reveals the **limitation/ opportunity** of using different services and service provider
- **Choose the service provider**

Relevant Touch Points

Preparation

Idea → Proposal → Grants

Decision Maker

Influencer

Coffee Rooms

IT consultation

Approval

Alert

Wider information

Researcher's Goals

Research

Experiment | **Analysis**

- Get research tools e.g. IT
- Build the hypothesis
- Doing simulations
- Recording the experiment
- Create and prove the right method
- Create research results

Researcher's Activities

- **Establish the IT environment** to the research
- Start the project and **collecting the data**
- Transfer the data
- Propose a method and create a hypothesis (iterative process)
- **Use the IT services and solutions** e.g. simulation analysis
- **Collaborating** between research group

Relevant Touch Points

Research

Experiment | Analysis

Researcher

Supporter

Service provider

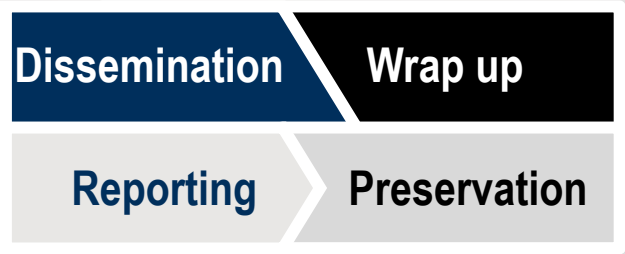
Co-operation

Service

Monitoring

Support

Researcher's Goals



- Get the final report to the professor/company/sponsors
- Get the feedback and recognition
- Get the data set and result from the service
- **Free up resources and close everything that makes costs**
- **Keep the valuable data**
- Get the citation or reference for the research output/data

Researcher's Activities

- Create and publish the scientific journal on the research platform or agreed portal
- Presenting the report in a conference
- **Move or link the datasets** to the research repository
- Report research output to the research information systems
- Filtering data; which files to keep and might be re-use in the future or to delete the unnecessary data permanently
- **Transfer the ownership of service**
- **Close or archive the services**

Relevant Touch Points

Dissemination | Wrap up

Reporting | Preservation

Researcher

Supporter

Service provider

Co-operation

Service

User satisfaction

Support

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