

How to support and upskill

After Digitization and Digitalization comes Digital Transformation

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Outline

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Deluge

Automation

Organization

Effect

1 Deluge

2 Automation

3 Organization

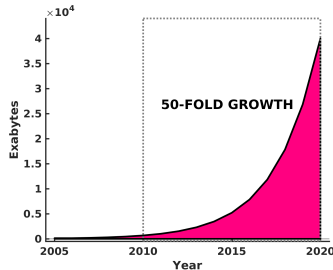
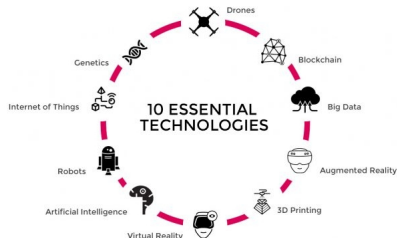
4 Effect



The Data Deluge

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Deluge

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- The **Data Deluge** is transforming knowledge discovery and understanding in every domain of human inquiry
- A large part of these data are **soft** and **unstructured**
- To get value from these data, **Humanities** needs to leverage **Automation** and become **Data-driven**



Automation and data-driven research are **organizational challenges**

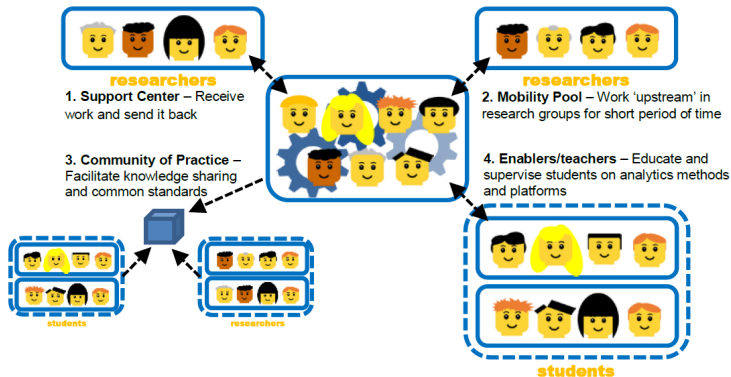
Automation

- Research and evaluate applications of Machine Learning in the humanities
- Move beyond research where ML applications are the end-goal
- Train, validate and apply “models as a service”

Data-driven

- Build, maintain & utilize high quality data sets
- Create a culture that embraces data (appreciates, uses, prioritize)
- Develop and employ software that empower people and supports good process





[solution] An adaptive **research and development** unit that intervenes in humanities research through collaborative development

- **build communities** across institutional boundaries, seed potential research projects and utilize peer pressure
- breed cross-domain respect and ensure that scientific developers and research software engineers have a **career path** within the organization

Effects of Competency Development and R&D

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Through digitalization of research, competency development
prepares the ground for digital transformation

- create a cross-domain language and value system
- generates a research- and problem-oriented community (a 'userbase')

Sustainable R&D units are the **transformative tool** that can interface and
develop technology for research

- facilitate research → ++publications & visibility
- streamline funding applications → ++€
- enforce open science standards → ++research
- **development of research spin-offs**



RDM spin-off

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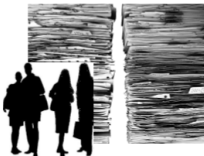
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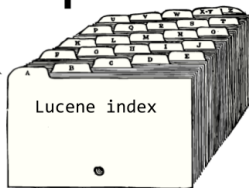
Collection of Documents



Document Data Schema



Full-text searchable web application



Define Data Field

>

Build Lucene Query

Field Name

title

Field data type

String

Brief description of the field

The title of your document in your filesystem

☒ is text searchable: true

☒ is in default index: true

☒ results can be sorted by this: true

Lucene Query String

(title:"foo bar" AND body:"quick brown") OR title:fox

Logic Plane Editor

OR >>

AND >>>



Implementing upskill and support for your research project or organization:

Description	...
Preconditions	...
Postconditions	...
Goal	...
Risk	...

10 minutes table followed by general discussion