

Sustainable open-source research software by founding a start-up:

A LinkAhead story

deRSE24

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LinkAhead: Looking Back

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- ✓ Used in production since 2016
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Why LinkAhead?

Challenges in the research group:

- Biomedical experiments, numerical simulations, and data analysis
- Experiments not easily repeatable
- Heterogeneous data: high-speed cameras, ECG, ultrasound, ...
- Vast, unclear parameter spaces and changing research questions
- Many large video files

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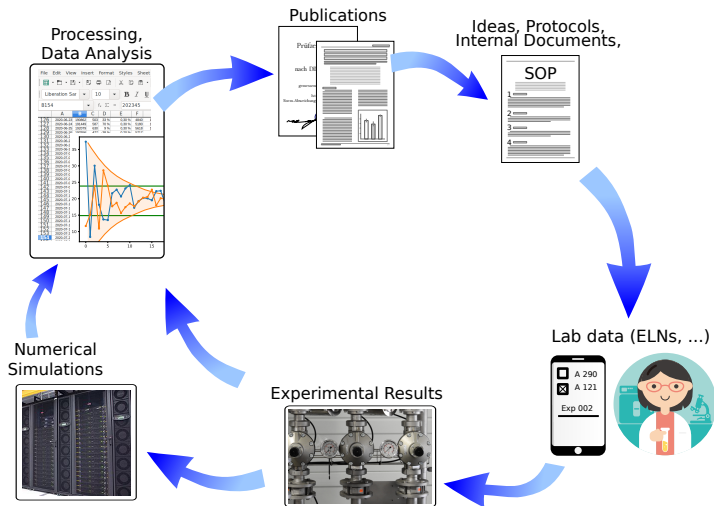
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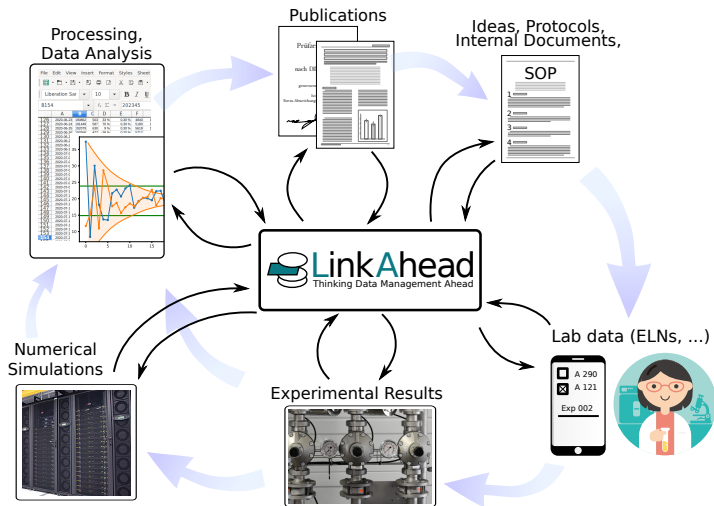
Addressed by RDMS LinkAhead

- Flexible datamodels
- Data remains on file system, linked to in RDMS
- Searchable references between entities
- Support for heterogeneous sources

LinkAhead in the Daily Research Routine



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- A lot of programming expertise with ending/limited contracts in working group; threat of significant brain drain

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 - Founders stipends for two of the founders; 2 regional innovation awards for young start-ups

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- Enthusiasm within developers and PIs
- Encouragement from mentor, Sernet as positive example
- Trend towards FOSS in Max Planck Society

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- Expanding beyond academic research



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- Efficiency: How do we prioritize? Meetings are expensive!
- SCRUM + room for unexpected tasks

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 - ... as well as expanding into industry and offering scientific programming services beyond LinkAhead



- ✓ Web site: <https://getlinkahead.com>
- ✓ Online demo: <https://demo.indiscale.com>
- ✓ Documentation: <https://docs.indiscale.com>
- ✓ Software repository: <https://gitlab.com/linkahead>
- ✓ Software paper in **Data**: <https://doi.org/10.3390/data4020083> 