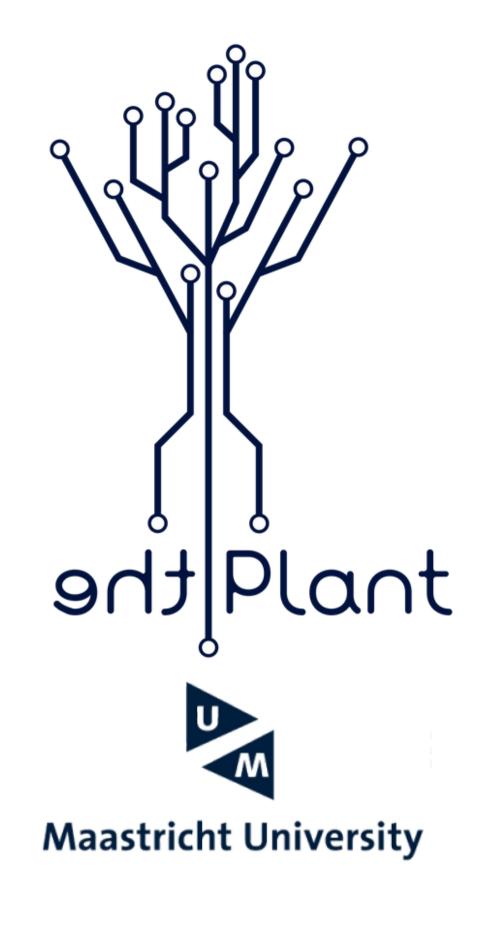
# King's Digital Lab







A participatory workshop on digital lab practices in the humanities and social sciences

## Programme

#### **Welcome and opening** (13:30 - 14:00)

- Introduction by KDL and The Plant
- Short discussion

#### PART 1: Lightning papers: Sharing Knowledge, Wisdoms, and Practices (14:00 - 15:15)

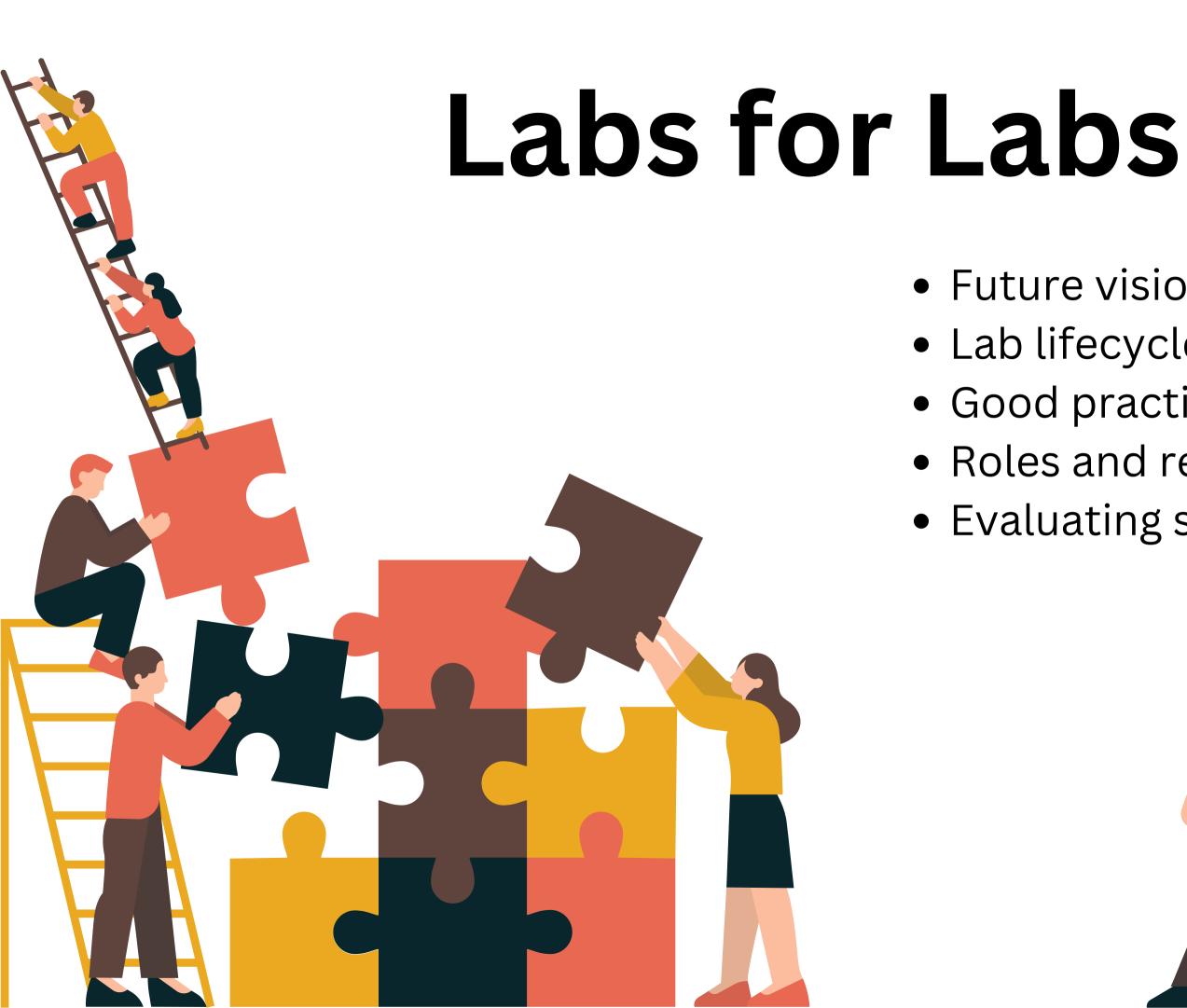
- Lightning paper session, 5-7 minutes per paper (7 papers)
- Circa half hour discussion

#### Break 15 minutes

#### PART 2: Design Thinking Activity: Towards a manifesto for digital labs (15:30 - 17:15)

- Divergence Phase (45min)
  - Ideation
- Convergence phase (60min)
  - Discussing of the findings per topic
  - Drafting a Lab Manifesto

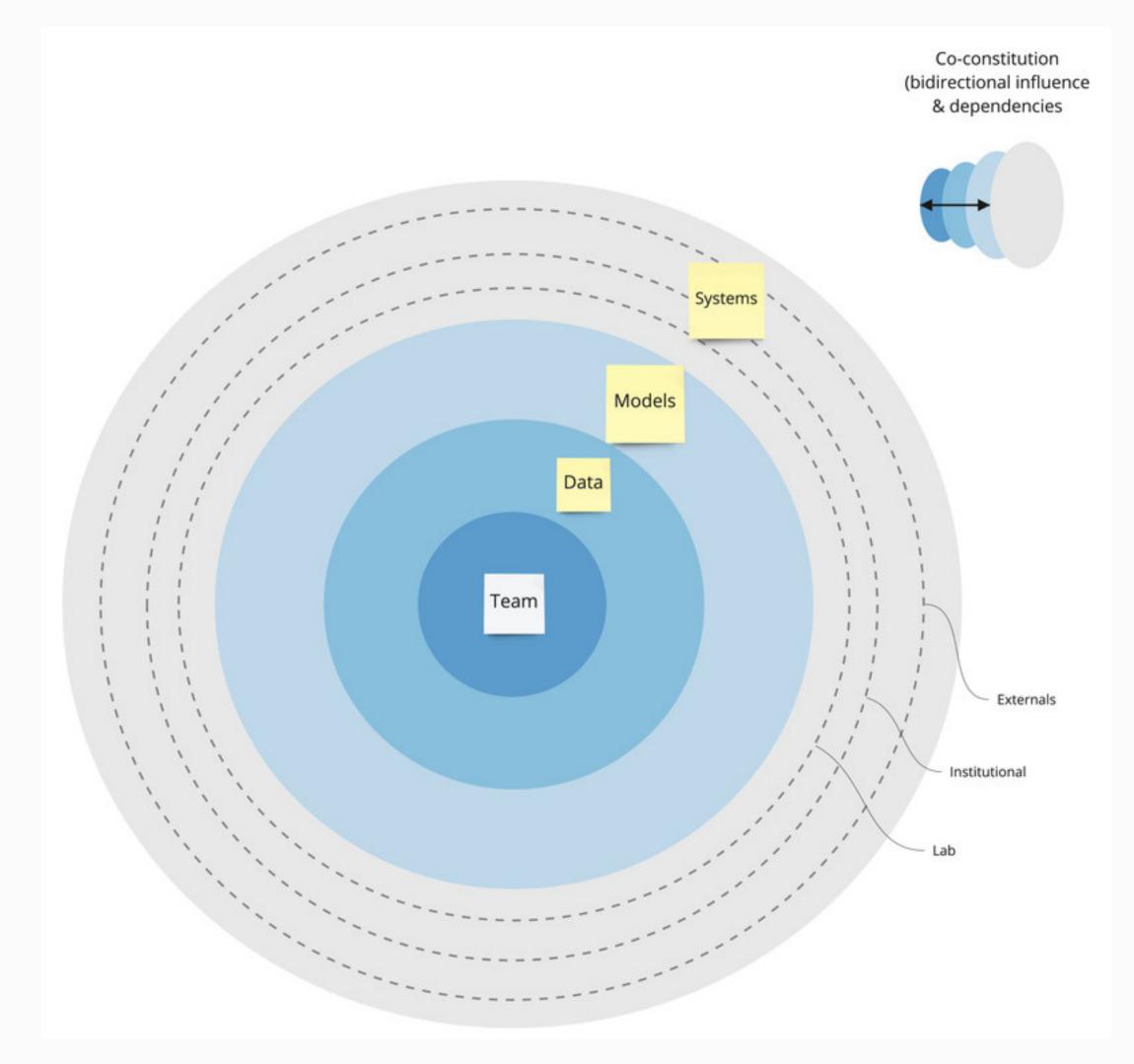
#### Closing remarks (15 mins)

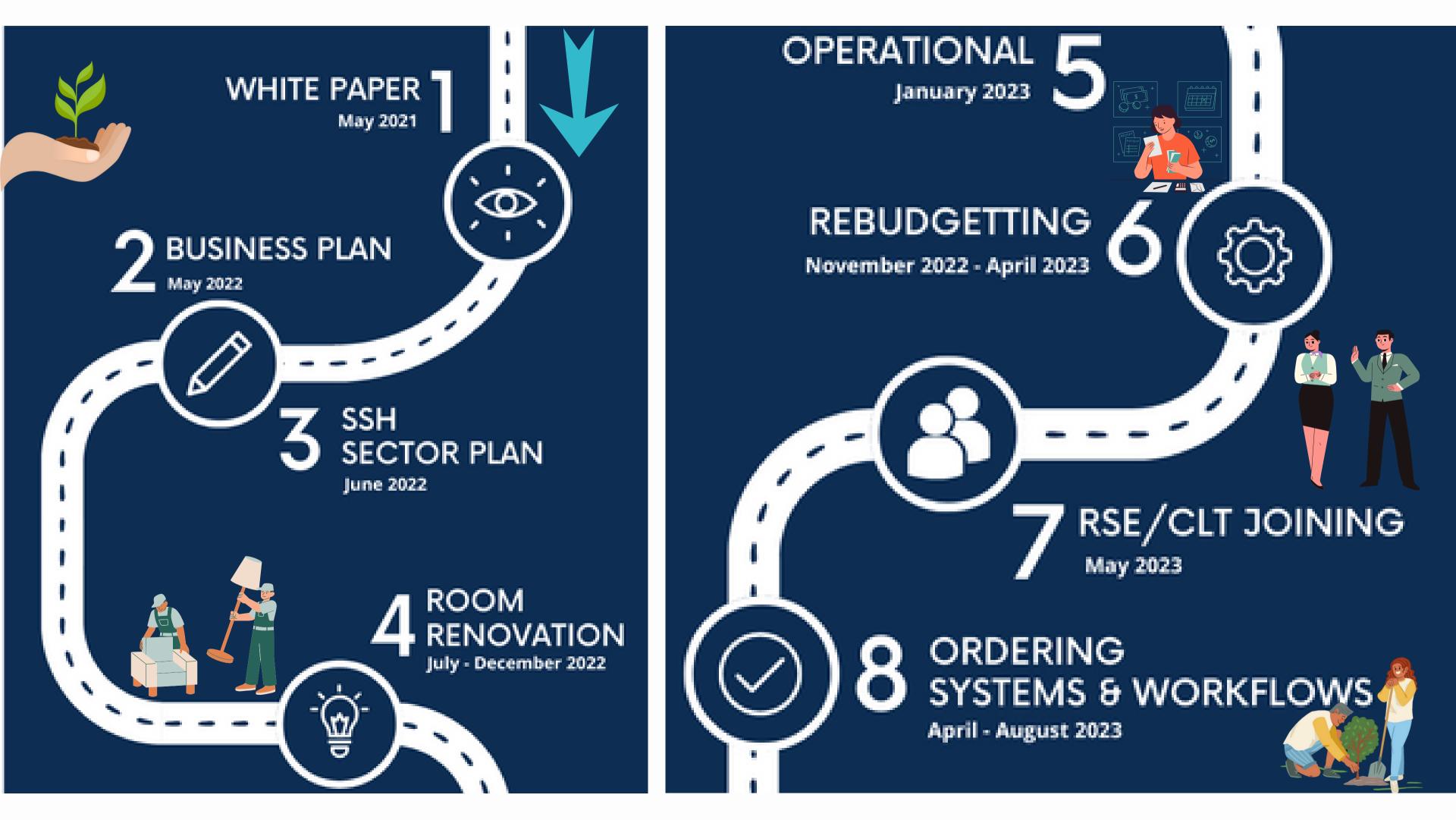


- Future visions and imaginaries
- Lab lifecycles
- Good practices in lab management
- Roles and recognition
- Evaluating successes and failures









Faculty Board

Faculty Director



Executive Cooperative Group

Advisory Board

Coordinator

Education Coordinator Research

Networking & Outreach Coordinator

Creative Lab Technologist

Research Software Engineer





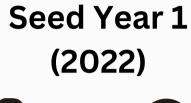






**Reorientation Year 5** 

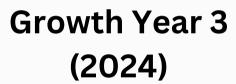
# (2026)













**Maturity Year 4** (2025)



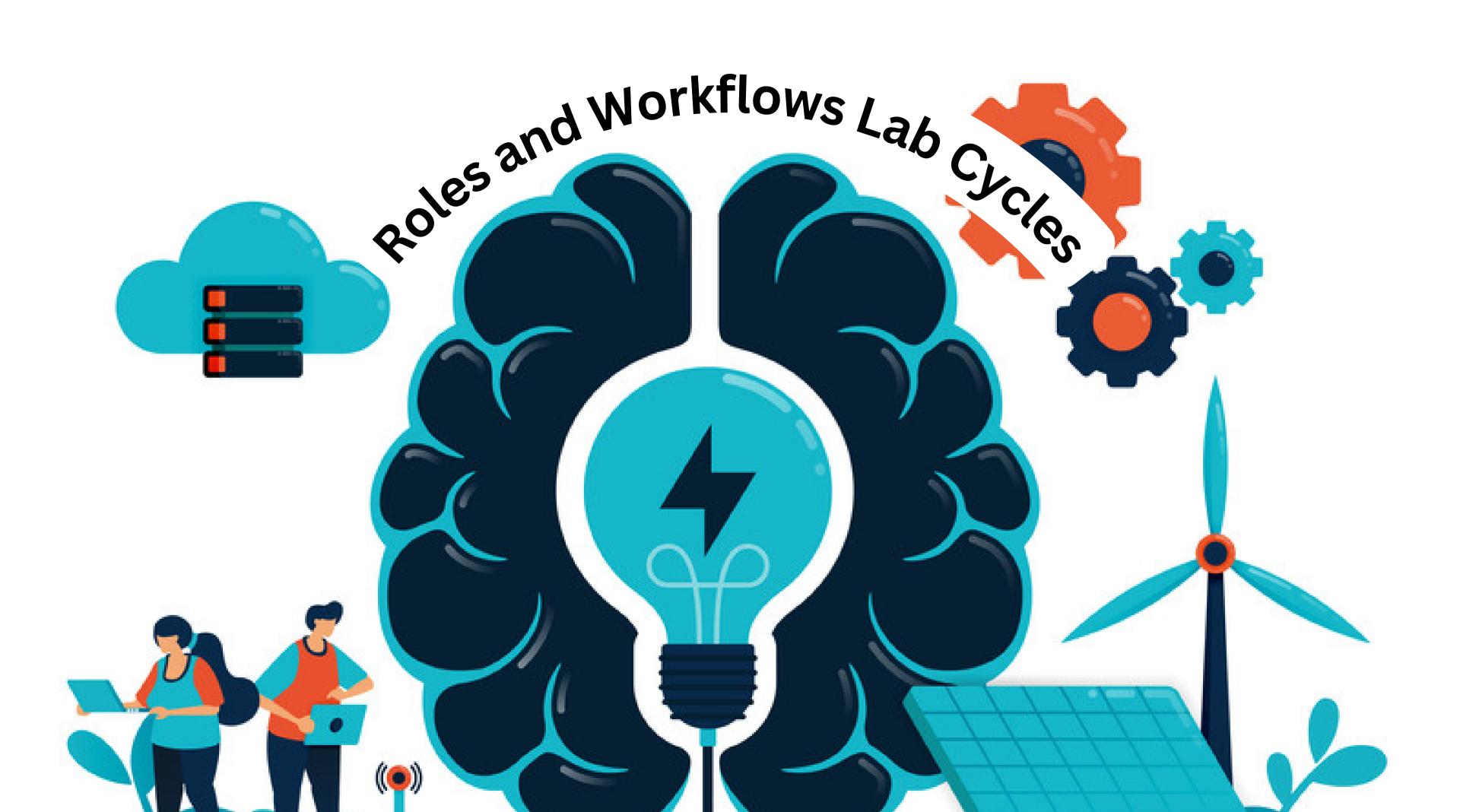
- Business Plan
- Renovations
- Start-up Equipment

- CLT + RSE
- Programming
- Launch
- Strategic positioning

- Stabilisation of processes and workflows
- Expanding user groups & networks
- External funding

- Evaluation SSH
- Sustainability Plan
- Strategic planning Y5 & beyond

- Implementing strategic plan
- Expansion



#### INITIAL CONTACT

Partner gets in touch with their project idea.

#### INTERNAL ASSESSMENT

We consider whether the proposed project is a good fit for KDL.

#### REQUIREMENTS ASSESSMENT

We'll have an in-depth discussion with the partner to understand requirements. Further internal assessment takes place to produce a product quote.

#### EVOLUTIONARY DEVELOPMENT

This is when the actual development happens.

Development is divided into increments and further sub-divided into 2 week timeboxes. It includes regular reviews and testing.

#### KICK OFF

If the project is funded, we'll go over the plan for working together at the very start.

#### FUNDING APPLICATION

If needed, we assist further with incorporating KDL involvement in the funding application.

#### DEPLOYMENT

Incremental deployment of the project allows us to refine the solution and test regularly as the project proceeds.

#### RELEASE

At the release stage the partner is asked to sign a Service Level Agreement, detailing the provision for ongoing hosting and maintenance of the project.

#### POST PROJECT

All of our projects incorporate consideration of research data management, long-term hosting and maintenance needs.





























Dr. Paul Caton

Elliott Hall

**Neil Jakeman** 

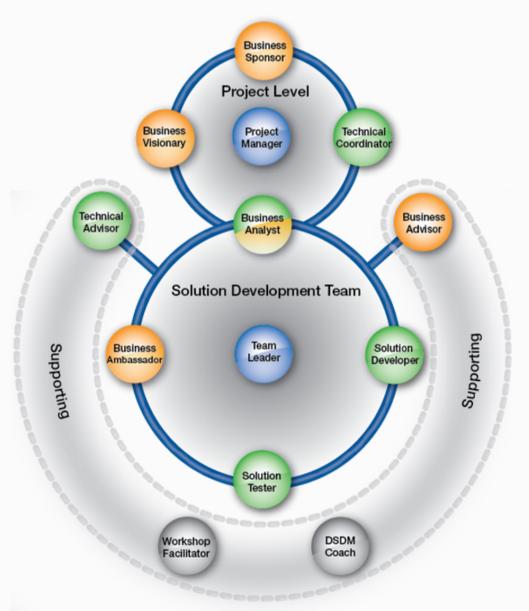
Brian Maker

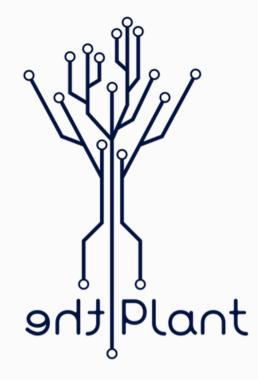
Tiffany Ong

#### Smithies (2019)

Research	Software Engineering		IT Business Support
'Academic' promotions process	Academic' promotions process  KDL		Professional Services Promotions Process
Research active:     Permanent academic.     Post-doctoral.     Research Associates.	Research intensive: PI / Co-I. Analysis. Design. Engineering. Data modelling (etc).	Research support:  Linux admin.  Desktop support.  HPC.	Research support:  IT business support.  Web development.

#### **Agile DSDM Roles & Responsibilities**





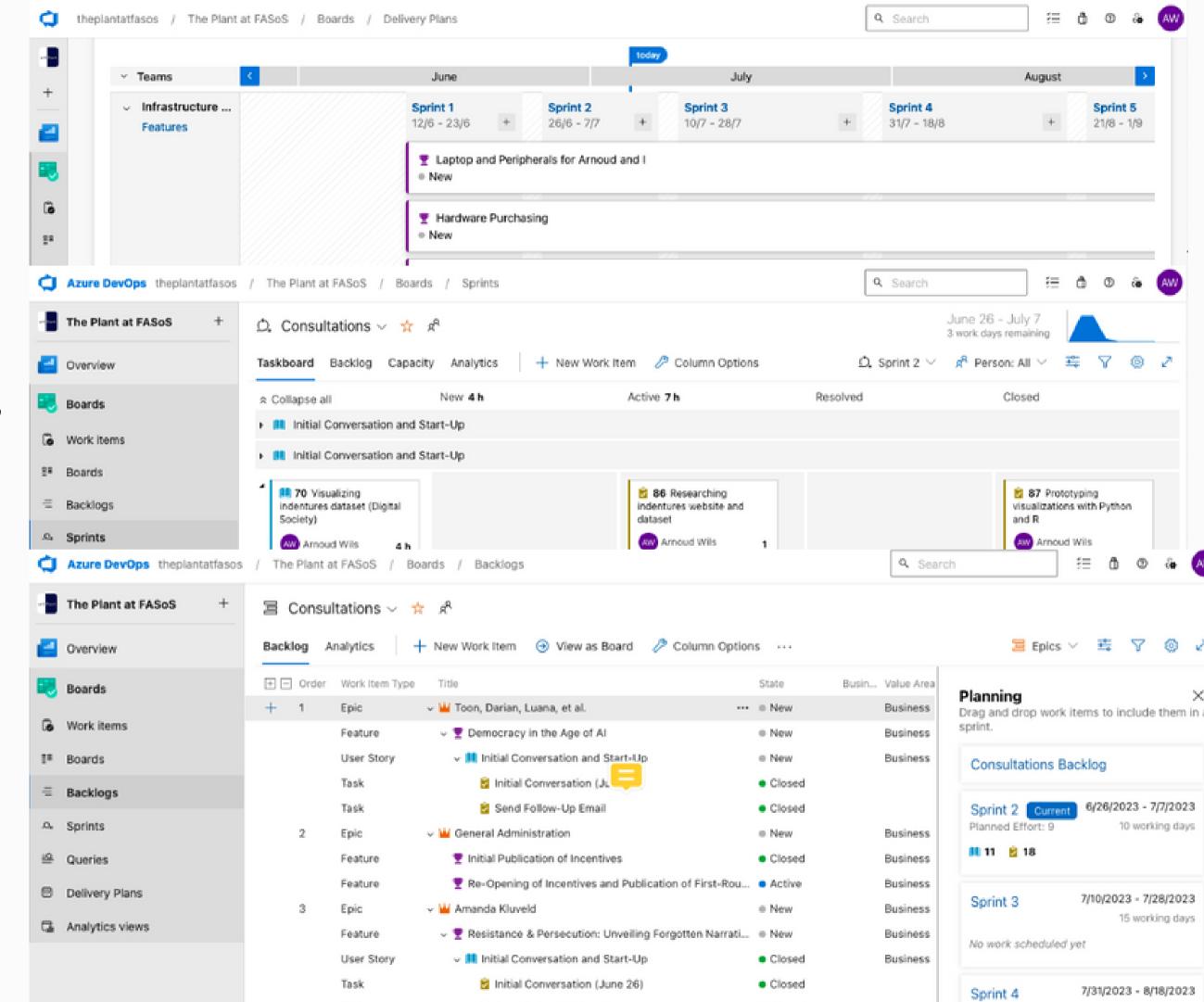
This is currently being formulated, led by the recently hired RSE

Agile and Iterative: 6 Planning Periods per year - 2 Weeks Sprints

CI/CD Continuous
Integration/Continuous
Development

GitLab (for privacy reasons)

Currently setting up Azure Boards





#### Priorities

#### 1. Faculty alignment

The primary partner for KDL is the Faculty of Arts and Humanities at King's College London with its very rich disciplinary breadth embodied by research conducted in and channelled via departments, centres, research groups and professional services units.

#### **2** . eResearch evolution

In addition to its core mission to design and develop high-quality digital products for research, a Research Software Engineering (RSE) lab can perform many other functions to enhance digital capability, research and scholarship

#### **3**. Community Engagement

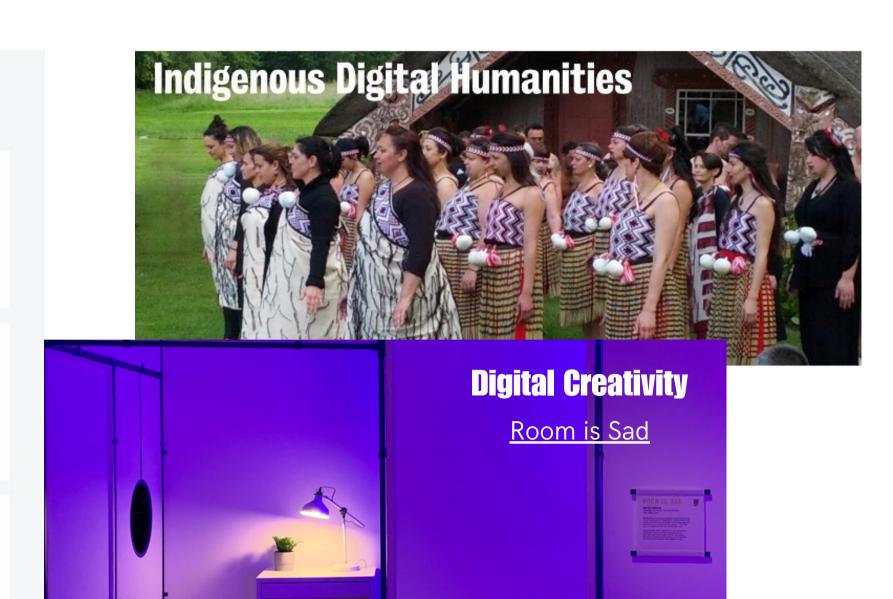
Another important priority for KDL is our continued contribution to the RSE community nationally and internationally as well as participation in the development of robust research methods in Digital Humanities to foster KDL'sprofile and quality of delivery.

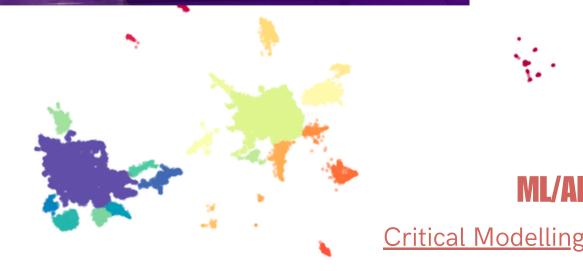
#### 4. Innovation incubation

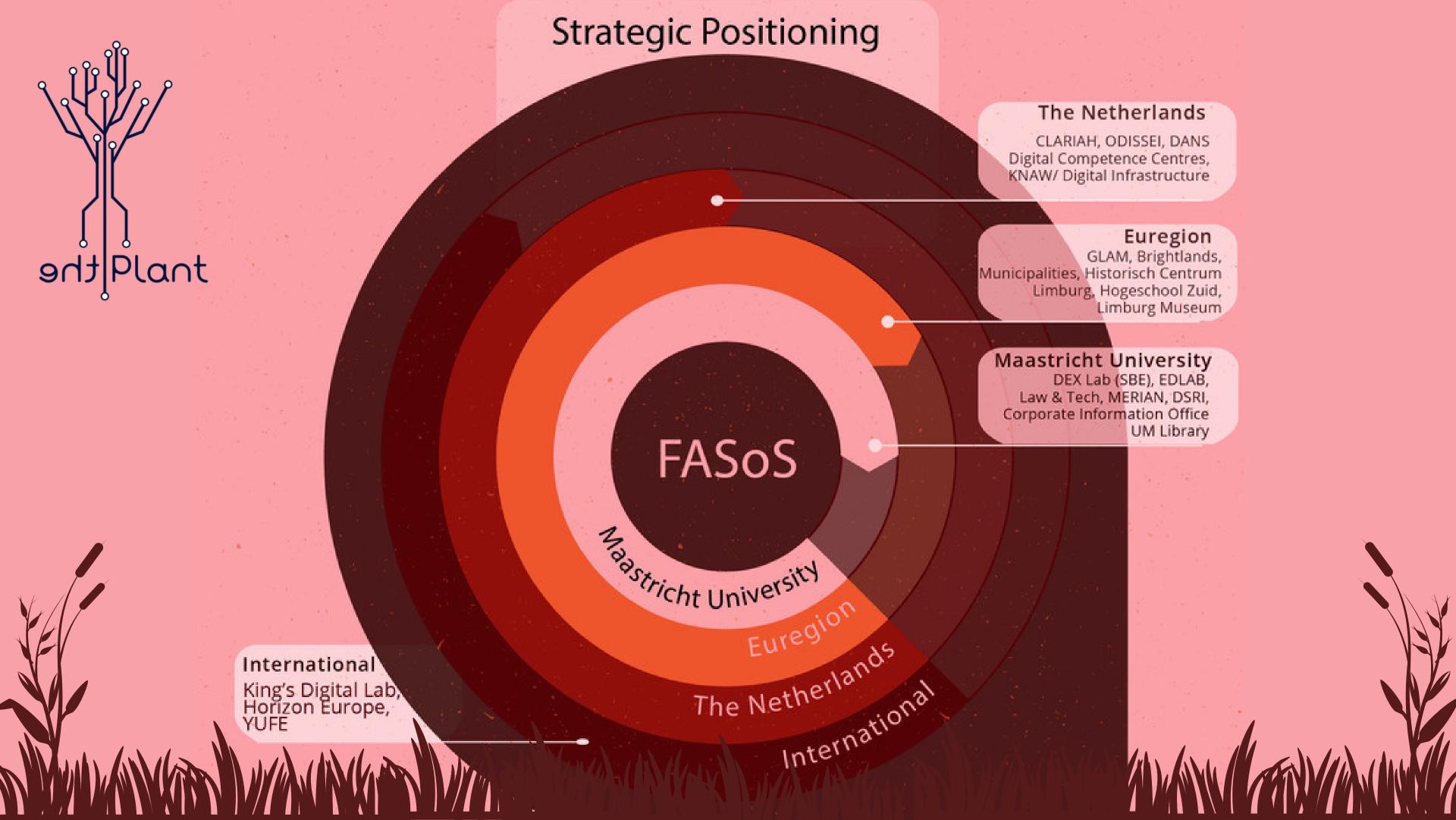
A fundamental priority is for KDL to identify paths of innovation leading to an enhanced portfolio of research and co-production including practice-based research activities.

#### 5. Team culture

Cognisant that the Director role is a leader-servant, I see these priorities underpinned by a strong sense of Team Culture.







### Risks

 Deliberative democracy --> everyone needs to have a say in every step

• Maastricht University is a teaching intensive institution: Teaching tends to dominate all other activities (risk of being turned into or perceived as a 'technology enhanced teaching/learning lab')

- Being relevant for a very diverse faculty
- Justify the expenditure (500K/year)



# O&A

# Lightning Talks

- 1. Alexander Czmiel TELOTA, Berlin-Brandenburg Academy
- 2. Leif Isaksen Exeter DH Lab
- 3. Natalia Ermolaev Centre for DH, Princeton
- 4. Sebastian Flick Data Science Lab and Digital Humanities, Uni. of Bern
- 5. Fabian Cremer and Thorsten Wübbena DH Lab, Institute of European History (IEG), Mainz
- 6. Michael Donnay, Digital Humanities Research Hub, School of Advanced Study, Uni. of London
- 7. Alison Langmead, Visual Media Workshop, Uni. of Pittsburgh

## Programme

#### **Welcome and opening** (13:30 - 14:00)

- Introduction by KDL and The Plant
- Short discussion

#### PART 1: Lightning papers: Sharing Knowledge, Wisdoms, and Practices (14:00 - 15:15)

- Lightning paper session, 5-7 minutes per paper (7 papers)
- Circa half hour discussion

#### Break 15 minutes

#### PART 2: Design Thinking Activity: Towards a manifesto for digital labs (15:30 - 17:15)

- Divergence Phase (45min)
  - Ideation
- Convergence phase (60min)
  - Discussing of the findings per topic
  - Drafting a Lab Manifesto

#### Closing remarks (15 mins)

# Miro Board



https://bit.ly/KDLTP



# Sharepoint



https://bit.ly/DH23Labs



#### **Good practices in lab** management

#### **Governance Structure of** the Labs

Maturity

- **Roles and Workflows** 
  - **Lab Work Cycles**

- 1. What should good governance look like for a digital lab?
- 2. What are the challenges for a digital lab to best support, enable, and facilitate research and/or education?
- 3. How can a digital lab establish and sustain collaborations (internal/external)?

- 4. What roles do you think are needed?
- 5. What structures and systems need to be put in place to develop or sustain these roles?
- 6. How to enable their development and career pathways?

#### **Evaluating successes and** failures

**Future visions and** imaginaries

- 7. What should count as success for a digital lab? How can successes and failures be evaluated?
- 8. How can failures be prevented or used to inform future practices and directions?
- 9. What culture should a digital lab foster?
- 10. What does fair growth look like for such labs

#### 11. What have we missed?



# TELOTA The electronic life of the Academy

Alexander Czmiel

TELOTA – IT/DH

Berlin-Brandenburg Academy of Sciences and Humanities

czmiel@bbaw.de

#### Who we are...

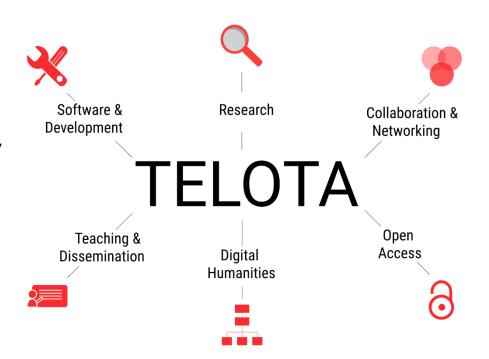


- started 2001 as the Digitisation-Initiative of BBAW
- now
  - DH working group
  - DH centre
  - DH lab
  - DH research unit
  - DH service unit.
  - RSE group
- 20 researchers / RSEs
- 4 student assistants
- project funding
- ca. 30 active projects
- ca. 30 legacy projects

#### What we do...



- Support of the whole digital lifecycle of research projects of BBAW
- Research in Digital Humanities → digital editions, markup, research data, interface design, etc.
- Use and further development of standards in the field of text encoding
- Design and development of research software
- Data and Software curation
- Teaching at universities and workshops
- DH-Colloquium
- digital support of the Academy library and archive



http://www.bbaw.de/telota

#### What we produce...



## Complex software applications to cover research lifecycle for Humanities research:

- digitisation
- data acquisition
- annotation
- publication
- visualisation
- query
- analysis
- interoperability
- storage
- etc...



## Two examples: Software for digital scholarly edition & research infrastructure



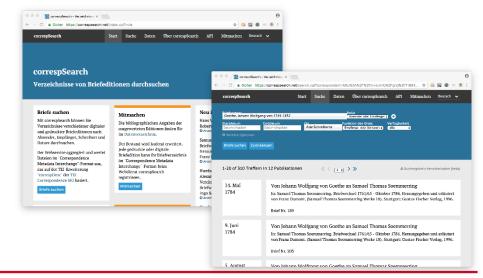
#### ediarum

- Digital research environment for scholarly editions; consistent use of standards (DTABf)
- provides solutions for all layers of a Digital Edition
- Used in over 25 projects
- https://goo.gl/mwLbXB

#### correspSearch

- Metasearch for Letter Correspondence
- Letter metadata of 227.258 letters from 372 printed and/or digital editions
- Standards and open interfaces (APIs)
- https://goo.gl/TRQwmK

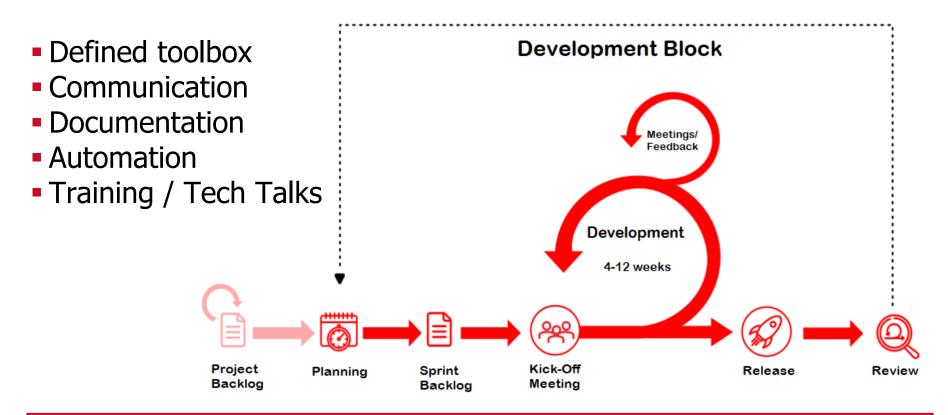




#### How we work...



- Service and research driven
- Pooling
- Agile planning (backlogs)
- Sprints → development blocks
- Minimum 2 RSEs / DH specialists per project



#### The DH Lab @ Exeter

- £1.4M investment by University in 2017
- Bespoke 'bricks and mortar' annex building with:
  - Large multi-purpose seminar space (and big screen)
  - Reception and breakout spaces
  - 3D additive manufacturing 'makerspace'
  - Large scale imaging suite
  - AV Lab
  - Multi-purpose room for photogrammetry, RTI etc.
  - Open plan office space for lab staff
- 11 full time staff:
  - 6 x Professional Services (library, IT, special collections)
  - 5 x Academic staff (3 x permanent, 2 currently fixed term)











#### What we do

#### Research

- Pre-award consultancy on all hums projects with a significant digital component
- Post-award development work and hosting
- Our own research (Academics for REF, PS staff on digital methods and technologies)

#### Education

- Regular programme of workshops and seminars throughout the academic year contributions to UG & PG programmes
- *Hot Source!* project is developing and delivering CPD courses on digital topics for A&H researchers UK-wide

#### Institutional

- Formulate DH institutional strategy
- PoC for external organisations (scholarly, Turing, DARIAH, etc.)

#### 'Live' questions

- Focus: 'DH' vs 'Digital' (vs Al & Data Science?)
- Careers: trajectories for Academic & PS staff
- Organisational structures: Being 'exceptional'
- Education: Accredited programmes vs CPD
- Defining Success: Whose success? In what way?



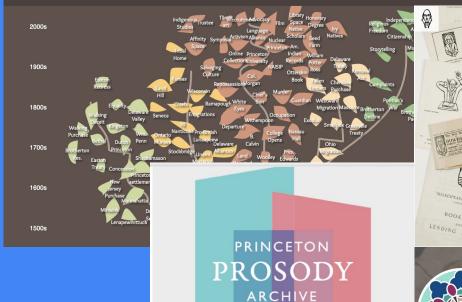


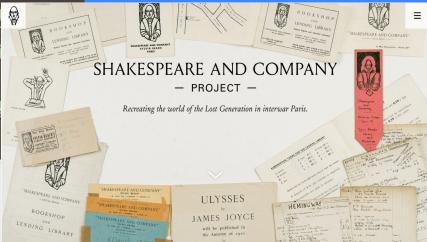


THE CENTER FOR DIGITAL HUMANITIES @PRINCETON

#### LUNAAPAHKIING PRINCETON TIMETREE

Relations, Removals, Resurgence









**Princeton DH Center Joins DARIAH as Cooperating Partner** 



New Languages for NLP Building Linguistic Diversity in the Digital Humanities



PEOPLE

RESEARCH

ENGAGE

EVENTS

UPDATES Q



Staff V



PROJECTS

Meredith Martin Faculty Director



Natalia Ermolaev Executive Director



Rebecca Sutton Koeser Lead Research Software Engineer



Elizabeth Samios Business Manager



Jeri Wieringa Assistant Director



Grant Wythoff Digital Humanities Strategist



Ryan Heuser Research Software Engineer



Mary Naydan Digital Humanities Project Manager



Carrie Ruddick Communications Manager



Aaron Dunn Computing Support Specialist



Jean Shaver Events and Office Administrator





PEOPLE	PROJECTS	RESEARCH	ENGAGE	EVENTS	UPDATES
Consultations	Funding	Graduate Students	Undergraduates	Opportunities	
	Data Fellowships	Graduate Certificate	Senior Thesis Prize	Research Software Engin	eer
	Research Partnerships	Dissertation Prize	JUST Data Lab	UAFs	
External Funding		Graduate Training Grants		Postdocs	
	Humanities & Data Science	Graduate Fellowships			
	DH for Hellenic Studies	Humanities Data Teaching Fellows			
		Project Management Fellowship			

Updates

## CDH Data Fellowship Reflections: Caitlin Karyadi

"Through the process, I have experienced how a well-curated dataset forms an argument in and of itself," writes 2022–23 Data Fellow Caitlin Karyadi (Art & Archaeology).

June 27, 2023 Working paper Open Access

## CDH Project Charter — Simulating risk, risking simulations 2022-2023

(D) Koeser, Rebecca Sutton; Buchak, Lara; (D) Ermolaev, Natalia

Project charter for CDH Research Partnership - Simulating risk, risking simulations 2022-2023.

The charter is the foundational document that describes the rationale, goals, plan of work, resources needed, terms and conditions, and outcomes of a Center for Digital Humanities at Princeton (hereafter CDH) project. Charters are written by core members of a project team in a series of planning meetings taking place over the course of a month. The planning process is intensive, collaborative, and requires substantial input from everyone on a team. Charters serve as formalized agreements among all team members on such crucial questions as scope, technical design, infrastructural needs, and success criteria.

This is a digital copy of a "living document" at a single point in time. Charters are amended as necessary throughout the project lifecycle to document major changes and serve as part of the CDH project archive. CDH charters and their planning documents exist in several forms as we have refined them over the years and tailored them to the several types of projects we have supported. For more about CDH project management, including the charter process, visit:

https://cdh.princeton.edu/research/project-management.

#### 51 ART MORDS



E:

ISSUE 3

#### **PARROTS**

By the time Emily Bender, Timnit Gebru, Angelina McMillan-Major and Margaret Mitchell's paper "On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?" was published in March 2021, it had already been shaking up the AI world for some time. view this issue

The technology I need to discuss in this paper doesn't yet have a consensus name.

#### **Mapping the Latent Spaces of Culture**

EN

**Ted Underwood** 

doi:10.5281/zenodo.6567481

Spanish is
the second most
widely spoken language
in the world as a mother
tongue. Official reports,
survey-based studies,
and Wikipedia confirm
it. And Google can
predict it.

On Spanish-Speakina Parrots

# BUILDING A POSITIVE WORK ENVIRONMENT FOR DEVELOPERS IN ACADEMIA



Labs for Labs Workshop, DH2023, Graz

10.07.2023

Sebastian Flick;
<a href="https://doi.org/10.1001/journal.com/">DH & Data Science Lab, University of Bern</a>

## FROM A DEV'S VIEW

private vs. academia: What are differences in the daily business?

(Roles and recognition)

- Emphasis on education and passing on knowledge even for devs
- Much wider range of projects: Loads of different requirements
- Having to fit requirements into frustrating organizational and technological bounds.
- Often not as much time pressure

demand creativity!

# PERFECT ENVIRONMENT FOR DEVS

What's needed that developers enjoy working in the academia and stay?

(Roles and recognition)

- contracts for 4+ years
- freedom of doing their work where, when and how it fits them best
  - flexible working hours
  - possibility to work from home
  - free choice of tools
- Encouragement to pass on their expertise
- Tasks are organized together with team-managers

# support creativity!

# PERFECT ENVIRONMENT FOR THE ACADEMIA

We can significantly improve performance and quality of digital projects in labs.

(Good practices in lab management)

- a team of experts in different fields is working together
- this symbiosis enables people to do what they do best
- possibility to employ Junior Devs
- even smaller projects can get hold of this team
- the lab can be better organized and therefore more efficient than single developers

# → strive for specialization!

### **ORGANIZATION**

We have a lot of opportunities to develop workflows that streamline our work and make it less repetitive, more fun and better quality.

(Lab lifecycles, Good practices in lab management)

- organize work through GitHub Projects, Jira, or other organization tools
- divide a project into milestones, milestones into tasks
- clearly describe milestones and components of the product - all stakeholders have seen these descriptions and agree with them
- set timeframes for each task and milestone
- define a responsible person per task

# → adopt agile workflow!

- demand & support creativity
  - strive for specialization
    - → adopt agile workflow

The slides to this presentation can be found here: https://dhbern.github.io/labsforlabs-dh2023-slides/ (github repo)

Find out more about the **DSL** and **DH Bern**:

https://www.dsl.unibe.ch/

https://www.dh.unibe.ch/index\_eng.html

# "Have one's cake and eat it too"



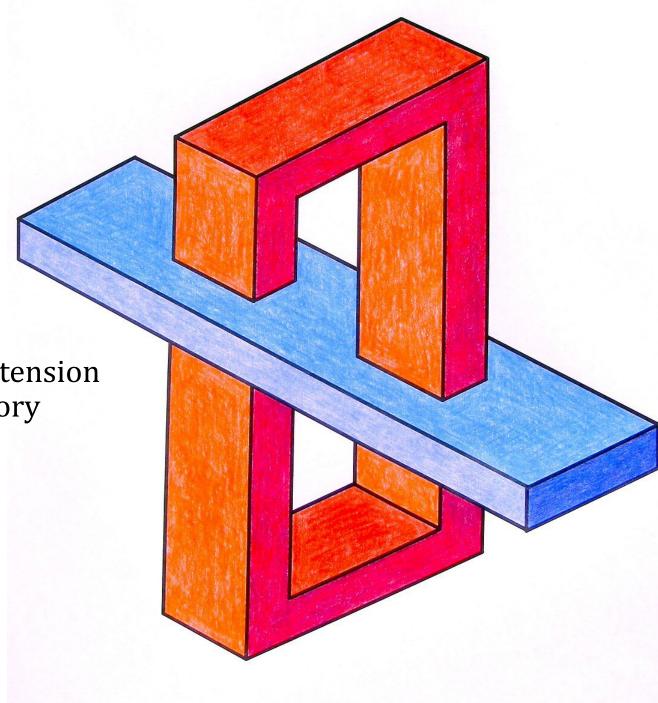
The DH Lab as a living oxymoron

Fabian Cremer and Thorsten Wübbena

DH Lab at the Leibniz Institute of European History (IEG) in Mainz, Germany

#### Contradictions

Newly established DH Labs often find themselves in a field of tension – of simultaneous and contradictory expectations, goals and missions.













### thanks | credits

Leibniz Institute of European History (IEG)
Digital Historical Research Unit | DH Lab

Fabian Cremer
Thorsten Wübbena

- <u>0000-0001-8251-9727</u>
- 0000-0001-8172-6097
- purl.org/ieg/dh-lab
- dhlab.hypotheses.org

#### use | cite

Fabian Cremer and Thorsten Wübbena: "Have one's cake and eat it too"
 The DH Lab as a living oxymoron, Labs for Labs, DH 2023, Graz,
 10/July/2023 | CC-BY 4.0

# visit us at our poster on wednesday!



#### image credits

- cake: <u>Henley Design Studio</u> at <u>Unsplash</u>
- impossible object: <u>FriedeWie</u> at <u>commons</u>, <u>CC BY-SA 3.0</u>
- tiger: <u>Javier Virues-Ortega</u> at <u>Unsplash</u>
- workshop: Gary Tou at Unsplash
- guitars: <u>Annie Spratt</u> at <u>Unsplash</u> and <u>Apolo Photographer</u> at <u>Unsplash</u>
- crab: <u>Javardh</u> at <u>Unsplash</u>
- stonewashed: <u>Jennifer Griffin</u> at <u>Unsplash</u>



# Minimal Labs

Michael Donnay
Digital Humanities Research Hub
School of Advanced Study
University of London

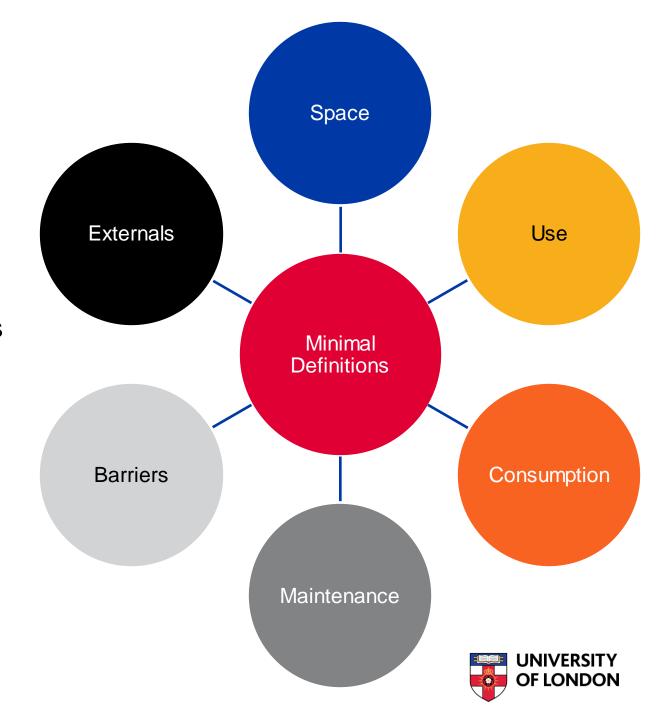
Labs for Labs 10 July 2023

london.ac.uk



#### **Minimal Computing**

- Approach to praxis that pushes back on the idea that innovation be synonymous with newness, size, or specific platforms.
- Is platform- and software-agnostic
- Risam and Gil (2022) identify four questions that guide a minimal computing approach to DH:
  - What do we need?
  - What do we have?
  - What must we prioritise?
  - What are we willing to give up?





#### Senate House MakerSpace

#### <u>Institutional context</u>

Part of the School of Advanced Study, national centre for the humanities in the UK

#### **Communities**

- Digital Humanities Research Hub
- University of London
- National DH community

#### **Ethos**

Experimental, light-weight and collaborative

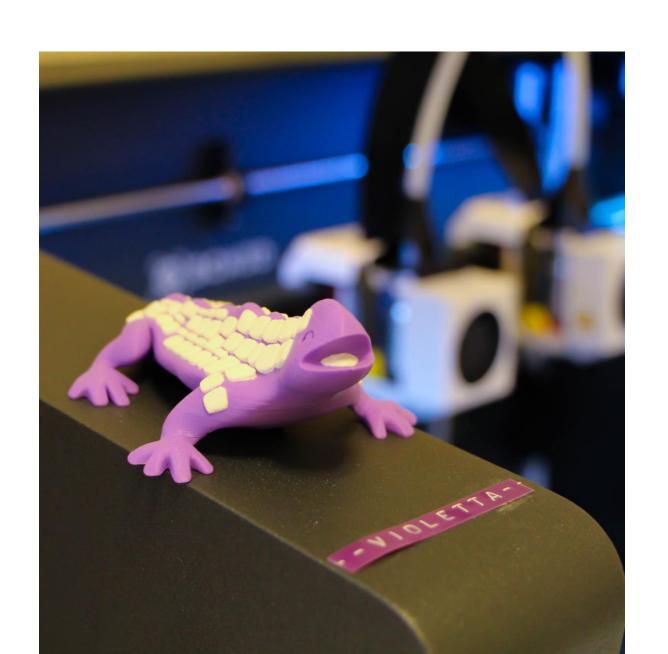


#### **Maintenance**

What do we already have or what can we borrow from elsewhere in the university?

#### If purchasing:

- Discounts & second-hand
- Prioritise ease of use and repair
- 'Middle of the line'
- Multiple uses

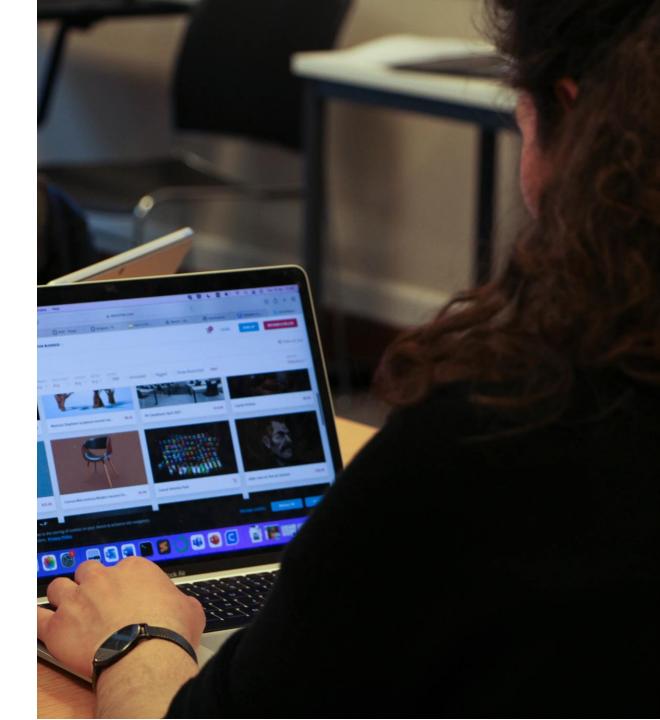


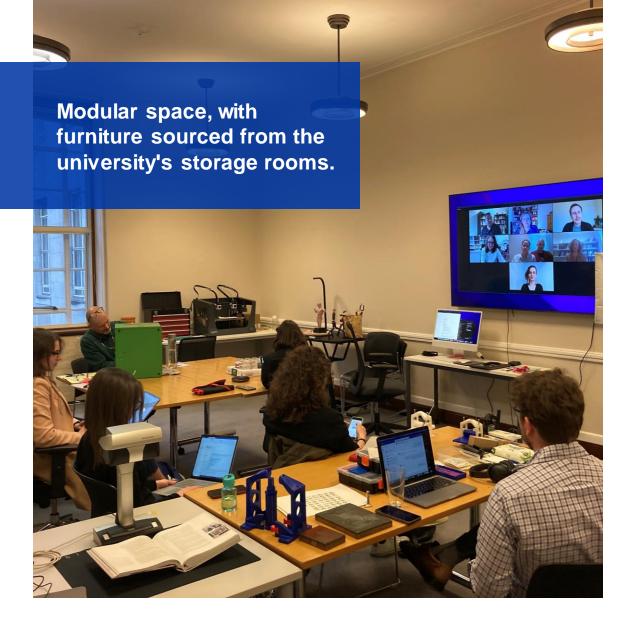
#### **Barriers**

Tension between encouraging uptake and staff availability

Taster sessions: short introductions to specific tools, includes safety certification

Incorporated into existing training opportunities





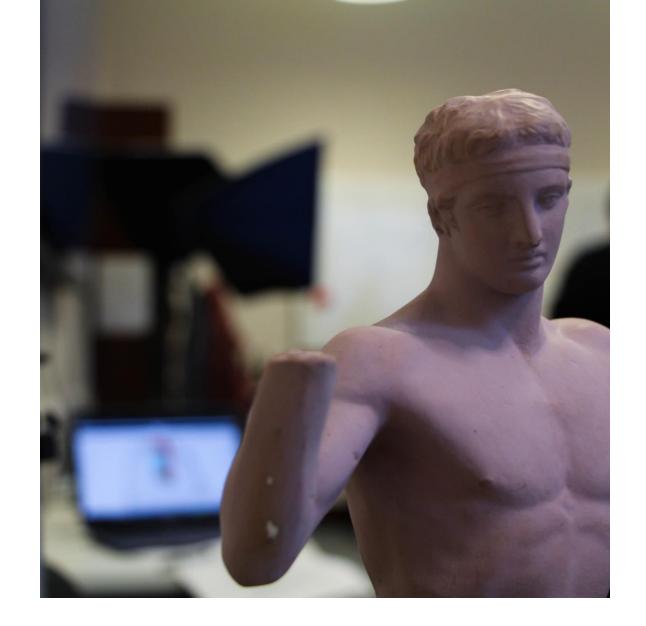
#### **Space**

Focused on collaboration

- Movable furniture
- Open floor-plan
- Separate storage areas

Additional resources for hybrid collaboration to improve access and flexibility





#### Implications for Lab Lifecycles

- Less frequent equipment turn over
- Less valuable for research bids
- Emphasis on collaboration forestalls obsolescence
- Approach to training lowers burdens on staff, also leads to lower uptake
- Focus on hybrid brings institutional challenges



# Thank you

### Digital Humanities Research Hub

www.sas.ac.uk/digital-humanities digitalhumanities@sas.ac.uk

@DH\_ResearchHub

@DH\_ResearchHub@hcommons.social



# Collaborative Humanities Labs in the Age of Synthetic Information Generation

Alison Langmead ADHO 2023: Labs for Labs Workshop July 10, 2023

# Covid Changed So Much...

# But not everything.

# Students Need, and Desire, In-Person Support

All students, but especially those wanting to integrate digital computing into their interpretive research *mindfully*.

 It has been quite the transition back into the VMW.

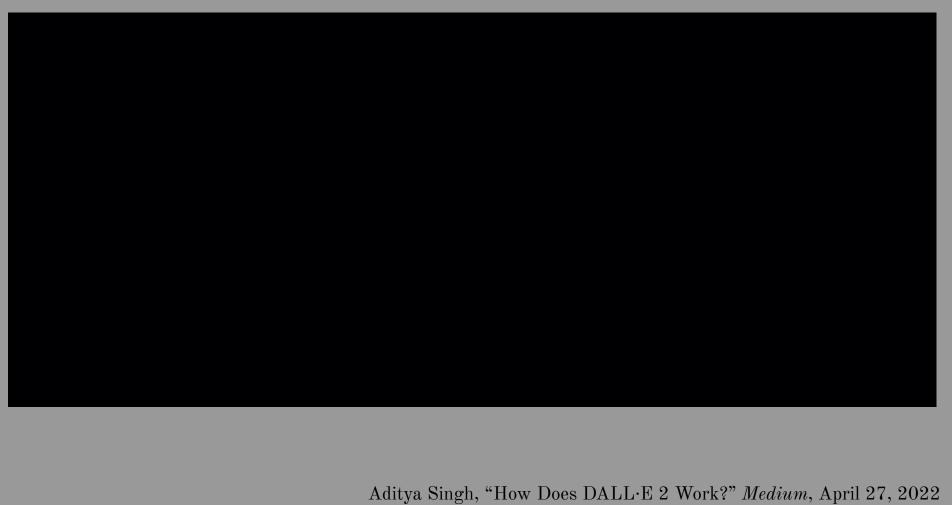
# And the pressures of change aren't coming only from within the academy.

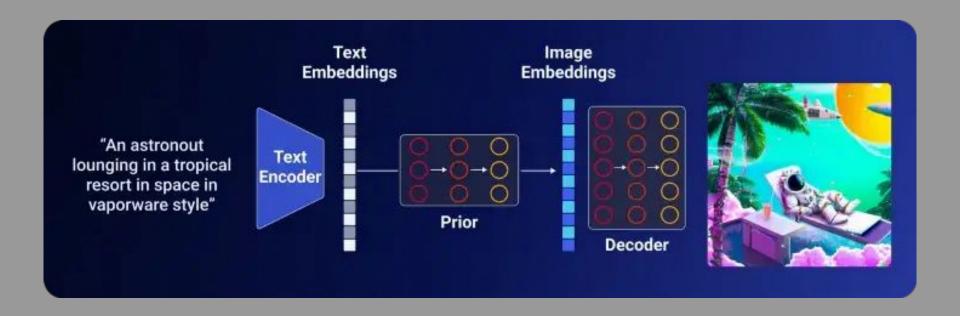
# Computational Image Generation

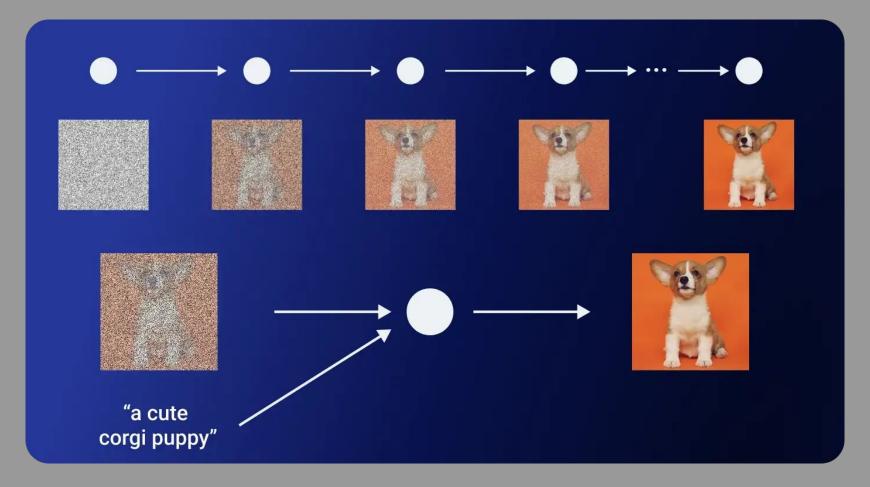
Over the last five years, computer vision researchers have made great strides in producing commercial-grade machine learning applications—such as <u>DALL-E</u> 2, <u>Midjourney</u>, and <u>Stable Diffusion</u>—that output lively, synthesized digital images from text-based, user-provided prompts.

The convincing and often appealing output produced by these computational image generators relies on the input of massive amounts of image data (and metadata) drawn widely from the digitized and born-digital history of human image production.

Contextualizing the opportunities and dangers presented by these image-making technologies within a deeply thoughtful historical context is the scholarly work of the fields of art history, visual culture, and material culture.





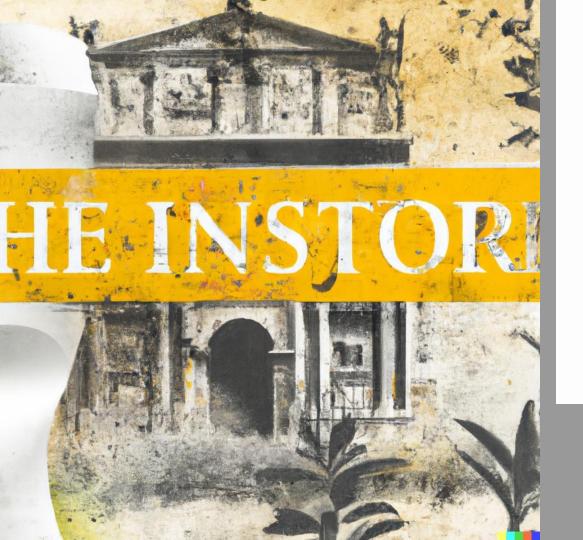


Aditya Singh, "How Does DALL·E 2 Work?" *Medium*, April 27, 2022 <a href="https://medium.com/augmented-startups/how-does-dall-e-2-work-e6d492a2667f">https://medium.com/augmented-startups/how-does-dall-e-2-work-e6d492a2667f</a>





The History of Art as Understood by Artificial Intelligence

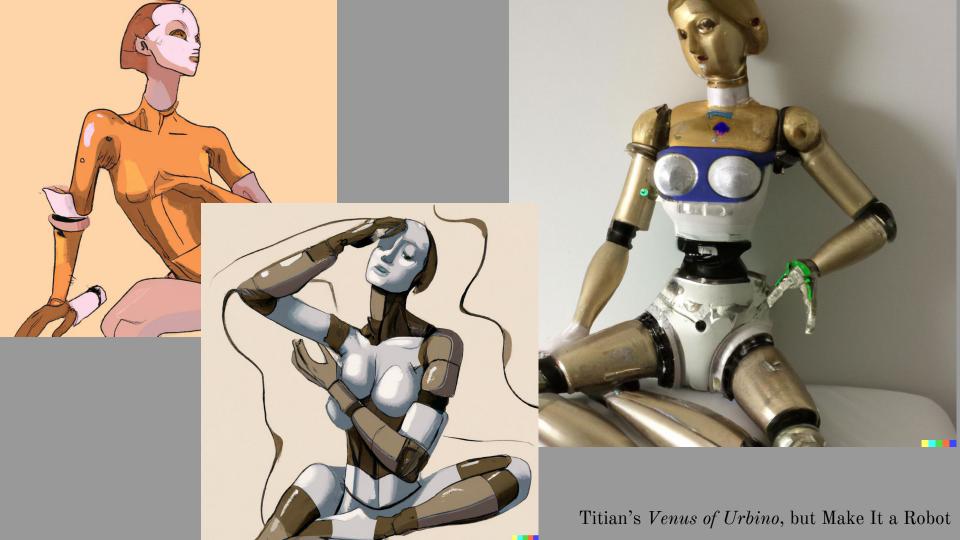




The History of Art as Understood by Artificial Intelligence



Darth Vader Creating the World in the Style of a Medieval Manuscript





DALL·E 2 transforming a Victorian house into a modern house. Credit: Aditya Ramesh

How can we help students make sense of these changes to the *world?* 

And, do it *now?* 

## The continuing role of the "DH Lab" seems clear to me in 2023.

...but we need to balance the "walled garden" approach with a "safe experimental space" approach.

## End.

Thank you very much for your attention!

adlangmead@pitt.edu

## https://openai.com/dall-e-2/

## https://stablediffusionweb.com/