



**Bring Your Research Asset Data to Life!**  
**Driving Interaction through Dynamic Data Visualizations  
and Engaging Content**

Anne Lykke (AAU), Søren Vidmar (AAU) & Kristian Toland (Elsevier)

VBN Team (Aalborg University): [vbn@aub.aau.dk](mailto:vbn@aub.aau.dk)  
Product Management (Elsevier): [k.toland@elsevier.com](mailto:k.toland@elsevier.com)



AALBORG UNIVERSITY  
DENMARK





# Aalborg University – *KNOWLEDGE FOR THE WORLD*

## THREE CORE AREAS

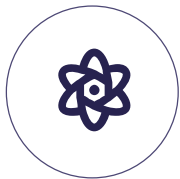
- ▶ Research
- ▶ Education and PBL
- ▶ Cooperation



AALBORG UNIVERSITY  
DENMARK



# AAU FACTS



## RESEARCH AND EDUCATION

- ▶ Social Sciences & Humanities (2022)
- ▶ Medicine
- ▶ Engineering and Science
- ▶ IT and Design



## STUDENTS

- ▶ **20,200** students (excl. part-time students)
- ▶ **3,200** part-time students
- ▶ **840** PhD students



## RESOURCES

- ▶ **2,230** staff members in research and education
  - Of which 700 international researchers
- ▶ **1,260** administrative staff
- ▶ Total budget of **3.08 billion DKK** (460 million US\$)



# RESEARCH AT A HIGH INTERNATIONAL LEVEL



## THE BEST EUROPEAN UNIVERSITY FOR ENGINEERING

U.S. News & World Report names AAU as the best university in Europe in the field of Engineering and the world's 4<sup>th</sup> best.



## AAU IS AMONG THE WORLD'S TOP UNIVERSITIES

According to Times Higher Education, Aalborg University is ranked 201-250 (no. 219) in the overall world university ranking. AAU is ranked as the world's best university in SDG 4: Quality Education.



## AAU IS THE BEST YOUNG UNIVERSITY IN SCANDINAVIA

According to Times Higher Education AAU is ranked 23<sup>th</sup> of the world's top universities under 50 years old, making AAU the highest ranked young Scandinavian university.



# AAU SHARED SERVICES

Søren Lind Christiansen  
University Director

## AAU SHARED SERVICES

Maj Rosenstand Acting Head Librarian	Flemming Koch IT Director	Mogens Juul Møller Director of Campus Services	Henrik H. Søndergaard Head of the HR Department	Ulla Gjølring Head of Sekretariat		Lone Vestergaard Director of Studies	Morten Winterberg Chief Financial Officer	Martin Vive Ivø CPH Campus Director	Anders S. Kristensen Esbjerg Campus Director
<b>Aalborg University Library</b> <ul style="list-style-type: none"> <li>• Accessions Team</li> <li>• Administration Team</li> <li>• Service Team</li> <li>• Information Team</li> <li>• VBN Editorial Office (publications and ranking)</li> <li>• Electronic Resource Management (ERM)</li> <li>• Secretariat</li> </ul>	<b>IT Services</b> <ul style="list-style-type: none"> <li>• Strategy and Portfolio</li> <li>• Project and Systems Management</li> <li>• Support Services</li> <li>• Infrastructure Services</li> <li>• Information Security</li> </ul>	<b>Campus Services</b> <ul style="list-style-type: none"> <li>• Administration and Planning</li> <li>• Construction and Operations</li> <li>• Building Services</li> </ul>	<b>HR</b> <ul style="list-style-type: none"> <li>• AAU Competence Development</li> <li>• HR Service Centre HSF</li> <li>• HR Service Centre EST</li> <li>• HR Specialist Centre</li> <li>• International Staff Unit</li> </ul>	<b>Rector's Office</b> <ul style="list-style-type: none"> <li>• Administrative support to the Rector and Pro-rector, the Executive Management, the administrative management group, etc.</li> <li>• Meeting preparations for the Rector and Pro-rector</li> <li>• AAU Strategy Sekretariat</li> <li>• Strategic analysis</li> <li>• Policy advice</li> <li>• Legal issues</li> <li>• Events</li> </ul>	<b>Communication</b> <ul style="list-style-type: none"> <li>• Communication on the AAU Strategy</li> <li>• Communications consultancy to senior management</li> <li>• Coordination of cross-faculty communication activities</li> <li>• Marketing</li> <li>• Press and media</li> <li>• Web: aau.dk and intranet</li> <li>• Events</li> </ul>	<b>Study Services</b> <ul style="list-style-type: none"> <li>• Elite Sports</li> <li>• Sekretariat</li> <li>• Student Society Sekretariat</li> <li>• Strategy and quality</li> <li>• Study administration</li> <li>• Legal resources</li> <li>• AAU Student Guidance and AAU Career</li> <li>• International Office and Accommodation Office</li> <li>• Admissions and Continuing Education</li> <li>• State education grant and student administration systems</li> </ul>	<b>Finances</b> <ul style="list-style-type: none"> <li>• Controller unit</li> <li>• Master Data Management</li> <li>• Finance Management Unit (Partner Team, Analysis Team, Planning and Process)</li> <li>• Accounts (Project Finance, Service Team, Accounts Team)</li> <li>• Procurement Unit (Tenders &amp; Procurement Unit, iProcurement Team)</li> <li>• Support &amp; Travel (ØSS Team, BI Team, Travel Administration, Communication)</li> </ul>	<b>AAU Shared Services CPH</b> <ul style="list-style-type: none"> <li>• Campus management and administration</li> <li>• IT Services</li> <li>• Construction and operations</li> <li>• Business partnerships</li> <li>• Study Services</li> <li>• Communication etc.</li> <li>• Overall operations and development of AAU CPH</li> <li>• External entertainment, events, etc.</li> </ul>	<b>AAU Shared Services Esbjerg</b> <ul style="list-style-type: none"> <li>• Campus management and administration (finance, HR, etc.)</li> <li>• IT Services</li> <li>• Campus and building services (technical services, operations, maintenance, cleaning)</li> <li>• Student guidance, International Office and Accommodation Office</li> <li>• Study administration (student services, timetabling, room booking, etc.)</li> <li>• Communication etc.</li> </ul>



# The VBN Team at AAU

## CORE AREAS

- CRIS (Pure)
- Portal (VBN)
- Research registration
- Research analysis
- Research dissemination

### History:

- Pure was developed in a cooperation between AAU and Atira (Aalborg)
- First version of Pure/VBN (in the world) was launched at AAU in 2003
- Acquired by Elsevier in 2012



AALBORG UNIVERSITY  
DENMARK

The screenshot shows the Aalborg University's Research Portal. At the top left is the Aalborg University logo and name. At the top right is the VBN logo. The main header area features a search bar with the text "Aalborg University's Research Portal" and an "Advanced search" link. Below the search bar is a navigation bar with icons and labels for Profiles (7961), Projects (8093), Publications (154052), Activities (48426), Research Units (509), Facilities (145), and More (91322). A paragraph of text describes the portal's purpose: "VBN is Aalborg University's research portal. The research portal is publicly available and supports the aim to aid the accessibility to research carried out at or in cooperation with AAU. The research portal promotes contact to and collaboration with the university's researchers and research communities. VBN is based on Pure, the system used at AAU for registering research, research activities, research projects and much more. The VBN team works with user support, the day-to-day maintenance and development of research registration, research analysis, and research dissemination through VBN. Additional information can be found on the homepage of the VBN team." Below this text is a "Log in to Pure" button.

### Collaborations within the past 5 years:

Click dots and donuts to bring up details.



[www.vbn.aau.dk](http://www.vbn.aau.dk)





# Working with data from Pure *et al.* – dissemination and approach

## Traditional approaches

Reports (Excel, PDF)

PowerPoints

Portals (Pure Portal and custom portal)

## Pros:

- Reliable
- Fast
- Standardized

## Cons:

- Static
- Level of detail
- One size doesn't fit all



# Let's spice things up a bit!

## What are our goals?

- ✓ Supplement to traditional reports and portals
- ✓ Less text, more visuals!
- ✓ As dynamic as possible
- ✓ Give the user the ability to start simple & drill down
- ✓ Interactive when possible
- ✓ “Curate” the data – avoid information overload



**Flourish**



**AALBORG UNIVERSITY**  
DENMARK

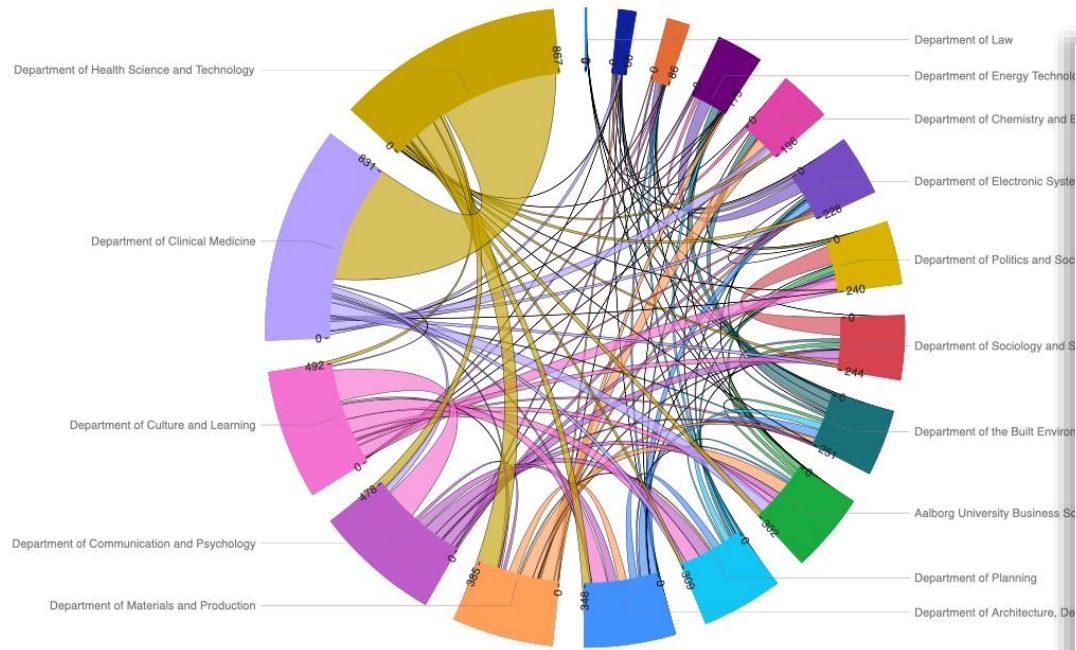


# Annual report: Sway + PBI

A screenshot of a Sway presentation interface. It features two main content cards: "Status 2020" showing a building with "AAU" signage and students on a lawn, and "Stories 2020" showing a woman with glasses working on a laptop. Navigation icons like "Del" and "Go to" are visible. At the bottom right, there are navigation arrows and a URL: <https://doi.org/10.5278/392000340>

# Annual report – Collaborations

Take the data for a spin!





# Themes

- Subsite to our Pure Portal
- "Curating" content
- Visualizations
- Attention to AAU research



## UN SUSTAINABLE DEVELOPMENT GOALS

Explore publications from AAU contributing to the UN SDG's

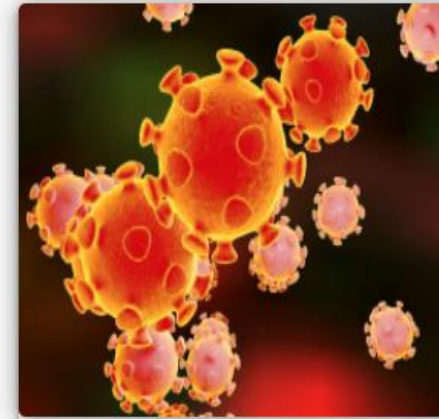
[New](#) [Theme](#)



## PHD THESES

Explore more than 3000 PhD Theses in our research database. More than half are available as Open Access

[Theme](#)



## COVID-19

Explore COVID-19 related projects, publications, press clippings & more from Aalborg University

[Theme](#)

vbn

[Home](#) [About](#) [Contact](#)

## Themes

Explore various themes and visualizations of AAU research



## COLLABORATION ON AAU STUDENT PROJECTS

Who are students at AAU collaborating with on their Student Projects?

[Visualization](#)



## ATTENTION TO VBN

Explore some of the attention surrounding VBN through usage analytics, SoMe and statistics

[Visualization](#)

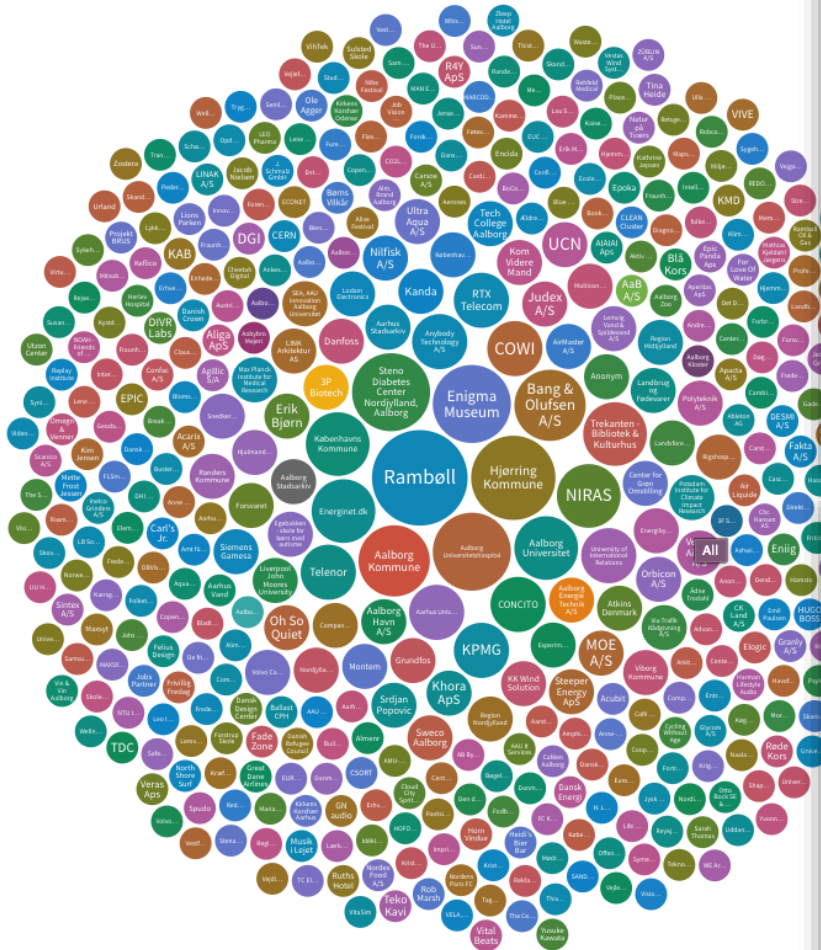


<https://vbn.aau.dk/themes>

# Themes – collaboration on student projects

## Samarbejder 2019 AAU studenterprojekter

Filter:  
All



## Samarbejde fordelt på uddannelser

Klik på uddannelse for at se samarbejdsorganisationer



BY-, ENERGI- OG MILJØPLANLÆGNING, KANDIDAT		↑	
Energinet.dk	Multiconsult A/S	Aalborg Havn A/S	Aalborg Universitet
NIRAS A/S	Potsdam Institute for Climate Impact Research	Claus Sørensen A/S	CO2Light A/S
Danish Crown	ECONET	Danfoss	MAN Energy Solutions
EUROSOLAR	Fraunhofer Institute for Industrial Engineering	Miljøstyrelsen	Rambøll
Fraunhofer Institute for Solar Energy Systems	J. Schmalz GmbH	Teknologirådet	Waste and Resources Action Programme
HOFOR A/S, Denmark		University of Leeds	



# Themes – COVID-19



**AALBORG UNIVERSITY**  
DENMARK

---

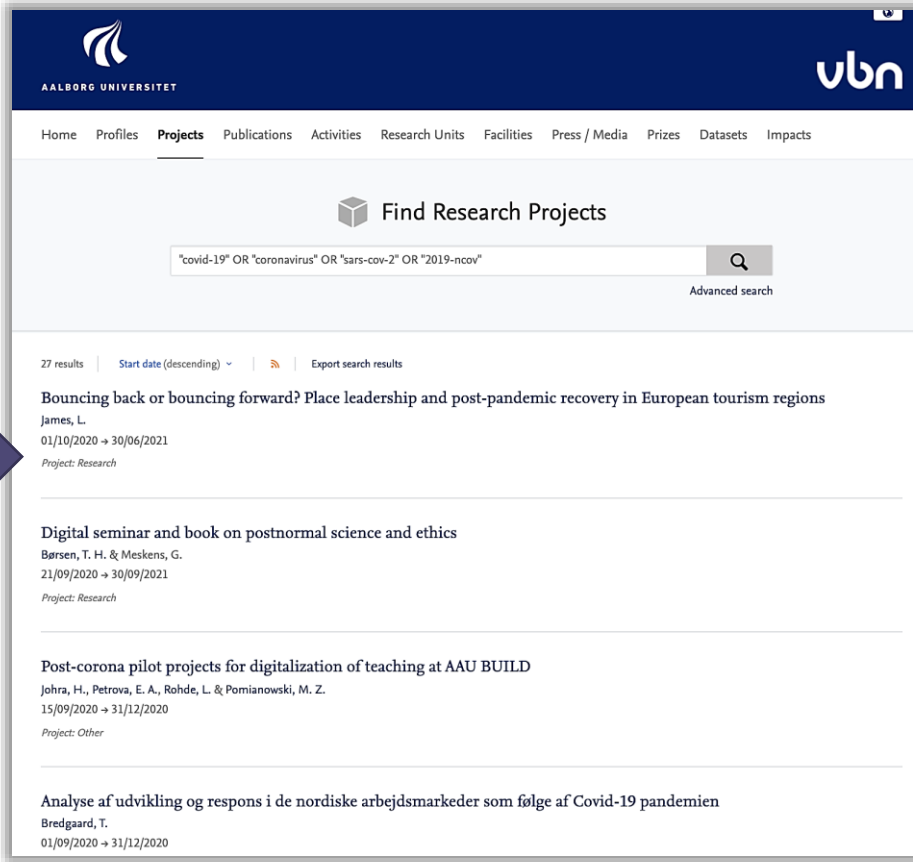
## COVID-19 RESEARCH AT AALBORG UNIVERSITY

EXPLORE COVID-19 RELATED RESEARCH FROM AALBORG UNIVERSITY

---

PROJECTS	PRESS	PUBLICATIONS	DATASETS	ACTIVITIES
----------	-------	--------------	----------	------------

🔒 COVID-19 FUNDING NEWS AND OPPORTUNITIES



**AALBORG UNIVERSITET** vbn

Home Profiles **Projects** Publications Activities Research Units Facilities Press / Media Prizes Datasets Impacts

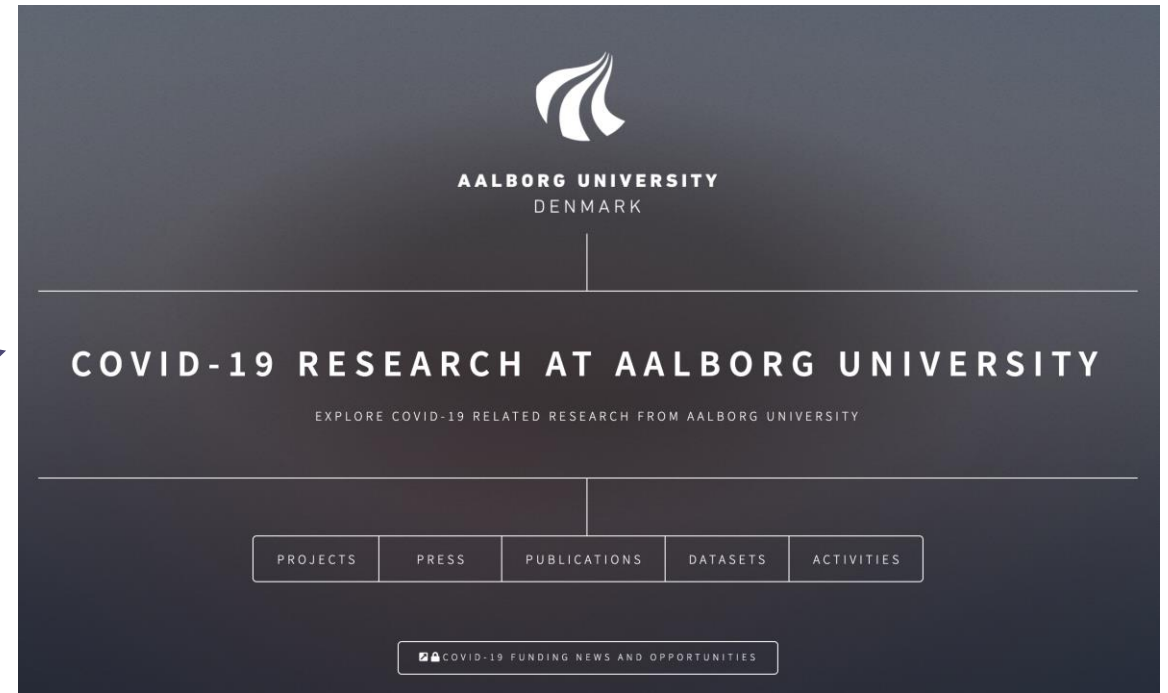
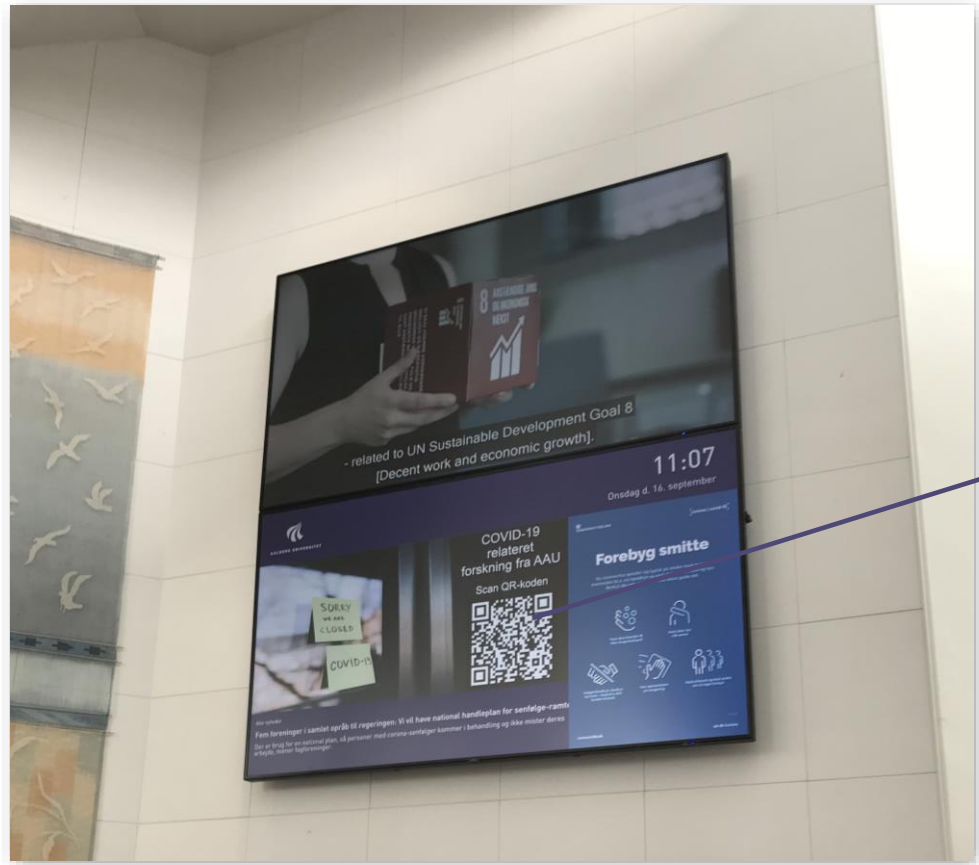
### Find Research Projects

"covid-19" OR "coronavirus" OR "sars-cov-2" OR "2019-ncov"  Advanced search

27 results | Start date (descending) | Export search results

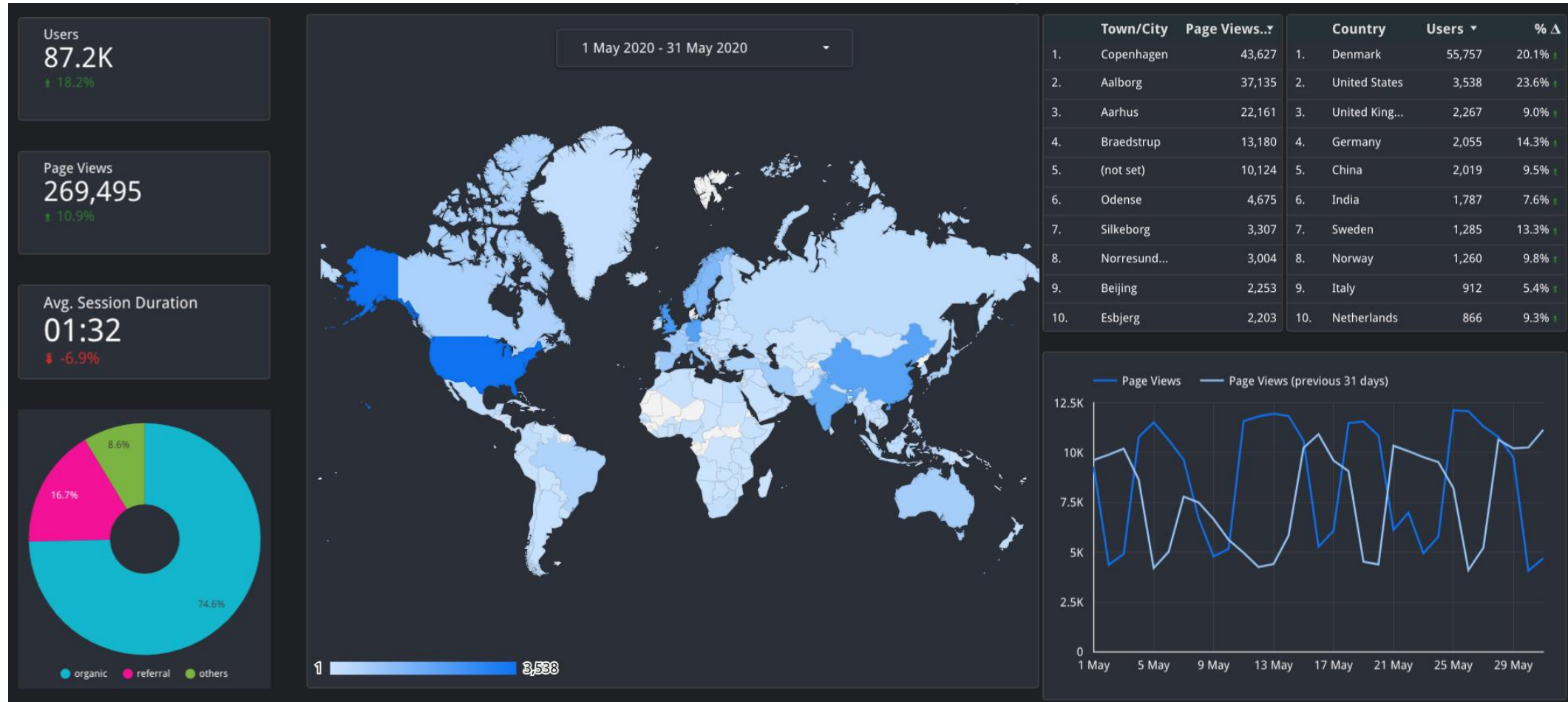
- Bouncing back or bouncing forward? Place leadership and post-pandemic recovery in European tourism regions**  
James, L.  
01/10/2020 → 30/06/2021  
*Project: Research*
- Digital seminar and book on postnormal science and ethics**  
Børsen, T. H. & Meskens, G.  
21/09/2020 → 30/09/2021  
*Project: Research*
- Post-corona pilot projects for digitalization of teaching at AAU BUILD**  
Johra, H., Petrova, E. A., Rohde, L. & Pomianowski, M. Z.  
15/09/2020 → 31/12/2020  
*Project: Other*
- Analyse af udvikling og respons i de nordiske arbejdsmarkeder som følge af Covid-19 pandemien**  
Bredgaard, T.  
01/09/2020 → 31/12/2020

# Themes – bring data into a physical space






# Themes – Attention – Portal traffic



# Themes – Attention – who’s linking to our research on Twitter?

Tweet	Tweeter	URL	Date
At få indvandrere/flygtninge ind på arbejdsmarkedet har været en central ambition siden 1970erne/1980erne i de nordiske lande. Der findes ingen nemme virkemidler... https...	@KBreidahl	<a href="http://twitter...">http://twitter...</a>	3 Feb 2021
@SvendErikAnder7 Det er bl.a. den slags spørgsmål @m_outreach, Niels Madsen og jeg arbejder med i det Fiskeavgiftsfonds-finansierede 'Fiskens Fodafrtryk' (https://t.co/IsL4W...	@TroelsHegland	<a href="http://twitter...">http://twitter...</a>	3 Feb 2021
New position as assistant professor at Aalborg University (yay!). Looking forward to joining @Banglindegaard's @DFF_raad funded project on environmentally sustainable mobil...	@TobiasBoelt	<a href="http://twitter...">http://twitter...</a>	1 Feb 2021
Check out this research output at Aalborg University's Research Portal: Publishing social enterprise rooted in lived experience of diversity and disadvantage doi:https://t.co/vfD...	@val_valpo	<a href="http://twitter...">http://twitter...</a>	31 Jan 2021
RT @kaaretraberg: @KHegaard Du bør måske inddrage nogle af professorerne i hvad der der så bør stå for at kunne medtage det i skyldsspørgsmålet. Jørn Vestergaard eller Le...	@GitteKJP	<a href="http://twitter...">http://twitter...</a>	30 Jan 2021
@KHegaard Du bør måske inddrage nogle af professorerne i hvad der der så bør stå for at kunne medtage det i skyldsspørgsmålet. Jørn Vestergaard eller Lene Wachter Lenz? #...	@kaaretraberg	<a href="http://twitter...">http://twitter...</a>	29 Jan 2021
RT @BrianVad: Do you know the four generations of #districtheating? And did you know there are significant benefits with district heating in combination with energy savings a...	@BrianVad	<a href="http://twitter...">http://twitter...</a>	29 Jan 2021
RT @BrianVad: Do you know the four generations of #districtheating? And did you know there are significant benefits with district heating in combination with energy savings a...	@HeatRoadmapEU	<a href="http://twitter...">http://twitter...</a>	29 Jan 2021
I kan læse hele vores rapport her: #covid19dk #arbejde #sundhed #arbejds miljø 4/4 https://t.co/hozaU0MBik	@clausdh	<a href="http://twitter...">http://twitter...</a>	26 Jan 2021
https://t.co/k5MSWUTIVT https://t.co/KbbBdFQ8ic https://t.co/sQewLCNfOj https://t.co/YBdrZP9IT	@Peaceful1979	<a href="http://twitter...">http://twitter...</a>	26 Jan 2021
#ResearcherOfTheMonth Ole Ravn has investigated how AAU's PBL model can bridge the gap between doing the formalisms and calculations of abstract mathematics and appl...	@CFU_AAU	<a href="http://twitter...">http://twitter...</a>	25 Jan 2021
@MaksBitter @je5perl @JEOCPH @Jakobsorgenfri @politiken Jeg tror svaret er at "alle" bliver gemt, op til 10 år efter din død. https://t.co/2oWBzIcPqg Vævsanvendelsesregister...	@SvendJ	<a href="http://twitter...">http://twitter...</a>	23 Jan 2021
@mzjacobson @2TVolts @stevehurcombe https://t.co/t6pPz6rDqw	@husmanden	<a href="http://twitter...">http://twitter...</a>	23 Jan 2021
Influence of Multilingualism & Mutual Intelligibility on Wikipedia Reading Behaviour https://t.co/HktvDuaAGp	@michaelgraaf	<a href="http://twitter...">http://twitter...</a>	22 Jan 2021
RT @WikiResearch: "The Influence of Multilingualism and Mutual Intelligibility on Wikipedia Reading Behaviour - A Research Proposal" https://t.co/SATjX0dQFR	@wikimediaid	<a href="http://twitter...">http://twitter...</a>	22 Jan 2021
"The Influence of Multilingualism and Mutual Intelligibility on Wikipedia Reading Behaviour - A Research Proposal" https://t.co/SATjX0dQFR	@WikiResearch	<a href="http://twitter...">http://twitter...</a>	22 Jan 2021
Congratulations to co-authors @PedersenTorp and Mikkel P. Andersen from @aausund. Their article was the second most discussed in 2020, out of the 3.4 million works tracke...	@VBNTeamet	<a href="http://twitter...">http://twitter...</a>	21 Jan 2021
The AAU PBL model is investigated and contextualized in #RotM Ole Ravn's collaborative 2016 article alongside CFU colleague Annie Aarup Jensen. They discuss the contempora...	@CFU_AAU	<a href="http://twitter...">http://twitter...</a>	21 Jan 2021
RT @KlausKblog: Another scientific account 'doesn't exist': Kim Varming, ledende overlæge i klinisk immunologi på Aalborg Universitetshospital, er sendt til Gulag / forsvundet f...	@journalstip	<a href="http://twitter...">http://twitter...</a>	21 Jan 2021
RT @KlausKblog: Another scientific account 'doesn't exist': Kim Varming, ledende overlæge i klinisk immunologi på Aalborg Universitetshospital, er sendt til Gulag / forsvundet f...	@crypto_1cat	<a href="http://twitter...">http://twitter...</a>	21 Jan 2021

1 - 100 / 417 < >



**IFTTT**



**AALBORG UNIVERSITY**  
DENMARK

# Themes – Attention – who’s linking to our research on Twitter?



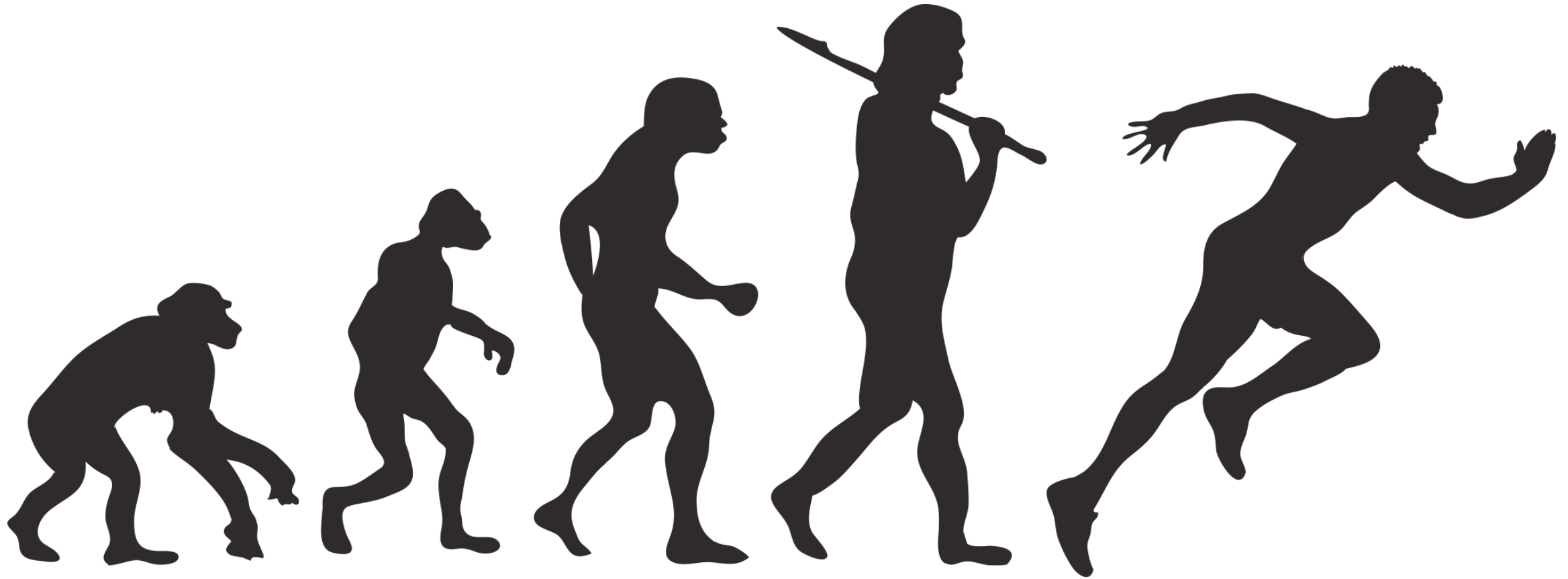
IFTTT



AALBORG UNIVERSITY DENMARK



# Evolving the Pure Portal: “Project Stella”



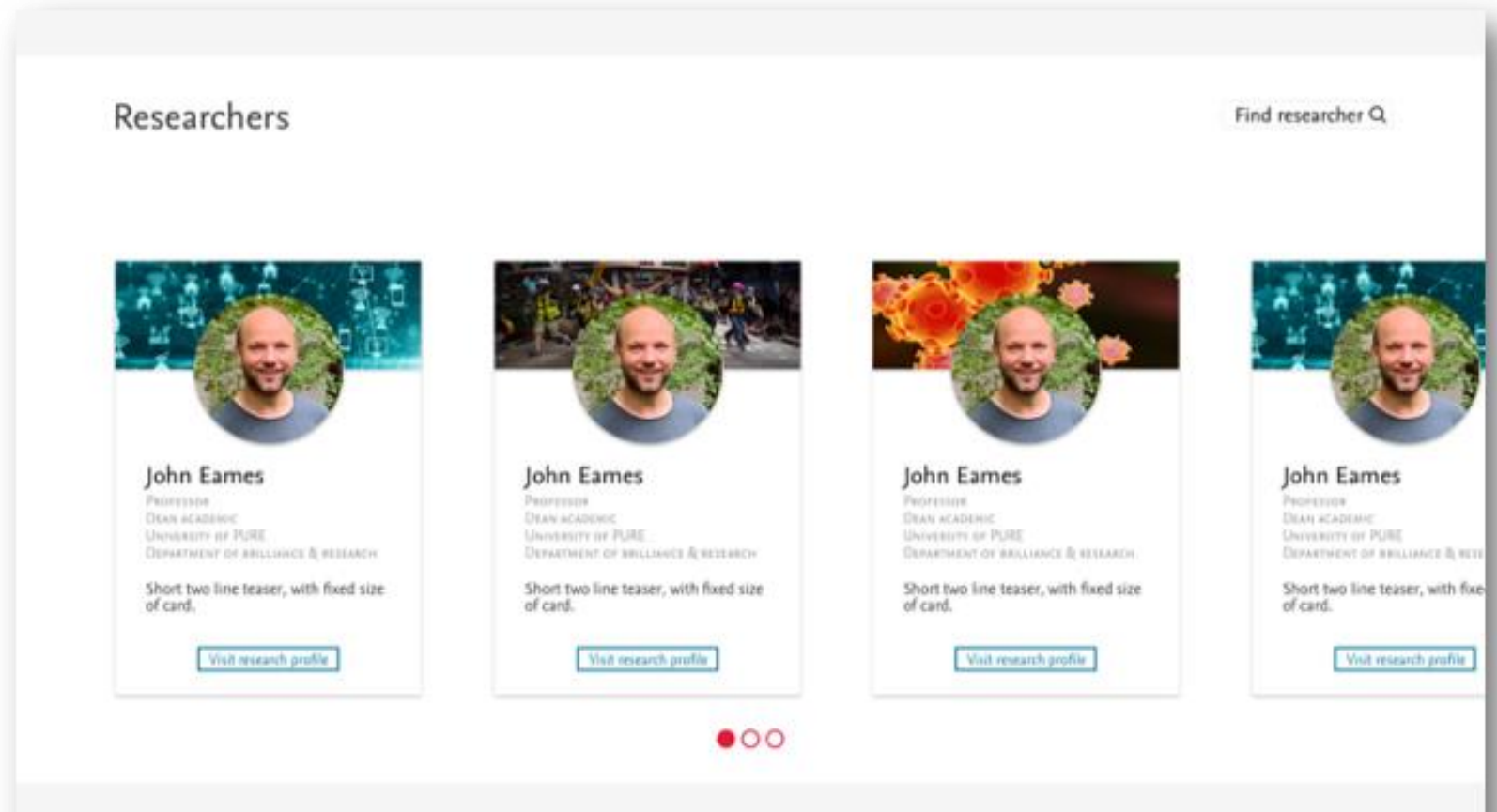
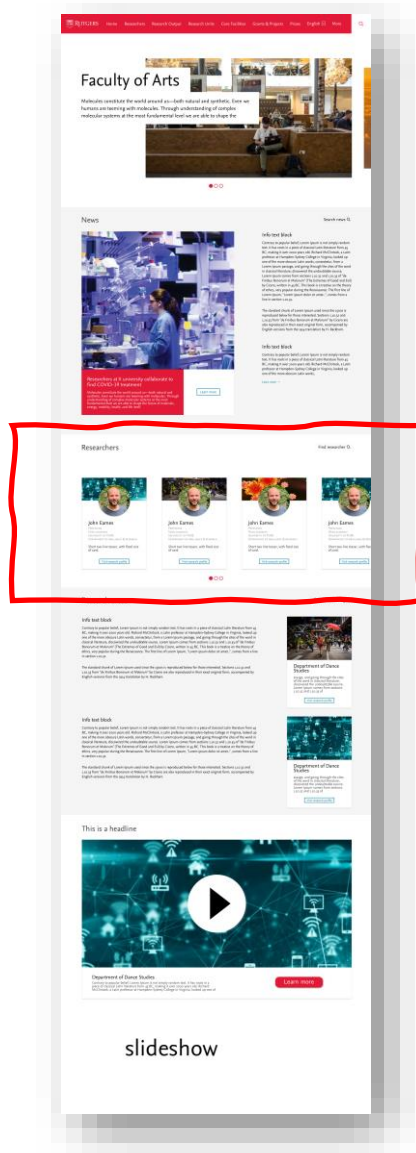


# Project Stella: Core areas to build on

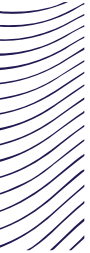
1. Easy management of what data to show, on all levels
2. Simple integration of multimedia and other external content
3. More control over branding and institutional identity
4. Content curation:
  - a) Highlighting/promoting top content
  - b) Bringing content together around key topics (e.g. SDGs, Covid-19...)
5. Simple configuration of basic page layout and display (WYSIWYG)
6. Integrating Portal content/visualisations into external pages



# Move towards a modular design







## Components

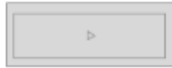
### Cards

Profile lists

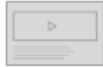
Profile cards

Video cards

Video card, large



Video card, medium

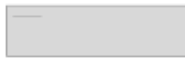


Video card, small



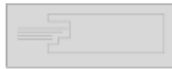
### Containers

New container

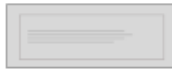


### Hero image

Style #1



Style #2



Hero image  
Compulsary component

+ Add text

+ Add image(s)

+ Add component (click or drag)

Video card  
Voluntary component

+ Add video

+ Add text

+ Add component (click or drag)

Top profiles card  
Compulsary component

Add top 5 items (edit afterwards)

+ Add all

Add individual items

+ Add collaborator

+ Add collaborator

+ Add collaborator

+ Add collaborator

+ Add collaborator







# Current status

- This work is ongoing, parallel to our other portal work.
- Successfully completed working prototype at the end of last year.
- Target: Core portal delivery in H2 2021/Q1 2022: Persons, Organizational Units, Research output
- Working in close collaboration with Pure clients to review progress regularly together and get feedback





# THANK YOU



AALBORG UNIVERSITY  
DENMARK

## VILD MED LVILJE

Det er ikke fordi gartneren holder fri, at arealet er langt og ukendt mæssigt. Det er først og fremmest Vild Med Vilje, Børner-blads til bioteknologi-urten, sommerflugt og vilde bier.

Først når vi til bioteknologi-urten bliver arealet slået en til to gange om året og afklippet for mos.

Vild Med Vilje er en bevægelse for alle os, der ønsker at gøre en forskel for naturens mangfoldighed, der hvor vi bor eller arbejder.

Denne vilde side gør en lille forskel lokalt. Når vi er mange nok, kan vi sammen gøre et stort ud af de vilde arter og urter og insekter i Danmark.

Vi håber at I vil lege godt imod den vilde natur, og at I vil nyde de mange forskellige planter og insekter, der indfinder sig.

Aalborg University  
Campus Service

vildmedvilje.dk/akt

