It was twenty years ago today
Sgt. Pepper taught the band to play
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Aalborg University went into production with the first commercial CRIS system worldwide
360° review of a CRIS environment

A case study from Aalborg University

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Dubrovnik May 13th. 2022
About AT-CRIS

• We support Universities, Research Organisations, Product Providers
• + 30 customers in Germany, Denmark, Netherlands, Austria, Thailand, South Africa.
• Consulting and implementation partner for CRIS, Campus, PhD, LMS systems and more.
• Operational experience in sales, implementation & development within the product environment for CRIS systems. Work experience as scientists & science managers in universities, universities of applied sciences & extramural research institutions
• 13 employees: 11 in Germany + 2 in Denmark
What is a 360°CRIS review

The 360°CRIS Review helps you identify potential rough edges in your use cases, services, and business processes.

We look into optimisations and unused system potential.

We make impact analyses of changes in the research environment (e.g. new mandates, Open Science, assessments, statuary returns, budget cuts).

We pay attention to user onboarding, training and satisfaction.

We check out hosting, system upgrades and your IT infrastructure.

We assess your data quality and data security matters.

We help you to prioritise your plans and consolidate the vision & value for your CRIS within the institution.

Benefits & outcomes
- Optimise your CRIS operation
- Stakeholder management
- Resource allocation
- Roadmap planning
- Process adjustments
- Identifying gaps to be closed

Timespan 6 weeks, Fixed price
Components – 360°CRIS review

1. Survey & Kick-off meeting

2. Collecting documentation & content usage

3. Interviewing stakeholders
   A. Bird’s eye view
   B. Digging into the details
   C. Data collection & governance
   D. Operating the CRIS

4. Presentation of findings and recommendations
# Activities – 360°CRIS review

<table>
<thead>
<tr>
<th>Activities</th>
<th>Customer involvement</th>
<th>Involved stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract and NDA sign off</td>
<td></td>
<td>CRIS owner &amp; AT-CRIS</td>
</tr>
</tbody>
</table>
| **1. Kick-off meeting**  
Introduction of the service and different components. Set expectations and workload. Appoint stakeholders to be involved. Schedule interviews and project time line. | 1 hour online | All |
| **2. Collecting documentation about the CRIS**  
Hand over materials (internal presentations, future plans, common reports, integrations, IT infrastructure diagrams, DPA, internal audits, etc). | 2 hours offline | CRIS administrator |
| **3. Content usage – Report from CRIS**  
Total amount/Created last 12 month/updated last 12 month. | 2 hours offline | System librarian/Data steward |
| Preparation of the interviews based on the collected material and content usage | | AT-CRIS |
| **4. Bird’s eye view**  
High-level interview to get an overview of usage, supported use cases in the system, business processes, services provided, what is good/bad, and future plans. | 2 hours online | CRIS owner |
| **5. Digging into the details**  
Interview on detailed use case and business processes | 3 hours online | CRIS administrator |
| **6. Data collection & governance**  
Interview on how data is added and used in the system, Integrations, Data security and protection | 2 hours online | System librarian/Data steward |
| **7. Operating the CRIS**  
Interview on infrastructure, technical issues, support, training | 2 hours online | CRIS administrator/IT responsible |
| Preparation of the report | | AT-CRIS |
| **8. Presentation of preliminary results** | 1 hour online | CRIS owner |
| Amendments and revisions | | AT-CRIS |
| **9. Final presentation of findings and recommendations**  
+ Written report, including interview protocols and recordings of underlying findings | 2 hours on site | All |
The CRIS system is well driven at Aalborg University. They have been using Pure for 20 years.

Pure team: 7 FTEs

System owner: The university library

Data in Pure is used in two main efforts:

1. Knowledge Sharing
2. Analysis and Bibliometrics

Pure is an established system both within dissemination and for decision support. But there is still gaps in terms of communicating the potential of Pure, especially at the institute and research group level.

Data quality
Data quality is generally high, but a definition of data quality does not yet exist.

Data security
There are no problems or concerns regarding data security. DPA is in place.

Data coverage
For certain content types, e.g. persons, org. units, publications, student projects, PhD theses, the coverage is largely complete. Other content types that have not been in focus, e.g. datasets, applications and grants, the coverage is low.

Integrations into Pure
Pure integrates with the following source systems:

- PDS (Internal HR)
- BFI*
- Sherpa Romeo
- Scopus
- Scival
- PlumX
- ORCID
- Infomedia
- Data Monitor (Elsevier)
- Digital Eksamen
- PubMed
- Bibliotek.dk
- Espacenet
- EBSCOhost

Help and support
There is a comprehensive e-mail support as well as a large number of guidance web pages on how to use Pure. In addition, a number of courses are held, although not very well attended, with the exception courses for Ph.D. students.

Hosting and system infrastructure
Pure is hosted locally with a staging and production server. The Pure Portal hosted on Amazon Cloud. Service agreement with Elsevier regarding upgrades. The software is fully updated and the library usually orders the latest version shortly after it has been released.

Individuals are being synchronized with data from PDS, which is being phased out. Work started for replacement of the PDS integration.

*) BFI, the Danish research assessment was cancelled in dec. 2021 and is therefore no longer a priority.
CRIS use cases at AAU

Decision support

<table>
<thead>
<tr>
<th>Report</th>
<th>Presentation format</th>
<th>No. of yearly reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual report</td>
<td>MS Sway/Power BI</td>
<td>1</td>
</tr>
<tr>
<td>SRFI report (Strategic Council for Research and Innovation)</td>
<td>PowerPoint</td>
<td>1</td>
</tr>
<tr>
<td>Reports for institutes</td>
<td>PowerPoint</td>
<td>17</td>
</tr>
<tr>
<td>Reports for research groups</td>
<td>MS Sway/Power BI</td>
<td>17* (260)</td>
</tr>
<tr>
<td>Reporting support for Medical Library</td>
<td>Excel, Power BI</td>
<td>Ca. 2</td>
</tr>
<tr>
<td>Reporting support for accreditation reports</td>
<td>Excel</td>
<td>A lot</td>
</tr>
</tbody>
</table>

* All these reports are provided at departmental level. There are 213 research groups and 47 sections under departments.

Knowledge sharing

Channels controlled by the Pure team

- Pure research portal
- AAU Connect (Mobile app)
- AAU CMS

External use of Pure data

- AAU Connect (Mobile app)
- AAU CMS

- The Digital Project Library (student projects)
- Annual report VBN (MS Sway)
- Status 2020 (MS Sway)
- Stories 2020 (MS Sway)
- VBN themes (MS Sway)
- VBN analytics (MS Sway)
- Info screens in AAU library
- Info screens with conference posters (Morresier)
- Annual printed poster

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> 260,000 Monthly pageviews
AAU'S STRATEGY: KNOWLEDGE FOR THE WORLD

Aalborg University's strategy Knowledge for the World 2022-26 makes the basis for the university's development. You can read about the university's strategic direction, characteristics and strategic focal points.

DOWNLOAD PDF
KNOWLEDGE FOR THE WORLD 2022-26

The world needs knowledge

Global dilemmas affect us all. More than ever before, the world's great challenges impact our daily lives.

Our increasing and higher demands for quality of life are draining the earth's natural resources at an ever-increasing rate. We are witnessing a profound loss of biodiversity. Income inequality is becoming more pronounced. The gap between rich and poor continues to widen.

We believe that knowledge can and must change the world.

Therefore, AAU is a university with ambitions that extend far beyond its walls, to the heart of the global community. As an international university, we want to play our part in solving the world’s most pressing problems.
AAU’s strategic focus

Education

International level
We strive to provide education at the highest international level based on problem-based and digital learning.

Interdisciplinarity
We strive to produce graduates who think and work in an interdisciplinary manner.

Relevance
We strive to produce graduates who work effectively on real challenges. We strive to address labour market needs for competencies and upskilling through future-proofed and flexible degree programmes.

Research

Excellence
We strive to cultivate world-leading research environments that link scientific excellence with mission-oriented commitment.

Collaboration
We strive to show how research is strengthened by active collaboration with the world at large. We need the world just as the world needs our knowledge.

Transformative
We strive to create foundational, interdisciplinary and transformative research that helps solve the world’s most complex and pressing challenges.

Innovation

First choice
We strive to be the preferred international, national and regional partner and provider of research-based innovation.

Agenda
Through our partnerships with external actors, we strive to set agendas with innovative solutions to relevant problems.

Utilisation
We strive to make use of our knowledge to create tangible value for our partners and the world around us.
CRIS focus areas – From the Pure team strategy document

- Systems and integrations
- Analysis & bibliometric
- Registration
- Dissemination and knowledge sharing (Open knowledge)
- Support Institutes
- Focus areas
Pure AAU stock of knowledge

- Analyse & bibliometrics (prioritised goals)
- Other tools (e.g. SciVal, Scopus)
- Knowledge sharing (Open Knowledge)
- Systems & integrations
- Registration
- Support institutes

Data flows in and out of Pure based the Pure team strategy document
Recommendations: strategic areas 2022-26

Focus on AAU’s prioritised goals for 2022-

Increase the impact in digital dissemination

Operational optimisations

Contribution to AAU’s Knowledge for the world 2022-26
Recommendations for initiatives in 2022->

**DECISION SUPPORT**

Focus on AAU’s prioritised goals for 2022

1. Report on strategic goals
2. Focus on core data quality
3. Refer to help and guidance
4. Research group support
5. Decision support in Pure

**OPTIMISATION**

Operational optimisations

6. Core data
7. External collaboration
8. Support and guides
9. User involvement
10. Updates from import sources

**STRATEGY**

Contribution to AAU’s Knowledge for the world 2022-26

11. Define data quality
12. Integration of datasets
13. Integrations of projects
14. Integrations of applications & grants

**KNOWLEDGE SHARING**

Increase the impact in digital dissemination

15. VBN Themes
16. The Digital Project library
17. Branding
Example 1: Focus on core data quality in reporting

**RECOMMENDATION**

**Be honest – tell about the content quality – it is a shared responsibility!**

Add a **Data Quality Awareness** element in all relevant reports. Thereby add focus and attention on core data quality (persons <-> affiliations <-> org. units) in Pure.

The purpose is to increase awareness of how data is registered in Pure, so that stakeholders have the opportunity to act if data is missing or erroneous.

This way, you get an increased awareness of the importance of high data quality among the stakeholders – *and you might cause them to act.*

**“DATA QUALITY AWARENESS” ELEMENT IN REPORTING EXAMPLE FOR AN INSTITUTE/DEPARTMENT**

<table>
<thead>
<tr>
<th>Current affiliations</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic staff</td>
<td>34</td>
</tr>
<tr>
<td>Admin staff</td>
<td>7</td>
</tr>
<tr>
<td>External staff</td>
<td>9</td>
</tr>
<tr>
<td>Hospital staff</td>
<td>1</td>
</tr>
<tr>
<td>[without affiliation]</td>
<td>2</td>
</tr>
<tr>
<td>No. of persons</td>
<td>43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current research groups/sections</th>
<th>No. of persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database and Web Technologies</td>
<td>12</td>
</tr>
<tr>
<td>Human-Centered Computing</td>
<td>14</td>
</tr>
<tr>
<td>Distributed, Embedded and Intelligent Systems</td>
<td>9</td>
</tr>
</tbody>
</table>

**STATUS, LAST 12 MONTHS**

<table>
<thead>
<tr>
<th>Org units</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research groups/sections</td>
<td>260</td>
</tr>
<tr>
<td>- Created</td>
<td>65</td>
</tr>
<tr>
<td>- Updated</td>
<td>146</td>
</tr>
<tr>
<td>Number of research groups with ≤ 1 related academic person</td>
<td>14</td>
</tr>
<tr>
<td>Research groups/sections without pws (org ID)</td>
<td>147 (57%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Persons</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliations without a classification</td>
<td>543</td>
</tr>
<tr>
<td>Updates (primarily synchronisations)</td>
<td>6.846</td>
</tr>
<tr>
<td>Updates from personal users</td>
<td>572</td>
</tr>
<tr>
<td>Manually created/updated (AAUH)</td>
<td>1.102</td>
</tr>
<tr>
<td>No of unique job academic titles</td>
<td>206</td>
</tr>
<tr>
<td>Portrait photos on research portal</td>
<td>less than 50%</td>
</tr>
</tbody>
</table>

Data extraction: Nov. 2021

Example 1: Add AAU priorities goals 2022 in reporting

Prioritised objectives for Aalborg University for 2022

The CRIS data and the Pure team can contribute with guidance and monitor 3 out of 11 goals:

1. **Collaborates with regional, national and international parties on mission-driven research...**
2. **Research based on digital data...**
3. **The Offices of the Danish Central Administration knows and collaborates with AAU...**

Support the priority objectives 2022 with insights from the CRIS

Support the registration in Pure through updated and targeted guides.

Communicate to the academics on how to register the prioritised objectives in Pure.

Provide evidence by monitoring the objectives.

All management reporting (SRFI, Annual Report, Department reports and research group reports) should include evidence from Pure evidence for prioritised objectives for Aalborg University for 2022

"PRIORITISED OBJECTIVES" ELEMENT IN REPORTING EXAMPLE FOR AN INSTITUTE/DEPARTMENT

<table>
<thead>
<tr>
<th></th>
<th>Last 12 months</th>
<th>Previous period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional collaboration</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>National collaboration</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>International collaboration</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>Collaboration with the Danish Central Administration</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Link to relevant online guides

**Digitale data in Pure**

<table>
<thead>
<tr>
<th>Datasets (created)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Show the tables even if the department / research group has no entries during the period. This might trigger the group to add missing registrations.
Define data quality

Identify all primary content types that can play a role in the “Knowledge for the world” strategy.

Define Data Quality Guidelines at field level for relevant content types concerning:

• Knowledge sharing (Open Knowledge)
• Analysis and bibliometrics
• External collaboration

This activity will form the basis for decisions on metadata & be the reference for the majority of initiatives for the Pure team.

Set goals for amount of content

It isn't easy to know how much content there should be registered per year for specific content types.

But... give your best estimates and set annual target for all research products, e.g. 2,500 projects and 2,500 data sets.

Make it a monthly exercise to share a monthly report on the numbers within the Pure team.
Recommendations for initiatives in 2022->

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**OPTIMISATION**

Operational optimisations

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7. External collaboration
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**STRATEGY**

Contribution to AAU’s Knowledge for the world 2022-26

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12. Integration of datasets
13. Integrations of projects
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**KNOWLEDGE SHARING**

Increase the impact in digital dissemination

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