CRIS-IL

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euroCRIS webinar, Nov. 2020
• Preface
• Initiation and main rationale
• Tender criteria and methods
• Installation process & issues
• Summary
Preface - Credits

• Our roles in the CRIS-IL project:
  – Dror Berger (TAU & IUCC) proj. manager
  – Prof. Gad Rabinowitz (BGU) proj. coordinator

• We thank our leading team partners:
  – Ehud Or (TAU) Head of CRIS-IL project
  – Odelia Levanon (IUCC) CEO
  – Ari Stone (CHE) Budget coordinator
  – Prof. Oron Shagrir (HUJI) v.p. for Inter. Affairs

• And acknowledge:
  – The CHE (regulator) support
  – The universities head committee (UHC) vision & resolve
  – The 9 participating universities and their devoted teams
Preface - 9 Participating Universities

Technion
Hebrew
Weizmann
Tel-Aviv
Ben-Gurion
Ariel
Open
Haifa
Bar-Ilan
Academia in Israel

- Young country – “startup nation”
- 9 Public universities (+ 50 colleges)
- Relatively lower investment per faculty or per student (according to OECD)
- Intensive international cooperation
- Western (European & North American) oriented excellence
- Relatively high # of Nobel laureates
Scope

- CRIS-IL will go live towards end of 2021
- 5 universities (Tear-1) deep in:
  - Learning PURE
  - Cleansing and Importing basic data
  - Installing & Preparing the roll-up
- 4 universities (Tear-2) – just started

Namely

- We are not experienced CRIS clients
- We are not aware yet of our main mistakes 😊
Initiation - The budget trigger

Till today:
- Publications → 34% of Ac. Research Budget
- Allocated by external agency with limited transparency to the U’s

Competitive publications budgeting model:
- Each org. unit belongs to one of 12 disciplines
- The slice for each discipline is set by total staff count
- NIF (1 – 15) for a list of journals in 250+ fields
- The slice to univ. in each discipline = no. of pubs’ ⊗ NIF
- Some more considerations in the model
Initiation - The budget trigger

2016

• The UHC (Univ.’s Heads Com.) required:
  – Transparency extended list of pubs’ (Hebrew, Arabic, books, etc.)

• The CHE (national regulator) agreed

• Execution team was nominated
2016

• **Initiation conference:**
  – How to collect all the publications?
  – How to build the database?
  – What tools available?
  – CRIS was mostly unknown

• **A design workforce forum**
  – Options mapping (BI, RIM, CRIS, IR, Metrics,..)
  – Agree that CRIS is required
  – CRIS provides more added values
  – **Golden opportunity: no Univ. has CRIS, yet!**
2017

- **Recommendations**
  - Establish community CRIS network
    - Wider, current and transparent pubs
    - Valuable information to researchers
    - Improved RDA service to researchers
    - BM & analytics for more effective management
    - Worldwide visibility (for coop., grants, students, industry)

- **Surprise…**
  - We sought for “donkeys” (transparency)
  - But a “kingdom” was found (CRIS)
2017

• CHE and UHC approve
• CHE assures 85% support for 5+ years
• IUCC + execution team initiate the project
  – Detailed design, SOW, tender, contract, etc.

Recall that in 2017 community systems were in its infancy stage!
Tender – Two Stages

2018-2019

• **Stage 1: PQ & RFI**
  – Selecting vendors that meet specified Prerequisite Qualifications (PQ) – (min. # of clients, CERIF, Auto. Harvesting…)
  – Request for information (RFI)

• **Stage 2: Learn & RFP**
  – Learn from the RFI
  – Design SOW & contract
  – Run RFP
  – Evaluate and choose a vendor
Tender - Main criteria

• A comprehensive SOW with 36 main required capabilities and 197 detailed requirements

• Mandatory requirements
  – CERIF compliant in data model + data interoperability
  – Independent institutional environments
  – Aggregation to a common and shared system
  – Multilingual, with emphasis on Hebrew & Arabic (storing, indexing, discovering and presenting the data)
  – A continuously evolving system (clear roadmap and an active development plan)

• Other Requirements
  – Open Access management
  – Institutional repository
2019

• A POC by HO exam. Was proposed

• Skeptical questions raised:
  – How to organize acad. & tech staff from 9 U’s?
  – How much time and cost it will take?
  – Will the vendors agree to set a pilot and send their staff?

• Main supporting arguments:
  – HO feel with own data is a critical criteria
  – Opportunity to learn CRIS by doing
  – Early acad. staff supporters
2019

• POC HO Exam, 2 weeks plan:
  – Only with vendors that met the PQ’s:
  – 35 Acad. & 25 Tech staff from all U’s
  – Randomly assigned in balanced order
  – **Week-1**: tech staff learn the systems and set the pilots
  – **Week-2**: acad staff learn (3h) and evaluate (3h), 1d per system
    tech staff – support the acad. staff, then evaluate
  – Tech staff evaluate all 38 functions, acad staff 19 functions

• Evaluation criteria for each function
  – **Ease of use** (intuitive, efficient, quick)
  – **Proper outcome** (clear, complete, as expected)
  – Comments (navigation, functionality, friendliness, outcome,...)
2019

- Examined Functions

<table>
<thead>
<tr>
<th>No.</th>
<th>Category of Functions</th>
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<tbody>
<tr>
<td>1</td>
<td>Input data</td>
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<tr>
<td>2</td>
<td>Control and manage data</td>
</tr>
<tr>
<td>3</td>
<td>Output CV information</td>
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<tr>
<td>4</td>
<td>Search information</td>
</tr>
<tr>
<td>5</td>
<td>Produce &amp; Manage Reports</td>
</tr>
<tr>
<td>6</td>
<td>Admin functions</td>
</tr>
</tbody>
</table>

Input data
- Define and manage data sources priorities
- Manage publications automated retrieval and update
- Manage other types of info from external and institute sources
- Add and edit publication and other content manually
- Upload external RIS or bibtex file
- Add a personal website URL

Output CV information
- Create, modify, authorize and share various CV templates

Search information
- Search by keywords
- Search by research field
- Search by academic unit
- Search by free text (semantic)
- Search by researcher name

Produce & Manage Reports
- Reuse, modify, manage, authorize and share defined reports

Admin functions
- Manage types of users and authorization
- Define and manage users' profiles
- Respond and manage users' messages
- Evaluate and monitor users engagement
- Monitor data status, processes, and outliers
- Manage upgrades
- Define and manage workflows
- Backup & Restore
- Define and manage Local fields
- Define and generate various calculated reports
- Follow own bibliometric
- Manage name variations
- Manage other types of info from external and institute sources
- Search by research field
- Produce & Manage Reports
- Input data
- Control and manage data
- Output CV information
- Search information
- Produce personal bibliometric and other reports
- Define and generate various bibliometric reports
- Define and generate various filtered reports
- Admin functions
- Define and generate various comparison reports
- Manage upgrades
- Define and manage workflows
- Backup & Restore
- Define and manage Local fields

2019

• POC HO Exam, types of results:
  – 2 scores (ease of use, proper outcome) for each function
  – Statistics for each institute and each type of staff
  – 486 comments, in avg. 12 per function, 7.5 per person
  – Comments were categorized into 14 types
  – Overall POC weighted score for each vendor

• Further benefits:
  – List of issues for the negotiation with the tender winner
  – List of needed developments in the winning system
  – Tighter engagement of staff groups
  – Closer acquaintance and a sense of common mission
2019

• POC’s insights:
  – Significant differences identified
  – Involvement of all types of users is essential
  – Academic staff voluntarily participated and praised
  – The HO experience revealed important issues
  – The POC reduced the overall score gap

• Overall tender insights:
  – Well thoughts, clear and agreed criteria and weighing
  – Professional team of a rep. from each participating univ
  – The reps should include Acad, IT & Lib staff
  – Central IT proj leading body (IUCC)
Installation - Project structure

Guiding Principles

• **Scope:**
  – National publications transparency
  – Institution autonomy and flexibility
  – Publications – mandatory for all U’s
  – CV & Portal – optional
  – Awards and other research outputs: on each U’s pace

• **Funding:**
  – CHE funding (85% for 5 years+)
  – Staff & other modules on U’s funding

• **Operation:**
  – Agreed rules and terminology
  – Tech. integration by IUCC
  – Central audit
Installation - Project structure

National Steering Committee

Ehud Or – Head
1 rep from each university
IUCC CRIS-IL team

Coordination Directory

Gadi R. – Head
Dror B. – Proj. Manager
1 rep from each university

IUCC - Project Management

Odelia L. – CEO
Dror B. – Proj. Manager

Professional Teams

Vision
Metrics
Schemes

marketing
Sources

CRIS OUI
CRIS Ariel
CRIS Haifa
CRIS HUJI

CRIS Weizmann
CRIS Technion
CRIS BIU
CRIS BGU
CRIS TAU

Tear-2 universities
Tear-1 universities
2020 - The CRIS network

External Sources: WoS, Scopus, National, Others, books, ...

CRIS OUI
CRIS Ariel
CRIS Haifa
CRIS HUJI
CRIS Weizmann
CRIS Technion
CRIS BIU
CRIS BGU
CRIS TAU

Data Cleansing
Portal
Reports
CV

Public
Management
Researchers
Institute

Public
management
regulator

Portal
Transparency & BM
Budget

CRIS IL
Installation - System architecture

Before CRIS

• **Features**
  – Partial info
  – Manual update
  – Loose standardization

• **Consequences**
  – Lots of author efforts
  – Lack of current info
  – Limited reports
  – Difficult to manage
  – Low visibility

Legend
- Author input
- Full data
- Partial data
- National Level
- University Level
- Pubs Sources Level

Preface  Initiation  Tender  Installation  Summary
Installation - System architecture

After CRIS

- **Features**
  - Mostly automatic
  - Mostly standardized

- **Benefits**
  - Transparent funding
  - Less author efforts
  - Mostly current info
  - Better reports
  - Benchmarking
  - Proactive academic monitoring
  - Wider visibility

Legend:
- National Level
- University Level
- Pubs Sources Level
Main missions

• **Institutional:**
  – Define the CRIS scope (author types, Units, Pubs., CV, Portal)
  – Information cleansing (Heb. - Eng., missing, structure)
  – Information transfer to Pure (develop and test)

• **Agreements:**
  – Taxonomies (Units, Persons, Pubs., metrics, CV, Grants, Students)
  – Central scope (must data, Portal, BM reports, IR, Hebrew…)
  – Central rules (Harvesting, inst. approval, submitting to center,…)

• **Central:**
  – Receive and integrate data (from all CRIS’s)
  – Implement central portal
  – Develop central BM
  – Identify budget model pubs.
Installation - Project structure

Project Schedule

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<th>Plan &amp; Design</th>
<th>2020</th>
<th>2021</th>
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<tbody>
<tr>
<td>T1 Central</td>
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<td>T2</td>
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<th>Launch</th>
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<tr>
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<td>T2</td>
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<tr>
<td>Central</td>
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<thead>
<tr>
<th>Implement &amp; Test</th>
<th>2020</th>
<th>2021</th>
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<tbody>
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<td>T1 Central</td>
<td></td>
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<tr>
<td>T2</td>
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<tr>
<th>Disseminate &amp; Net. Tests</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>T1 + T2 Central</td>
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<tr>
<th>Configure to Needs</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>T1 On-Air Central</td>
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<tr>
<td>T2</td>
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Main duration factors: Community coordination, Pubs importing, Data cleansing, COVID-19
• Community Portal demonstration
Current Challenges

- Improving internal IT systems and data
- Common language (terms, definitions)
- Fitting Pure to Hebrew & Arabic (RTL)
- Harvesting pubs from Israeli sources
- Faculty acceptance and cooperation
- Coopetition – with 9 universities & 1 regulator
- Prevail with Change Management at all levels 😊
Future Challenges

• Normalized indicators from multi sources
• Common BOOK metrics
• Benchmarking pubs by org. units and by disciplines
• Revised budgeting model based on CRIS figures
• Evaluating the CRIS network impact
• Extending the platform for further added values

Will we miss the donkeys or enjoy the kingdom?
Thanks & take care!

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