• Challenges of National Libraries (this morning)
• Testing ways in which AI could help the process of cataloging.
• Power Platform
Microsoft Power Platform

The low-code platform that spans Office 365, Azure, Dynamics 365, and standalone applications

- **Power BI**: Business analytics
- **Power Apps**: Application development
- **Power Automate**: Process automation
- **Power Virtual Agents**: Intelligent virtual agents

- **Data connectors**
- **AI Builder**
- **Dataverse**
Objectives and methodology

- Optimize the cataloguing process by leveraging OCR technology
- Utilize AI technology to not only recognize text but also accurately identify essential bibliographic elements
- Harness the detected information to conduct HTTP queries to enrich the bibliographic records.
- Automated subject indexing
Title, author, publisher, year

ISBN, publisher, year, legal deposit number, original title, edition, copyright information, ISNI(?)

Text
<table>
<thead>
<tr>
<th><strong>Search</strong></th>
<th>Search VIAF with Title or Original Title, combined with author</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extract</strong></td>
<td>Extract the 'works' of output (local identifier)</td>
</tr>
<tr>
<td><strong>Add</strong></td>
<td>Add output (local identifier) to a variable</td>
</tr>
<tr>
<td><strong>Search</strong></td>
<td>Search output in second VIAF-search to get permalink of VIAF-work</td>
</tr>
</tbody>
</table>
* Select an output from previous steps

results

{x} Append to variable ClassificationBB

{x} AddToVariableMarc21 082

* Name
Marc21 082

* Value

```xml
<datafield tag="082" ind1="1" ind2="4">
  <subfield code="a">fx substring(...)</subfield>
  <subfield code="2">kbr</subfield>
</datafield>
```

{x} AddToVariableBIBFRAME classification

KBR
Koester de Liège
Protégeons le temps
Create Output

Create Files

Move or rename a file using path
Results

Output 3 files
- Html
- MARC21XML
  - Can be imported directly in LMS
- BIBFRAME-rdf

Can be imported directly in your Library Management System
- API
- FTP

PDF renamed and replaced in OneDrive/SharePoint
- Embedded view (iframe) in LMS
Training

Automated Subject Indexing: Good training data are key (see WLIC 2023 Satellite Meeting at KBR)
Attention for biased training set

Typology of Title Pages
L. SECRÉTAN

CHARLES SECRÉTAN
SA VIE ET SON ŒUVRE

LAUSANNE
LIBRAIRIE PAYOT & Cie
1911
Tous droits réservés

GEORGES EEXHOUD

Nouvelles Kermesses
ÉDITION DÉFinitive

Ma curée de diabète m'étais pour
neun tours et jamais guide au mè-
dicin ne la recommandais...
(Kxwawerx, Ex Voto)

PARIS
LIBRAIRIE INTERNATIONALE
1, place Saint-Michel, 4
BRUXELLES
PAUL LAGONNILE, Éditeur
3, rue des Parolissiens, 31
Tous droits réservés

FRAGMENTEN.

WINTER- EN ZOMERBEELDEN

DOORN
C. VAN NIEVELT.

LEIDEN,
S. C. VAN DOESSBURGH.
1875.
Impact

Cataloguers' tasks

- From manual data-entry to
  - Accurate
  - Fast
  - Automated
  - Automated
  - multi-script
  - Recognition

HTTP queries: create automatically linked and improved data

Value-added and higher-level task
- Maintain training set
- Maintain LOD-sources

Higher security: fast registration