KOREA RESEARCH DATA COMMONS

Research Data Sharing Center
Sa-kwang Song
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KISTI’s Open Science Activities

◆ **AccessON**(accesson.kr)
  - From authoring to disseminating Open Access articles
  - Provides discovery, self archiving, monitoring and co-authoring services
  - Total # of articles: 34 M

◆ **DataON**(dataon.kr)
  - National Research Data Platform
  - Provides discovery, registration, interconnection and analysis cloud services
  - 1.2M metadata (950GB), 5.6M Figure/Table

◆ **ScienceON**(scienceon.kisti.re.kr)
  - Portal of Open Science systems in KISTI
  - Integrated search based on AccessON and DataON
  - Interconnected with various research services in KISTI, such as NTIS, KMAPS, COMPAS, KOSEN, etc.
  - Towards Open Collaboration System for Korean researchers

※ NTIS provides information about Researcher, Projects, and R&D outcomes in Korea
◆ DataON services
- Registration, preservation, and discovery services for Research Data
- Repository hosting service
- Interconnection with other research data platform
- Virtual research environment supporting VM, JupyterLab, and workflow environment.

◆ DataON Statistics
- # of metadata: 963K (OpenAIRE), 100K (ARDC), 65K (NII)
- # of (Meta)data: 32K (Korea) (File size: 925GB)
- # of Figure/Tables in R&D reports: 5.6M
- 17 interconnected repositories in Korea
DataON Virtual Research Environment

- DataON CANVAS(VRE) – beta version
  - JupyterLab to configure own analysis environments and perform analysis work
  - GUI-based workflow modeling and analysis
  - High-speed and large-capacity analysis utilizing high-performance cloud infrastructure (CPU/GPU)
  - Provision of preprocessing tools/apps and use case apps and workflows on top of DataON CANVAS.
Connected/connecting Platforms

- Domain research data platform: 2 (ongoing: Biology, Materials), 2 (planned: Aerospace, Huge experimental Science, etc)
- Research data platform for government-funded research institutes: 10
- Universities, other organizations: 9
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<th></th>
<th>~2020</th>
<th>2021</th>
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<tbody>
<tr>
<td><strong>Policy</strong></td>
<td>OD Strategy</td>
<td>Draft bills for Open Science and Open Data</td>
<td>Application of the law(s) (Parliamentary legislation vs government legislation)</td>
<td>Follow-up policy &amp; strategy</td>
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<td><strong>Research Data Mgt.</strong></td>
<td>DataON &amp; NaRDA Dev. and Operation</td>
<td>Advanced DataON &amp; NaRDA(Repository)</td>
<td>CoreTrustCeal, NaRDA Opensource, AI based Curation</td>
<td>Developing use cases, Incentivization support function</td>
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<td><strong>KRDC</strong></td>
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<td>Model design, Dev. of KRDC Core framework</td>
<td>Support KRDC application to other institutions, Interconnection between Research Data Commons in Korea</td>
<td>Interconnection with global RDCs, Dissemination of KRDC framework, Developing use cases</td>
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Thanks for your attention!!