

Open access repositories on open educational resources: feasibility of adopting the Japanese model for academic libraries

URL	http://weko.wou.edu.my/?action=repository_uri&item_id=531
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Open access repositories on Open Educational Resources : Feasibility of adopting the Japanese model for academic libraries

Sub-theme: Open Knowledge Movement

by

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TRANSFORMATION OF LIBRARIES - NEW EXPERIENCE !



LIBRARY 0.0

LIBRARY 1.0

LIBRARY 2.0

LIBRARY 3.0

Brief Outline



- Present library information systems have moved to the cloud, digital libraries, linking resolver, repositories, etc.
- Triggered by this, WOU Library seeks to add a **new dimension of its digital library services** that is to build an **open access repositories** on Open Educational Resources (OER) using an open source software, WEKO from Japan
- This presentation aims to highlight the feasibility of using Japanese open source software, WEKO as a Content Management System to build two web-based **institutional and federated repositories** on OER (ROER)

Infographics – Repositories Insight in Asia

- Figures are based from *OpenDOAR – The Directory of Open Access Repositories* (University of Nottingham, UK)

OpenDOAR

Directory of Open Access Repositories

Home | Find | Suggest | Tools | FAQ | About | Contact U

The Directory of Open Access Repositories - OpenDOAR

[Search for repositories](#) | [Search repository contents](#) | [List of repositories](#) | [Repository Statistics](#)

OpenDOAR is an authoritative directory of academic open access repositories. Each OpenDOAR repository has been visited by project staff to check the information that is recorded here. This in-depth approach does not rely on automated analysis and gives a [quality-controlled](#) list of repositories.

As well as providing a simple [repository list](#), OpenDOAR lets you [search for repositories](#) or [search repository contents](#). Additionally, we provide tools and support to both repository administrators and service providers in sharing best practice and improving the quality of the repository infrastructure. Further explanation of these features is given in a project document [Beyond the list](#).

The current directory lists repositories and allows breakdown and selection by a variety of criteria - see the [Find](#) page - which can also be viewed as [statistical charts](#). The underlying database has been designed from the ground up to include in-depth information on each repository that can be used for search, analysis, or underpinning services like text-mining. The OpenDOAR service is being developed incrementally, developing the current service as new features are introduced. A list of [Upgrades and Additions](#) is available.

Developments will be of use both to users wishing to find original research papers and for service providers like search engines or alert services which need easy-to-use tools for developing tailored search services to suit specific user communities.

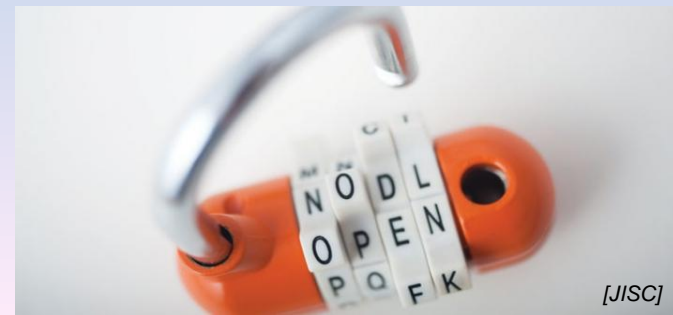
OpenDOAR has over 2600 listings!



Growth of the OpenDOAR Database



[Source: <http://opendoar.org>]

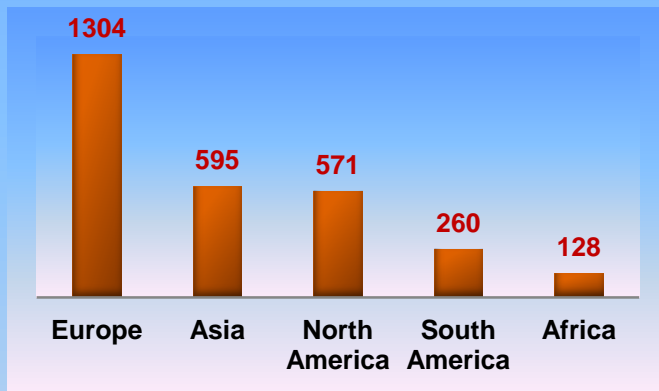


Infographics – Repositories

Insight in Asia



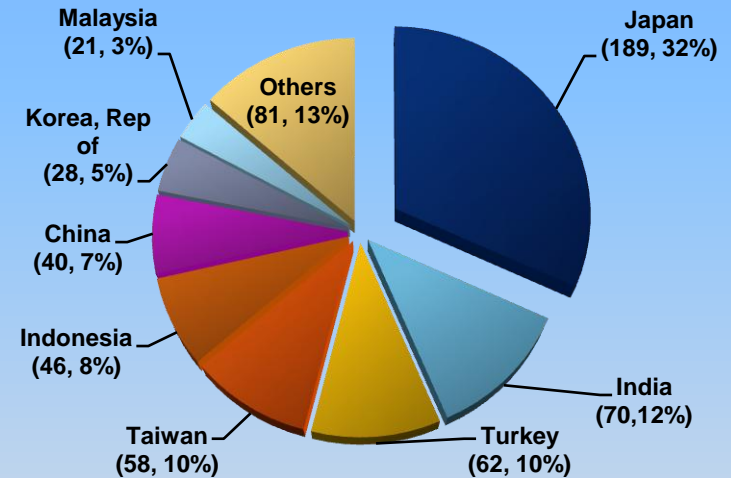
BY REGION (T=2,958)



□ Asia ranked at 2nd place after Europe, with 595 (20.1%) repositories

□ Majority are institutional type repositories, others are governmental, aggregating and disciplinary

BY COUNTRY (T=595)



□ Japan contributed highest number of repositories (32%), followed by India (12%) and Turkey (10%). Japan is the institutional repositories paradise, actual figure is higher

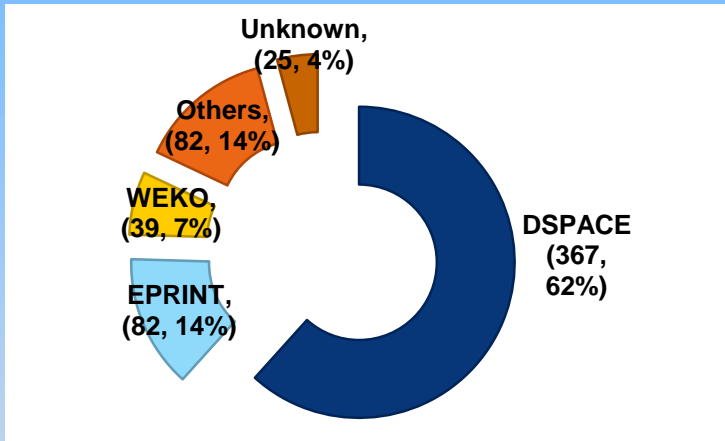
□ Malaysia, ranked at 8th place, contributed 21 repositories (3%)

AT A GLANCE

Infographics



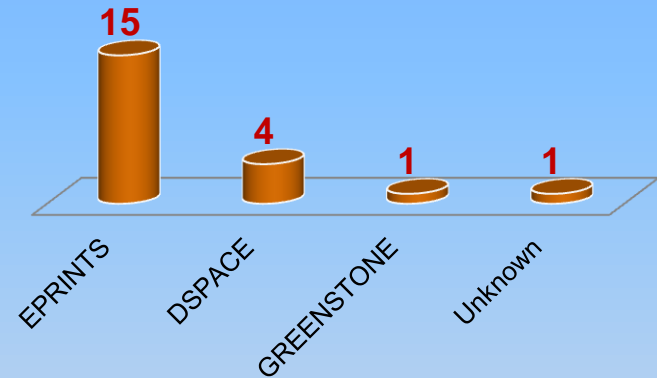
BIGGEST PLAYERS IN OPEN SOURCE SOFTWARE (OSS)



❑ *Dspace* (62%) is the most popular open source softwares used, followed by Eprints (14%) and WEKO (7%)

MALAYSIA'S MOVEMENT IN OSS

(Total : 21 repositories)



- ❑ Malaysia's movement and visibility in establishing institutional repositories can be considered low; 21 repositories

- ❑ Eprints is more popularly used (71.4%), followed by Dspace (19%)

❑ No contributor using the Japanese OSS, WEKO; WOU being the first in year 2014

WOU WEKO-based repositories project (Feb 2014 - Jan 2015)


Purpose : Built two web portals on OER-based resources using WEKO



Design approach : Based on push to pull strategy to harvest metadata using OAI-PMH protocol from within and outside institution's databases



Findings : Created an open knowledge platform; content freely available; redefine librarians' profession as manager of institutional assets; built collaboration



Values : Enhanced librarians professional work in repositories development on OER and metadata harvesting



Output : (1) WOU's institutional repository
[<http://weko.wou.edu.my>]
(2) Federated repository OER@AsiaHub
[<http://oerasia-repository.wou.edu.my>]

OSS WEKO Infrastructure



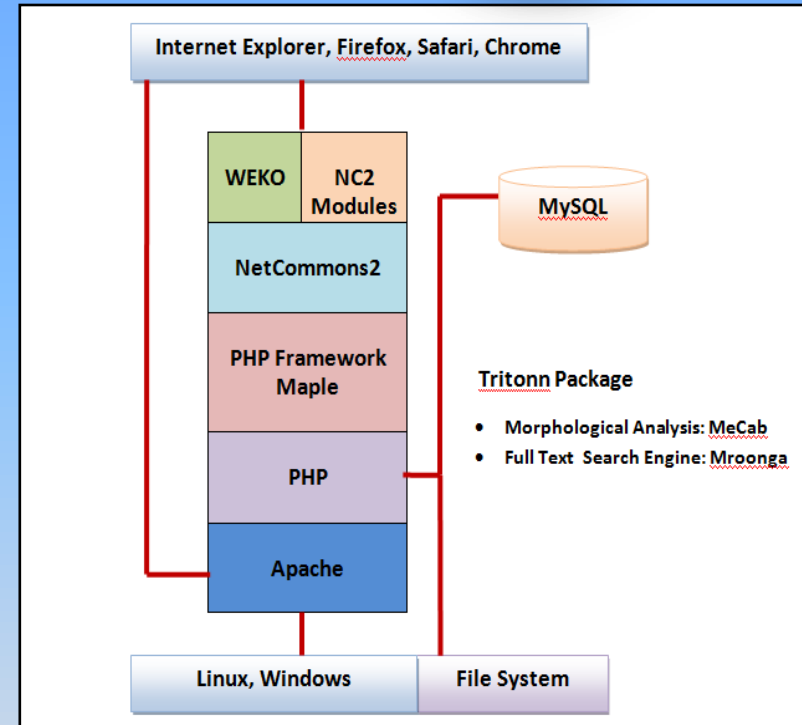
❑ WEKO is developed by the National Institute of Informatics, Tokyo, Japan

❑ Uses AJAX-oriented Content Management System called NetCommons2 (info-sharing system); written in PHP scripting language

❑ OS independent : WOU uses Linux CentOS

❑ WEKO : the repository module with search engine and function tools

❑ MySQL : content storage; compliant to OAI-PMH protocol for metadata harvesting



[Adapted from Yamaji, 2014]

Portal #1 : WOU Institutional Repository

(<http://weko.wou.edu.my>)

The screenshot shows the WOU Institutional Repository (WEKO) portal. The header includes the Wawasan Open University logo and the text "wawasan open UNIVERSITY the people's university". The main title is "OER® REPOSITORY" with the subtitle "An online collection of the University's Open Educational Resources (OER), learning objects metadata and other learning materials output".

Annotations highlight specific features:

- 2. Webpages modules - Header, Side-bar, Footer**: Points to the top navigation bar, the left sidebar with filters, and the right sidebar with menu and resources.
- 1. WEKO modules – Search engine, Index trees, Index-item lists, Languages (10), Results display, LO metadata, Ranking**: Points to the search bar, the language filter, the subject classification filter, the item list, and the search results display.

The interface includes a search bar, a language filter (English), a subject classification filter, and a list of items. The total number of items is 368. The right sidebar contains a menu, what's new section, and resources.

FIGURES (Oct 2015)

368 learning objects deposited to-date

- 31,292 views count
- 18,671 downloads count

Collaborative open knowledge platform

- The WOU institutional repository on OER allows academic library to expand WEKO boundary
- The library has successfully developed another federated repository network called **OER@AsiaHub** for the OER Asia communities
- Aims to generate wider participation from open access communities in practice to contribute their resources - sharing and reusing

Collaborative open knowledge platform



OER@AsiaHub

to join

GLOBE

(Global Learning Objects Brokered Exchange)

OER Asia - <http://oerasia.wou.edu.my>

Feasibility analysis of WEKO

❑ A measure of how beneficial and practical WEKO system to the library and WOU

Technical

- Application is easily developed
- Practical solutions
- Support available from Japan

Operational

- Problems and solutions workable
- Interoperability between different systems

Economic

- Cost-savings
- Hardware and system maintenance (ITS)
- Librarian's time to develop content

Schedule

- Deadlines can be met

Facilitating WEKO challenges

4. Copyright



1. Application - Japanese language



5. Quality assurance – Social and technical values

3. Standardised metadata

- OAI-PMH* compliant
- Network interruption

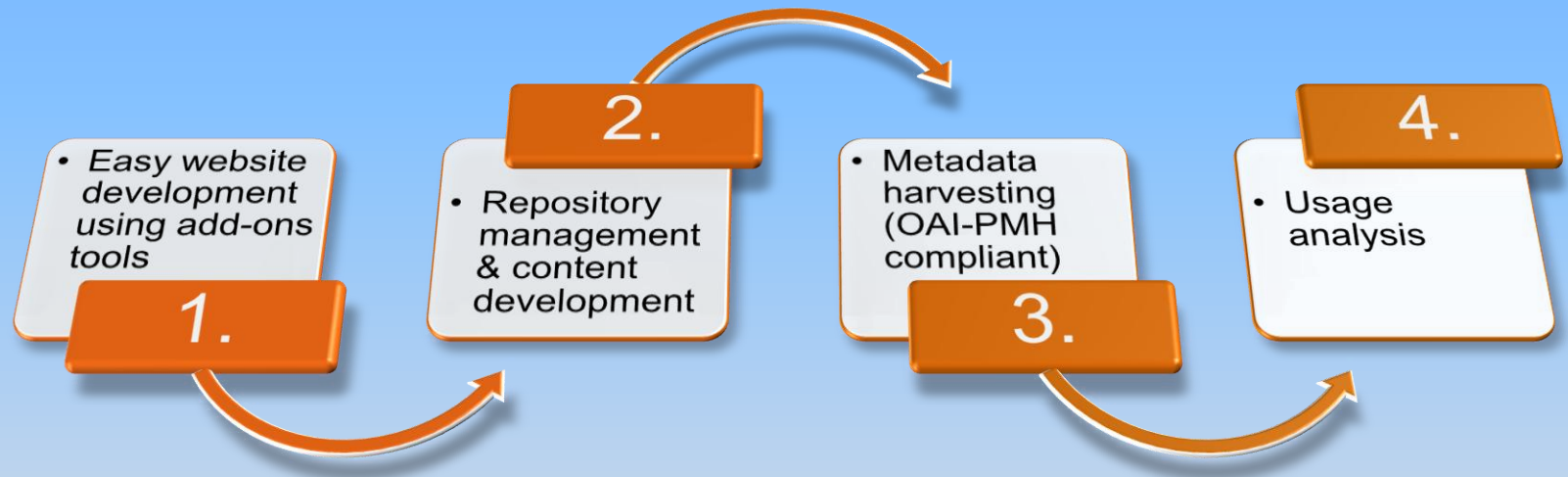


2. Content recruitment and sustainability

* OAI-PMH : Open Archives Initiative Protocol for Metadata Harvesting

Discussions

- 4 important aspects of WEKO in development of repositories on OER



- Development of OERs using open source software creates an opportunity for librarians to assert their knowledge - we know about institutional repository, metadata, copyright issues

Future directions

- Moving forward – To increase the open access Learning Objects metadata from other institutions to the **OER@AsiaHub** repository
- Participate into the GLOBE collaboration network [<http://globe-info.org>]
- We hope to further promote more academic libraries with repositories to participate in support of UNESCO OER movement – i.e. *“OER provides teachers and learners with high quality teaching and learning materials that allow for free use, adaptation, and distribution” (UNESCO)*



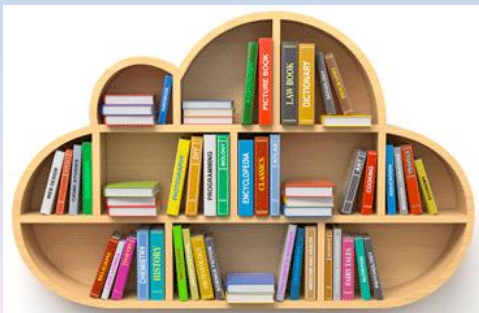
Impact

- Open access repositories development has increased **institutional visibility** e.g. OER movement development
- Enhanced new professional challenges for librarians in the field of :



Conclusion

- This research project has showed that using the Japanese OSS model, WEKO indeed can be adopted by other institution libraries – it can fulfill the library's requirements
- Easy to install, develop and maintain; Costs-saving
- Experience gained is useful and WEKO is comparable with other open source systems
- WEKO can serve as a model for future opportunities



*Academic libraries
transform from
custodian of printed
books roles to open
access publishing*



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Thank You !



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