Utilizing Pure: The Kyushu University experience

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Kyushu University (KyushuU)’s Office of Institutional Research established to improve research strength and international competitiveness in April 2016.

Board of trustees: Decision-making process

Provide evidence based strategy

IR office: Data collection, analysis, research, and visualization
My background

Psychoacoustics

Interaction between auditory and visual information

Interaction of nonacademic staffs and academic ones

Interaction of systems (Pure, Q-RADeRS and other systems)
KyushuU’s Office of Institutional Research

Supplied data to board of trustees and stakeholders.


Data analysis

IR office website
Relieving the work load for academic staffs to correspond to the statutory disclosure obligation of educational and research activities

**Examples of Activities**

*Research Intelligence Solutions: Visualizing & Consolidating Research Activities through SciVal and Pure (in August, 2016).*

**Database**
- Scopus
- CiNii
- PubMed

**Educational and Research Activities Database**

**Pure Admin + Pure Portal**

**Transferring Educational Activities**
- Link mutually
  - Q-RADeRS
  - Researcher’s Activity Development & Report

**Importing Publication Information by Import Module**
- Scopus Database
- Educational Activities

**Transferring Publication Information**
- Transferring Researcher’s Activities

**Transferring Educational Information**
The purpose of this presentation

How are we using Pure?

What effect have we had?
Outline

1. Pure access analysis

2. Research performance analysis using Pure

3. Connecting Pure and KyushuU’s researcher database via Pure API
Section 1

Pure access analysis
Background

Timeline for implementing Pure at KyushuU.

Admin: Account set up

Preliminary phase

2017 March

Portal: Campus only access

Admin site usage survey

October

Each faculty member had to confirm that the information was accurate.

Percentage of faculty member logged in: 10%
Actions to increase usage

- Send **E-mail reminder** (from executive) to those who had yet to log into Pure (about 2,000 staff)

- Hold **seminars and faculty development (FD)**

- Produce and distribute **flyers**

- Call on faculty members to login and confirm information about achievement on the admin site at meetings
Seminar and Faculty Development

held several times a year periodically

- Faculty Development (FD) dedicated to particular departments
- Seminar for all faculty members, students

By dissemination of Pure inside campus, we tried to gather users.
Flyers

For young researchers

For students

Explains how to use Pure for students, young researchers, and professors
Flyers in cafeteria
Admin site usage status
currently about 60% of the entire faculty use Pure

Number of users every 2 weeks
Portal site access status: campus only access stage

During the campus only access, usage was minimum.
October 2017: portal site’s outside campus access –

**Actions to increase usage**

- “Kyushu University researcher’s database” and Pure **mirror link**
  - 120,000 access / month

- Links to Pure were created on other sites such as the IR office website etc.
Portal site access status: Result

About 45,000 sessions from 173 nations (2, Oct, 2017 – 8, Mar, 2018)

About 15,000 visitors per 1 month
Positive side effects

Increasing the access to “KyushuU’s researcher database”

Up more than 10% (about 15,000 visitors) from the same month last year

It is assumed that people who visited Pure accessed “KyushuU’s researcher database” as well.
Section 2
Research performance analysis using Pure
Research performance analysis

“Analysis on demand”
Responding to requests from executives and faculty members

For example,
- Energy research analysis
- Diversity analysis in KyushuU
KyushuU Platform of Inter/Transdisciplinary Energy Research (Q-PIT)

3 Collaborative Research Projects
(1) Renewable Energy Utilization
(2) Future Energy Management
(3) Future Energy Society

3 Transdisciplinary Projects
(4) Global Energy Research Alliance
(5) Future Society Think-Tank Research
(6) Transdisciplinary Energy Science R&E
Specifically, papers with keywords relevant to energy

- Hydrogen
- Fuel cells
- Solid oxide fuel cells (SOFC)
- Refrigeration
- Electrocatalyst
- Organic light emitting diodes (OLED)
- Nuclear fusion
- Wind power
- Geothermal

Publication 1st, Citations 1st, FWCI 1st in Japan

Bubble size: publications

KyushuU (554)
Kyoto (190)
Tokyo (249)

Sources: SciVal (Nov. 2017)
KyushuU’s Energy research

Organic light emitting diodes (OLED)
Solid oxide fuel cells (SOFC)

Trend analysis
Exclude papers with more than 1,000 authors from the analysis.
Diversity in KyushuU

KyushuU’s mission: **Increase diversity** in the research environment

IR office: Analyze research performance in the context of gender

Method of analysis
- Combine research data and gender with **human resource data** (Use Precise gender information)
- Compare research activity between men and women throughout the entire university and between each department
Increased rate of publications by women is higher than that of men.

Diversity in KyushuU

Publications per Faculty

1996 – 2000

Women: 1.21

Men: 4.50

2011 – 2015

Women: 6.03

Men: 10.50

Increased rate of publications by women is higher than that of men.
Connecting Pure and KyushuU’s researcher database via Pure API
Relieving the work load for academic staffs to correspond to the statutory disclosure obligation of educational and research activities.
KyushuU Researcher’s Activity Development & Report System: Q-RADeRS

**Problem:**
- Required to fill out a lot of information
- Complicated process to input data

January 2018: **System updated**
Implemented the function to **import data from Pure**

**Monitor and evaluate their activities**
**Partially open to public**

http://hyoka.ofc.kyushu-u.ac.jp/search
Connecting Q-RADeRS and Pure Timeline

**Pure**
- Preliminary phase
- Campus only
- Public (outside campus)
- 2017
  - March
  - August
  - October
  - January
- Specify function and design the system
  - Design user interface
  - Mapping of Pure and Q-RADeRS etc.

**Q-RADeRS**
- Run the new system
Overview of database / Model of database connection

Pure

- Title
- Authors
- Journal
- Year
- Type
- Abstract
- DOI
- Citation
- H-index etc.

API

Q-RADeRS

- Education
- Research
- Social contribution
- University management

Original publications
- Title
- Authors
- Journal etc.
Q-RADeRS’s Screen: import from Pure

Q-RADeRS

The list of publications from Pure

Import

Asia Pacific Conference
Seoul 2018
Connecting Q-RADeRS and Pure Effect

✓ **37 items** (20% of the total “Research” items) were inputted automatically by connecting Q-RADeRS and Pure.

✓ **Save each person 2 hours per person per month** and **reduce the burden and stress** of inputting data

If all faculty use this function, **4,588 hours will be saved** to input data.
Difficulty in developing

- Few precedents of using Pure API in other universities of Japan.

- Mapping Q-RADeRS and the xml available via Pure API
Ongoing Challenges and plans for the future

• Improve operability between Q-RADeRS and Pure

• Modifying the programs for API update
Section 4

Conclusion
Conclusion

We use Pure not only for our executives but also for our faculty members and students.

How are we able to achieve positive outcomes using Pure?

Passions
Collaborations
Thank you for your attention!

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