A usage-centered approach to the promotion of institutional repositories

IR INITIATIVE AND SCHOLARLY COMMUNICATION IN JAPAN

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Today's contents

- What does DRF want to do?
- DRF's basic strategies for IR sustainability
- Four usage-centered approaches:
 - Public relations tactics for IR awareness & visibility
 - IR cures ILL : IRs to replace ILL/DD for domestic scholarly communication in Japan
 - AIRway: seamless integration of licensed and open access online resources
 - ROAT: Repository Output Assessment Tools to standardize download statistics
- Future prospects

What is DRF (Digital Repository Federation)?

Formed as a collaborative initiative by librarians in Japan in 2006 with financial supports of Cyber Science Infrastructure (**CSI**) of the National Institute of Informatics (**NII**) to support digital repository projects

Membership of **86** libraries of universities and research institutions as of November 2008

Aiming at promoting IR in Japan by forming **an IR community** for the improvement of scholarly communication in Japan

Activities include communication(Wiki, Mailing List, Workshops, Int'l conference etc) and **Project Clusters** carried out and coordinated by core members

Usage leads to Sustainability

Among its basic ideas is:

that the enhancement of usage of IR should lead to the sustainability of IR When things are not used, they are forgotten, they are neglected, they are unsupported, they are unfunded, they are unstaffed, and finally they will be gone Advocacy alone does not appeal!! You have to show that it is being used, and that therefore it is useful

Upload just in time

-Examples of PR Tactics by Kyoto-

Case 1:

- Prof. YAMANAKA, CELL vol.131 no.5
- Induction of Pluripotent Stem Cells from Adult Human Fibroblasts by Defined Factors (an article on iPS cells)

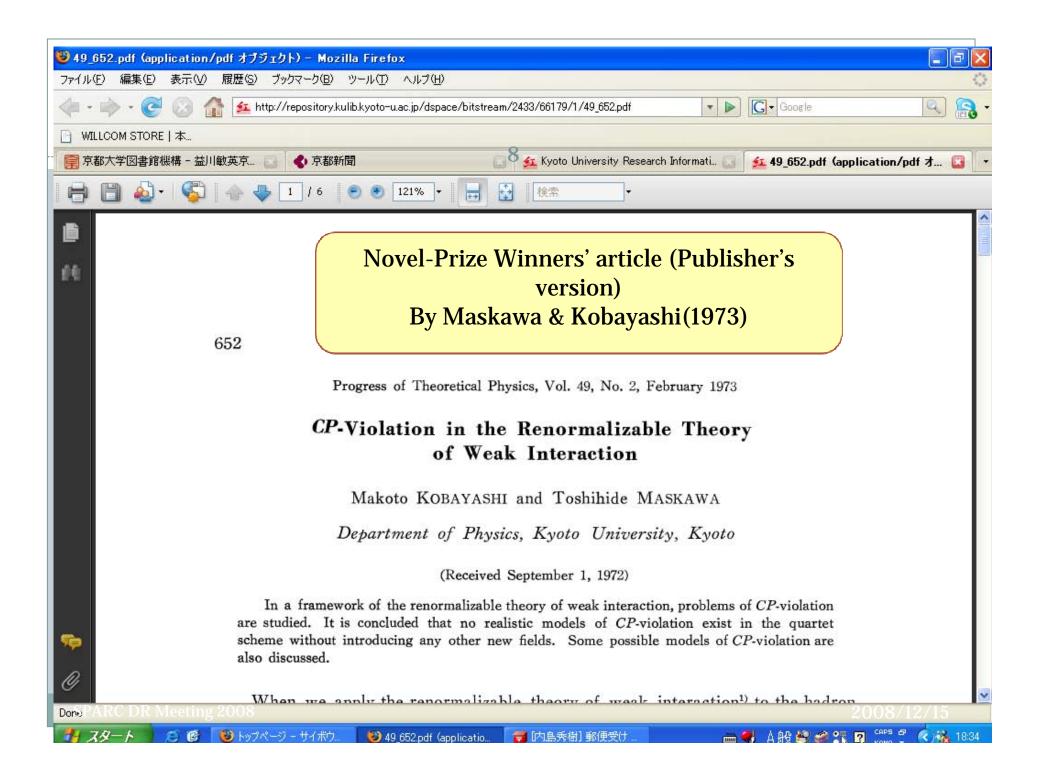
Case 2:

- 2 Nobel Prize-Winning physicists' articles (Publisher Version)
- Professors emeritus of Kyoto , Toshihide Masukawa and of KEK, Makoto Kobayashi, who once worked in Kyoto
- CP-Violation in the Renormalizable Theory of Weak Interaction, *Theory of Theoretical Physics* 1973 49-2 p.652-657

KURENAI(Kyoto's IR) Top 30 accesses from domains outsides JP

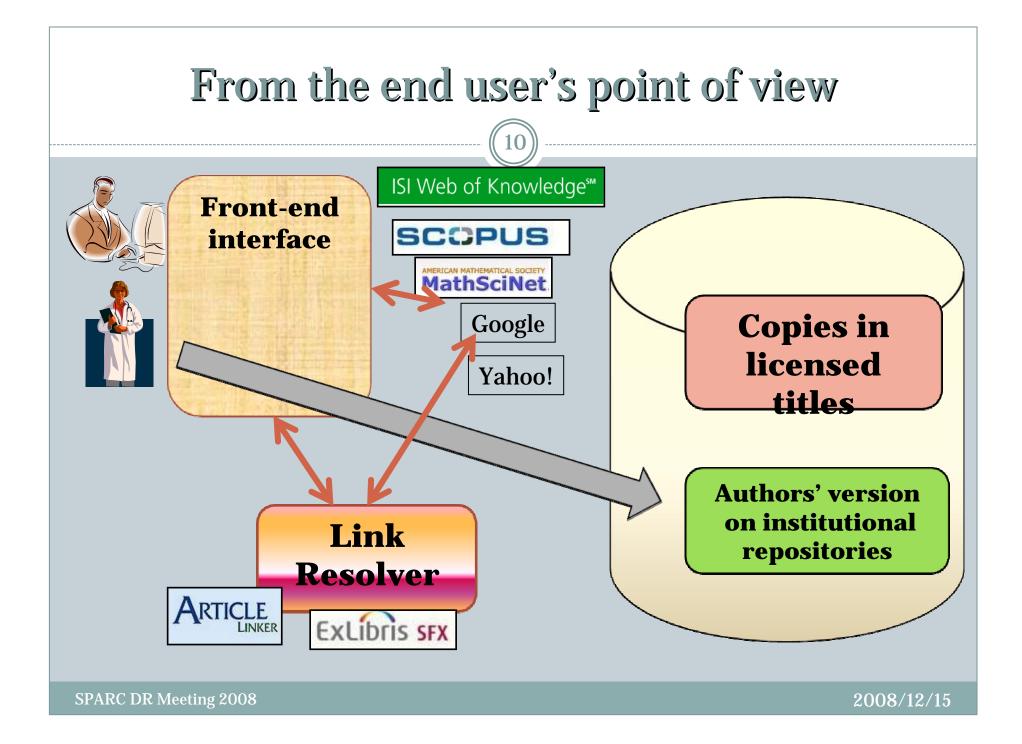
アクセス	タイプ	掲載誌等				
430	Kiyo	The Review of Physical Chemistry of Japan; 22(1), 4-8				
325	Kiyo	東南アジア研究; 38(4), 481-511				
296	Article	Cell; 131(5), 861-872 Professor Yamanaka's article on iPS cell				
293	Kiyo	The Review of Physical Chemistry of Japan; 47(1), 12-24				
259	Kiyo	The Review of Physical Chemistry of Japan; 49(2), 59-69				
211	Research Report	京都大学大学院経済学研究科Working Paper; 73				
238	Thesis					
226	Kiyo	東南アジア研究; 29(4), 468-485				
221	Kiyo	東南アジア研究; 33(3), 303-316				
213	Kiyo	The Review of Physical Chemistry of Japan; 44(2), 93-97				
212	Kiyo	東南アジア研究; 38(3), 271-446				
208	Kiyo	東南アジア研究; 30(4), 401-419				
205	Kiyo	東南アジア研究; 22(2), 197-213				
	Kiyo	The Review of Physical Chemistry of Japan; 49(2), 120-122				
200	Conference Paper	Proceedings of the International Symposium on SEASTAR2000 and Bio-logging Science (The 5th SEASTAR2000 Workshop); 52-63				
195	Thesis					
185	Kiyo	The Review of Physical Chemistry of Japan; 44(1), 11-24				
183	Kiyo	京都大学医療技術短期大学部紀要; 19, 1-9				
174	Book					
171	Kiyo	京都大学医学部保健学科紀要:健康科学;2,89-106				
169	Kiyo	The Review of Physical Chemistry of Japan; 44(1), 1-10				
166	Research Report	藤月会論集;16				
165	Kiyo	東南アジア研究; 22(3), 307-315				
	Kiyo	京都大学大学院経済学研究科Working Paper; 71				
161	Thesis					
160	Kiyo	京都大学文学部哲学研究室紀要: PROSPECTUS; 9, 69-84				
SPARO	DRsMeeting	2008 2008/12/15				
- 100	PRESISCUTTS					

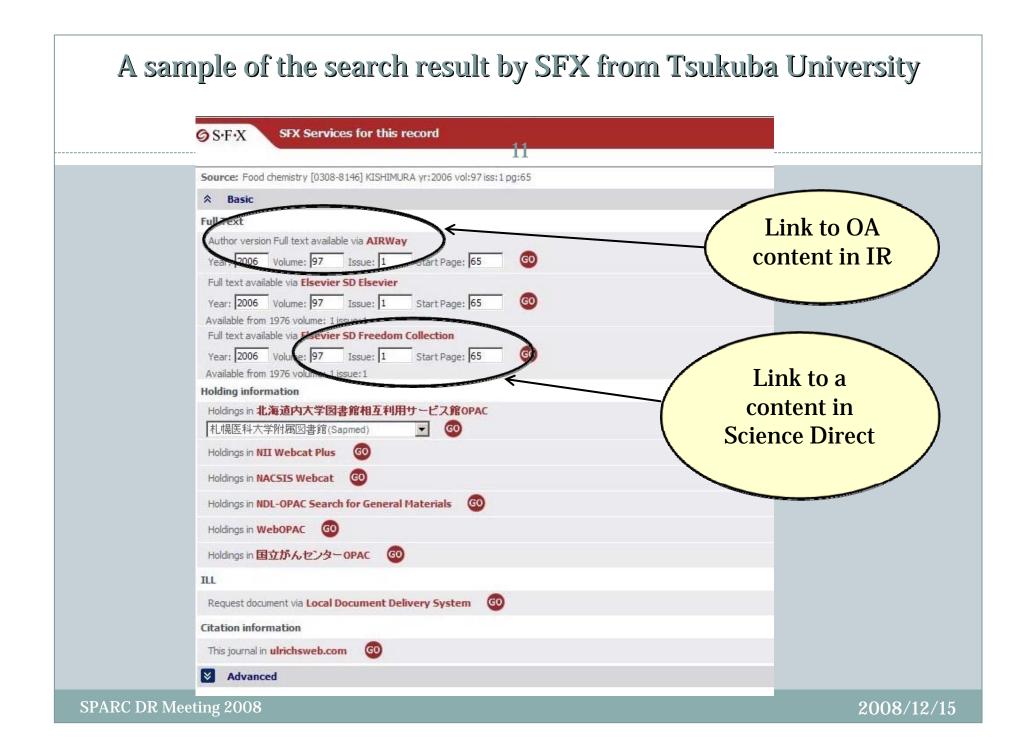


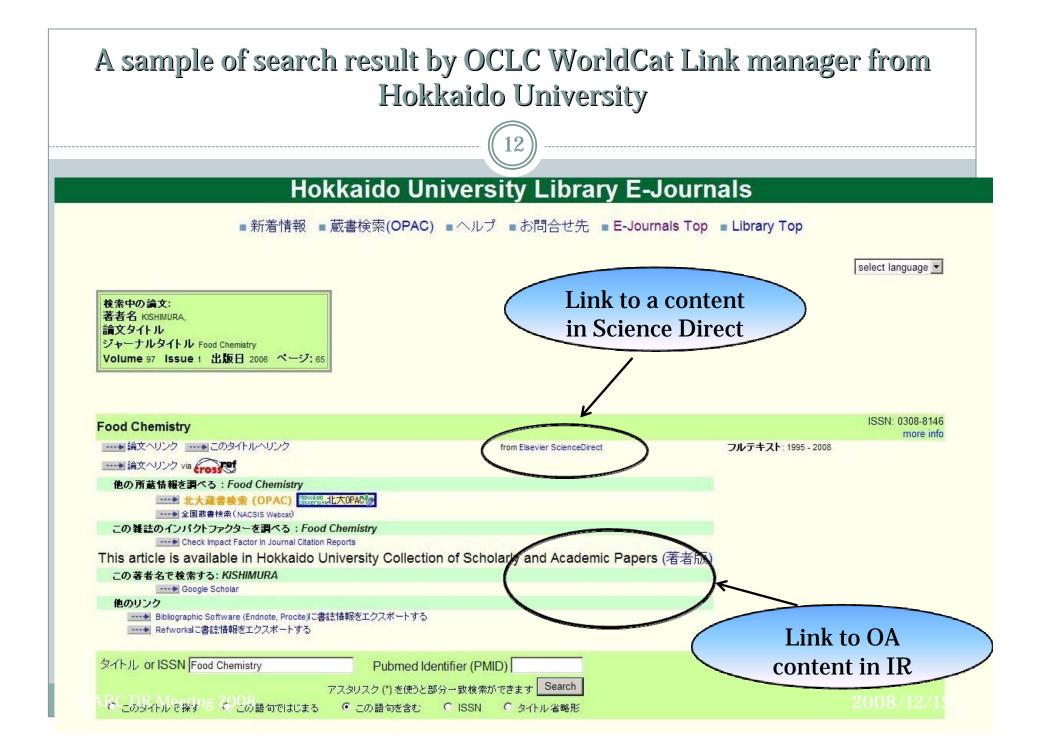


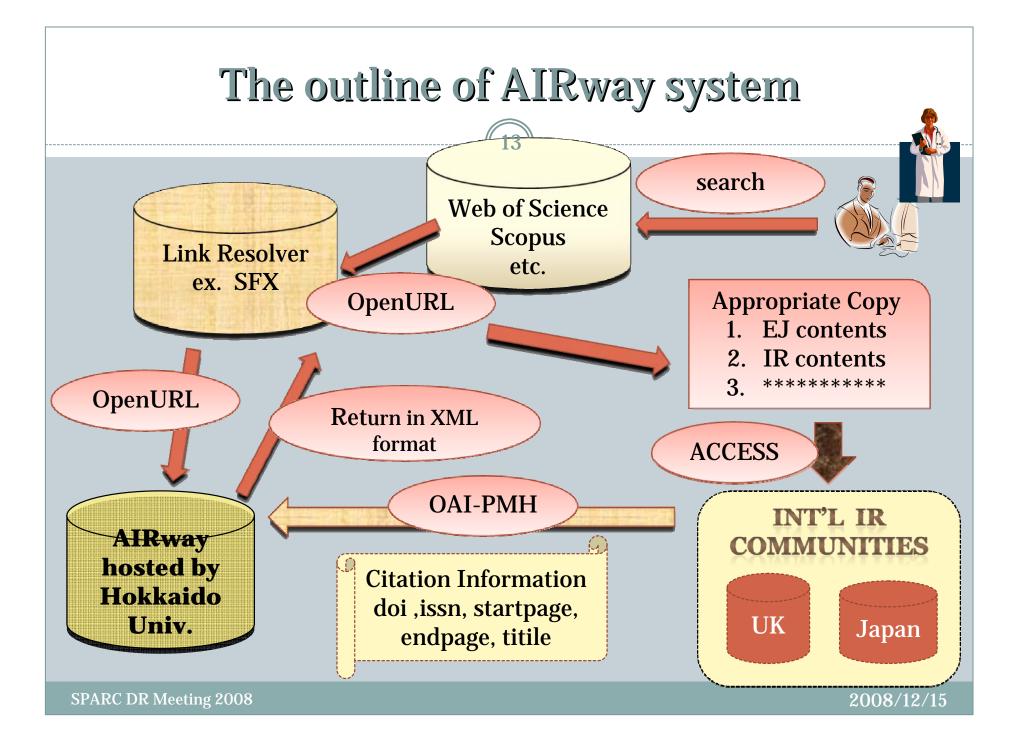
AIRway: the idea

- AIRway helps resolve OpenURLs of OA documents on IR, thereby seamlessly incorporating repository content into users' search experience
- Link resolvers have come to be commonly used in research libraries, almost unbeknownst to campus users, so the AIRway server can help them improve their function of offering appropriate copies to the benefit of users
- Users will be automatically led to some copy of the document they want



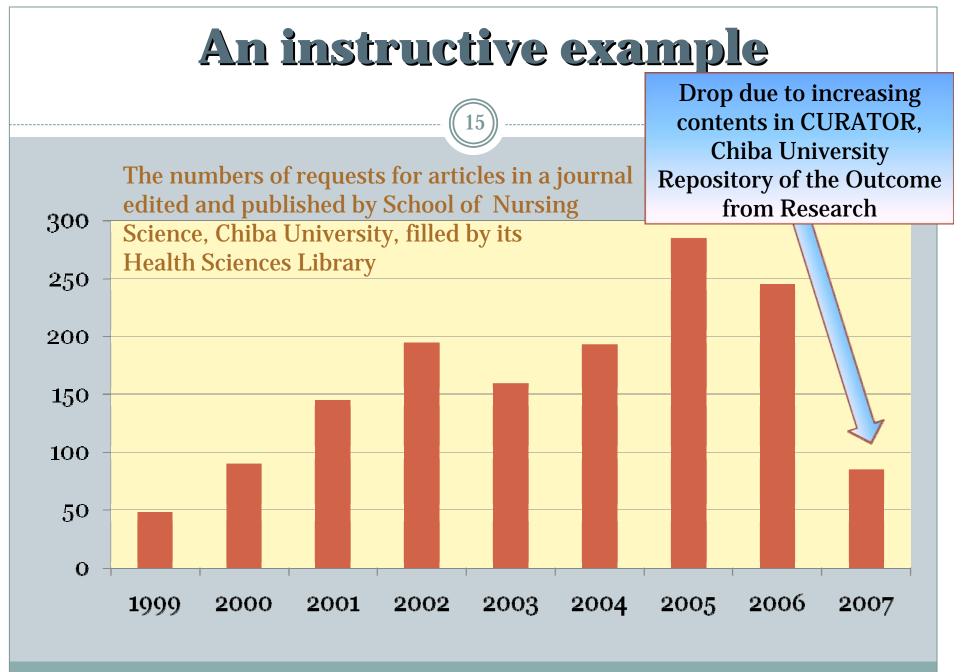






IRs replace ILL

- A Japan-specific situation, maybe
- ILL requests for photocopies of articles published in major international journals have decreased sharply in the past 7-8 years in Japan, as a result of "big deals" with major journal publishers
 - \circ 660,000(2000) \implies 410,000(2007)
- On the other hand, those for domestic journals published in Japanese have increased!
 - \circ 270,000(2000) \Longrightarrow 520,000(2006)
- ILL of non-returnables is labor-intensive and unrewarding, so this increase is unhealthy
- Findings:
 - Requests are mainly for articles in self-published journals, bulletins, reports etc from universities, research institutes, departments and laboratories
 - Precursory examples show institutional repositories help
- Why not make it pervasive?



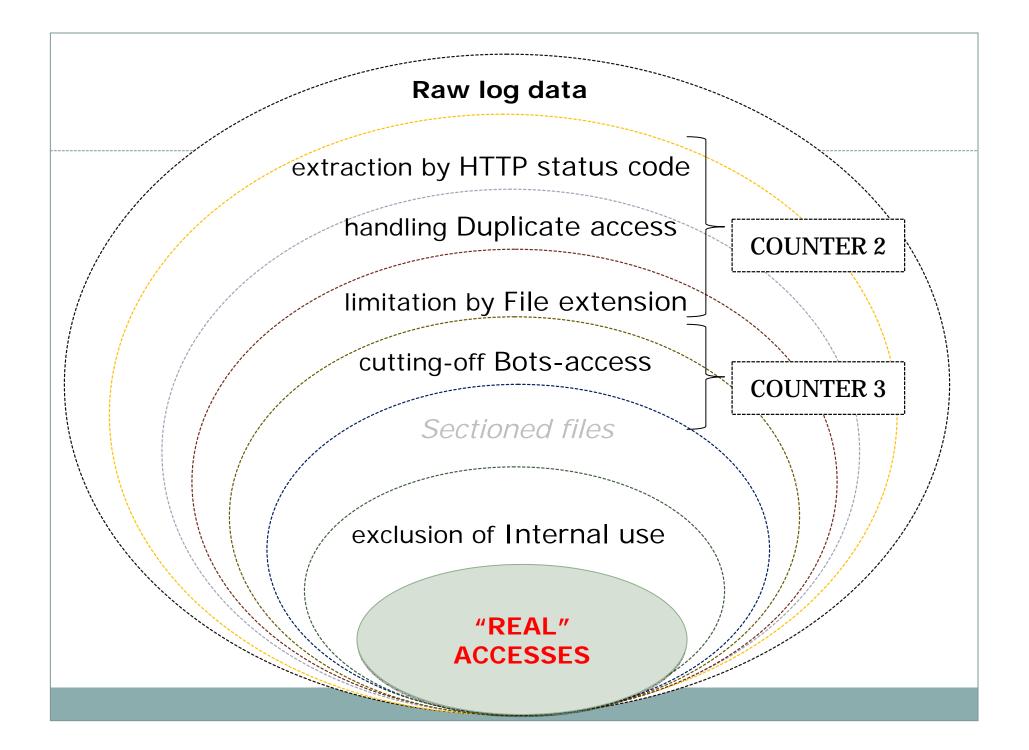
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Standardized statistics of downloads from repositories

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- Core of usage-centered approach
- Rigor in stats warrants the credibility IR, hence need for standardization
- Method for distillation of access logs: complying with "COUNTER Code of Practice;
 - HTTP status code; only 200 and 304 is extracted,
 - Duplicate access within 10 seconds for HTML and 30 seconds for PDF,
 - File extension; e.g. only files having ".pdf ", ".htm" and ".html",
 - Bots-access; cutting-off access from known and unknown robots, crawler etc.,
 - Internal use for development and maintenance, additional item to COUNTER Code
- IR managers can obtain accurate and appropriate access logs to analyze the usage of IR scholarly contents with this standardized method across any IR platform.

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Effects of Filtering: samples from Hokkaido and Kyoto of DRF community

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IR & Access P	eriod	HUSCAP (2008.5-7)	KURENAI (2007.3-2008.8)
Origin	nal Access Log	3,800,814	16,216,116
Selection by	HTTP status codes	3,711,417	15,592,769
Elimination	Google, Yahoo!, MSN	2,771,190	10,149,059
of crawling by robots	Other robots	2,463,002	7,939,328
Selection o	nly by PDF Format	134,973	582,061
Elimination o	of Duplicated Accesses	123,801	486,042
	entifiable by Domain (Reliable Log)	81,458	326,623

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Access analysis by Top Domain									
	HUSCAP		KURENAI						
JP domain	46,541	57.1%	205,765	63.0%					
Other domain (country)	34,917	42.9%	120,858	37.0%					
Total	81,458		326,623						
KURENAI···Indenesia,India, Germany Malasi, Australia HUSCAP ···India, Germany,UK, Italia, Brazil									

Access analysis by referrer										
	HUSCAP		KURENAI							
No referrer	28,005	22.6%	105,453	21.7%						
Inside IR system	33,930	27.4%	111,985	23.0%						
Search Engines	60,726	49.1%	265,784	54.7%						
(Google)	54,629	44.1%	235,599	48.5%						
Other referrers	1,140	0.9%	2,820	0.6%						
合計	123,801		486,042							

Our future plans

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- DRF is more than the four project I presented, so stay tuned for their results
- DRF Project Cluster & Community Activities will continue in cooperation with NII & Learned Societies in Japan
- Analyze the usage of institutional repositories within DRF community in order to evaluate and prove the benefits of IR from the viewpoint of the contents usage by the end-users on the Internet
- International Collaboration with IR communities like DRIVER II for the development of OA
- 2nd DRF International Conference in Tokyo (DRFIC2009)

• Thank you for your attention!

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