



**WORLD BANK GROUP**  
INTEGRATED SERVICES

# Case study in responsive (re)design for DSpace

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# Introduction

The Open Knowledge Repository is The World Bank's official open access repository for its research outputs and knowledge products.



OPEN KNOWLEDGE REPOSITORY

# Audience

A critical audience for the OKR is research groups in developing countries, where mobile access is significant.

In Uganda, more than 95% of internet connections are mobile.

# Non-responsive design

The screenshot displays the Open Knowledge Repository (OKR) search interface. The page is cluttered and non-responsive, with a large search bar at the top and a complex filter section below it. The search results are displayed in a list format, with each item showing a thumbnail, title, author, date, and abstract. The layout is not optimized for smaller screens, with elements overlapping and text being difficult to read.

**Search Interface Elements:**

- Search Bar:** A large search input field with a search button.
- Filters:** A section titled "Filters" with a sub-header "Use filters to refine the search results." It contains "Current Filters" and "New Filters" sections. The "Current Filters" section includes filters for Topic (Private Sector Development, Environment), Region (Europe), and Publication Date (2010, [2010 TO 2014]). The "New Filters" section includes a filter for Title (Contains).
- Statistics filter:** A section titled "Statistics filter" with a "Show statistics" link.
- Search Results:** A section titled "Showing 5 out of a total of 5 results. (0.0060 seconds)" with a "Showing items 1-5 of 5" indicator. The results are listed as follows:

Title	Author	Date	Abstract
Better Regulation for Higher Growth : Bulgaria's Business Regulation - Achievements and Recommendations	World Bank	2010-11-01	Removing regulatory obstacles that create barriers to business is a major objective for economic policymakers. There is broad understanding among policymakers and development practitioners ...
Bulgaria - Administrative and regulatory barriers to business	World Bank	2010-11-01	The present report on the Administrative and Regulatory Barriers to Business is part of an ongoing World Bank analytical and advisory support to the Government of Bulgaria in the area ...
Poland - Convergence to Europe : The Challenge of Productivity Growth - Investment Climate Assessment	World Bank		

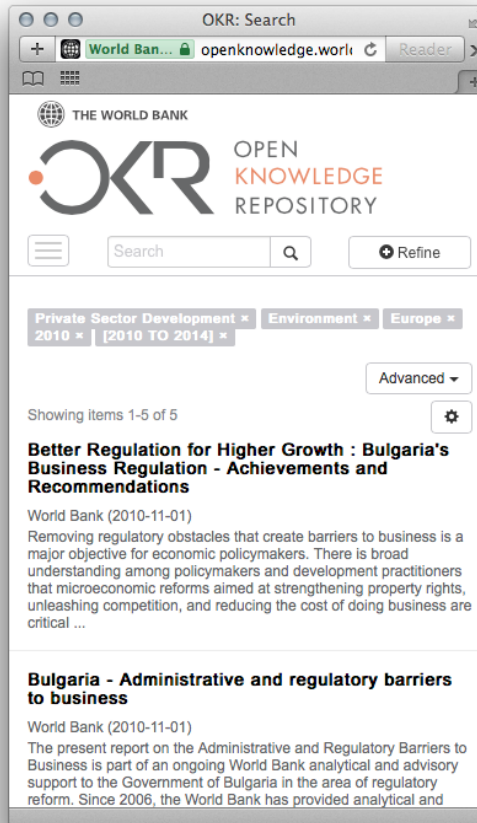
# Non-responsive design (phone)



# New design

The screenshot displays the OKR Open Knowledge Repository website. The header features the OKR logo and the text "OPEN KNOWLEDGE REPOSITORY" with a search bar. The main content area is titled "Search" and shows a list of search results. The left sidebar contains navigation links such as "Browse the OKR", "Author profiles", "Site Statistics", "Resources", and "Stay Connected". The right sidebar displays a "Filter" panel with categories like "Author", "Date", "Topic", "Type", "Keyword", and "Region". The search results list includes titles like "Better Regulation for Higher Growth : Bulgaria's Business Regulation - Achievements and Recommendations", "Bulgaria - Administrative and regulatory barriers to business", "Poland - Convergence to Europe : The Challenge of Productivity Growth - Investment Climate Assessment", "Bulgaria - Ex-post impact assessment of the act on limiting administrative regulation and administration control on economic activity", and "Albania - The New Growth Agenda : A Country Economic Memorandum". The footer contains the World Bank Group logo and navigation links.

# New design (phone)



# New design strategy

## *Simplify*

### Flat, neutral design

- ✦ Less image heavy

### Larger, higher resolution images for cover thumbnails

- ✦ Draw focus to content

### Revise layout to give a natural hierarchy to content

- ✦ Assists in the reordering of content sections in responsive UI



# Responsive UI strategy

Collapse controls according to display size

Main navigation

✦ Browse by, etc.

Facets

Collection list

# Recommendations

## Functionality

- ✦ Don't dumb down functionality based on device type, as this will dictate the user's behavior

## Navigation

- ✦ Increase size of buttons and margins of links for mobile UI

## Simplify the interface

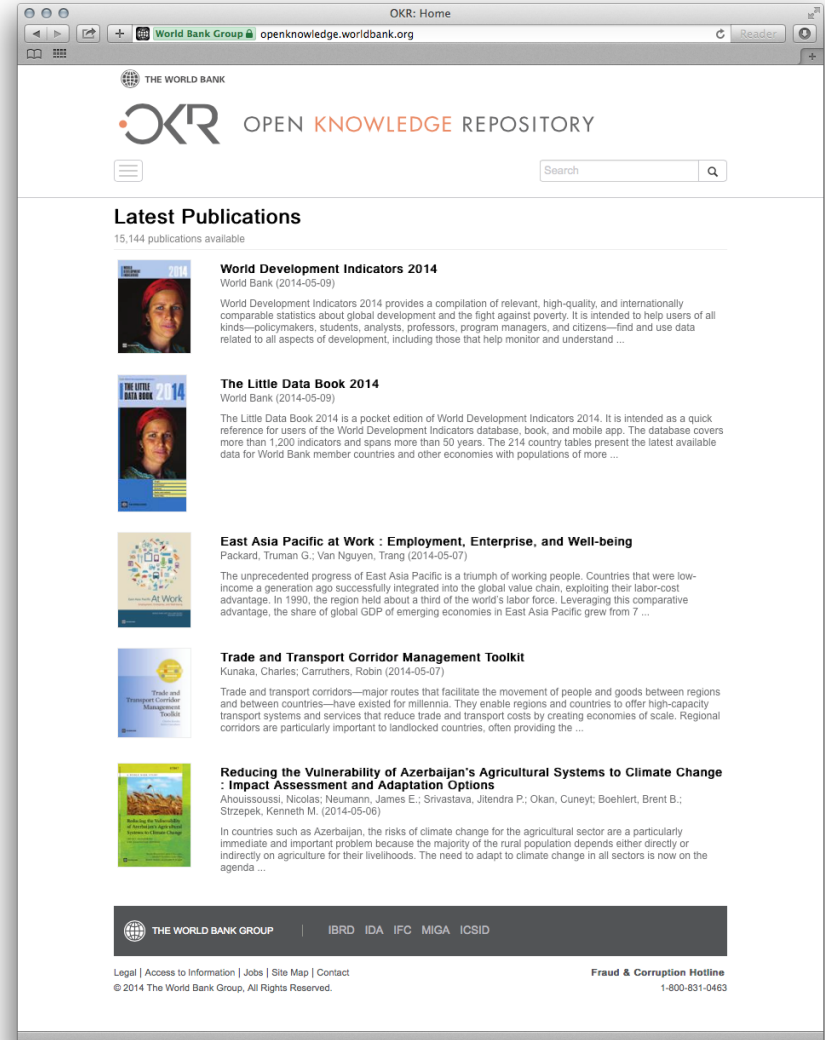
- ✦ Maintains consistency and eases the user's transition across different UI resolutions

# Main navigation

## Tablet

✦ Portrait orientation

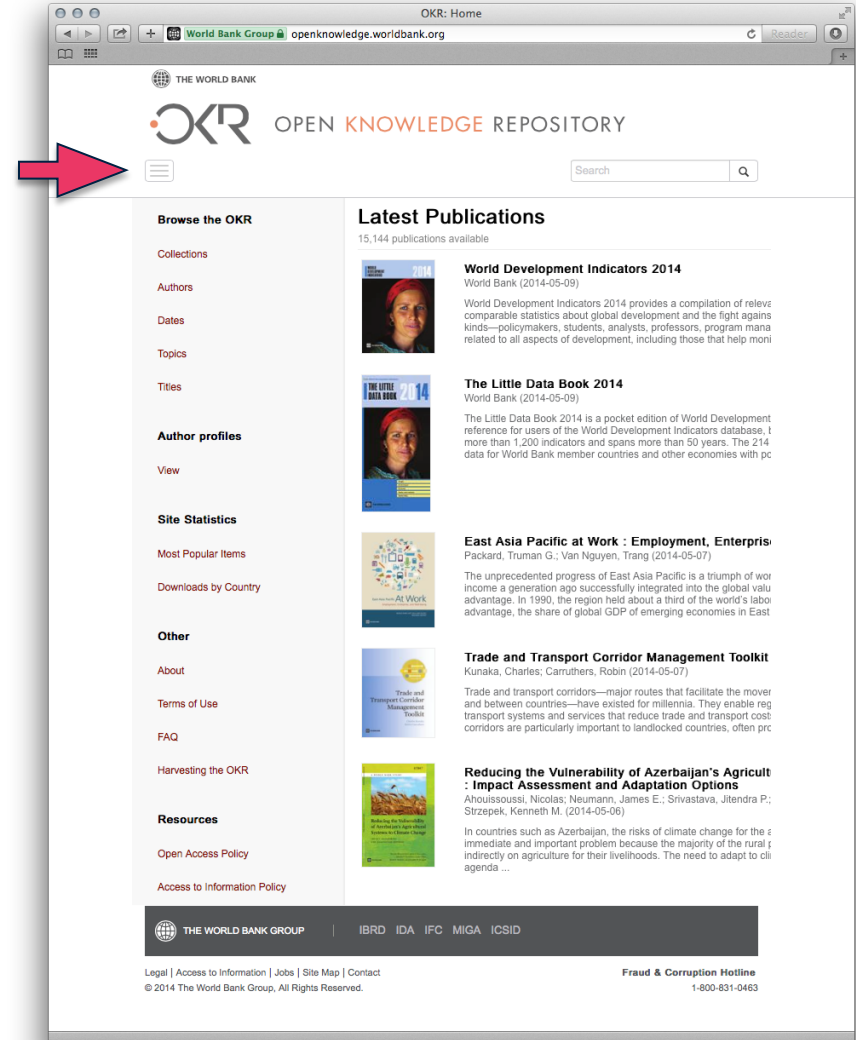
✦ Navigation collapsed



# Main navigation

## Tablet

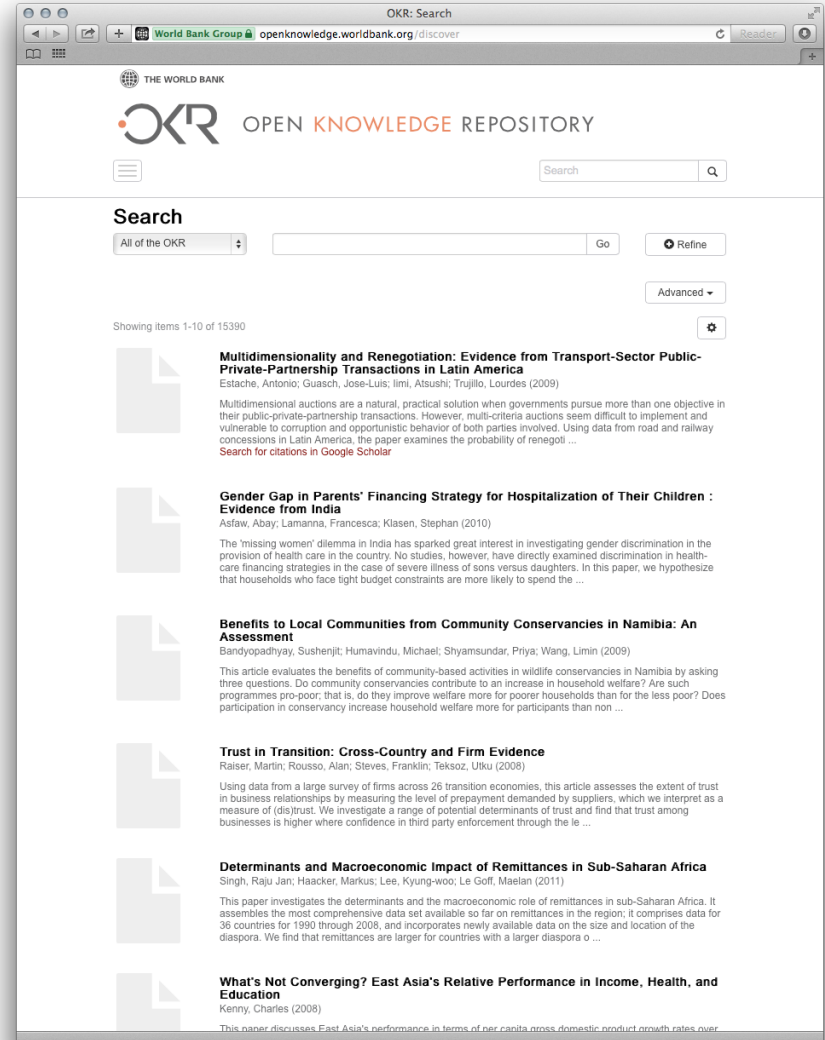
- ✦ Portrait orientation
- ✦ Navigation expanded



# Facets

## Tablet

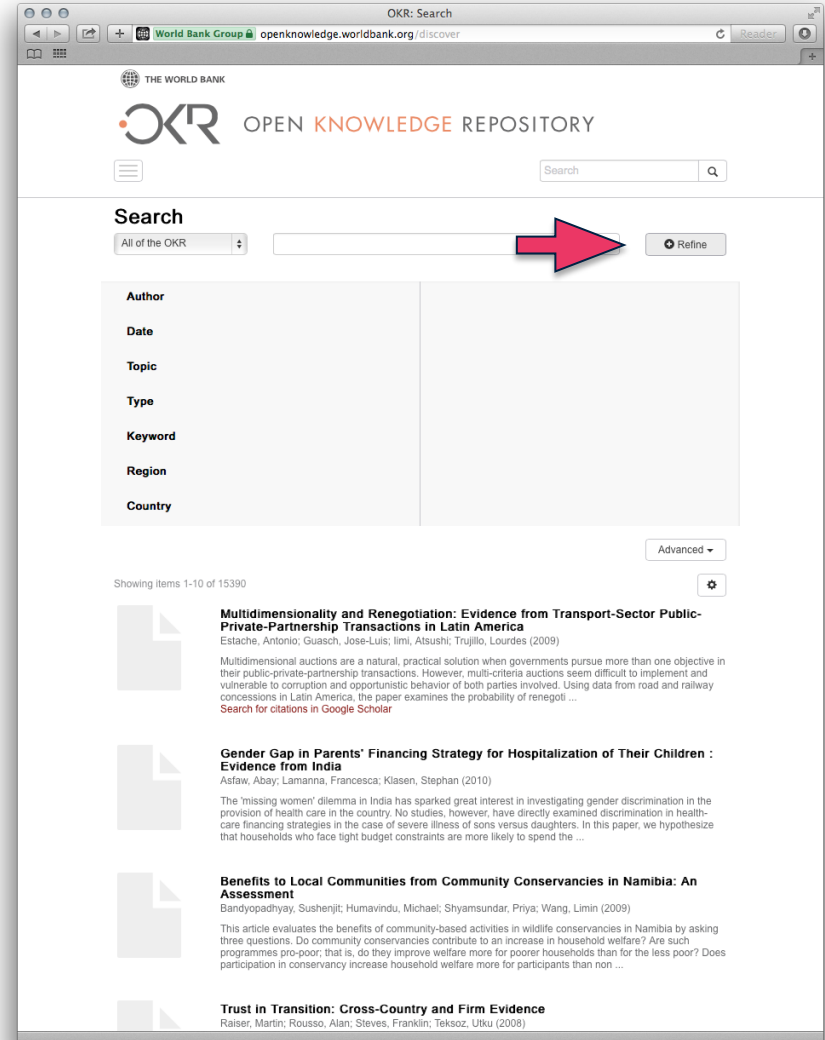
- ✦ Portrait orientation
- ✦ Facets collapsed into “Refine” button



# Facets

## Tablet

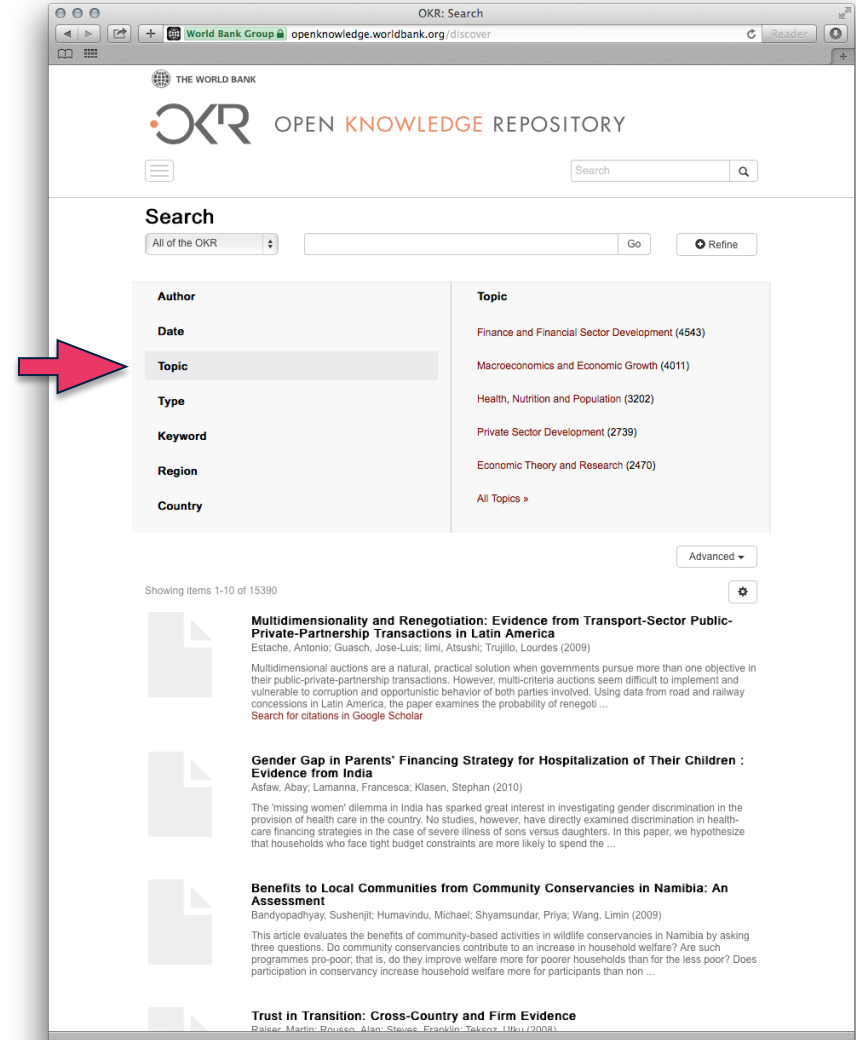
- ✦ Portrait orientation
- ✦ Facets collapsed into “Refine” button



# Facets

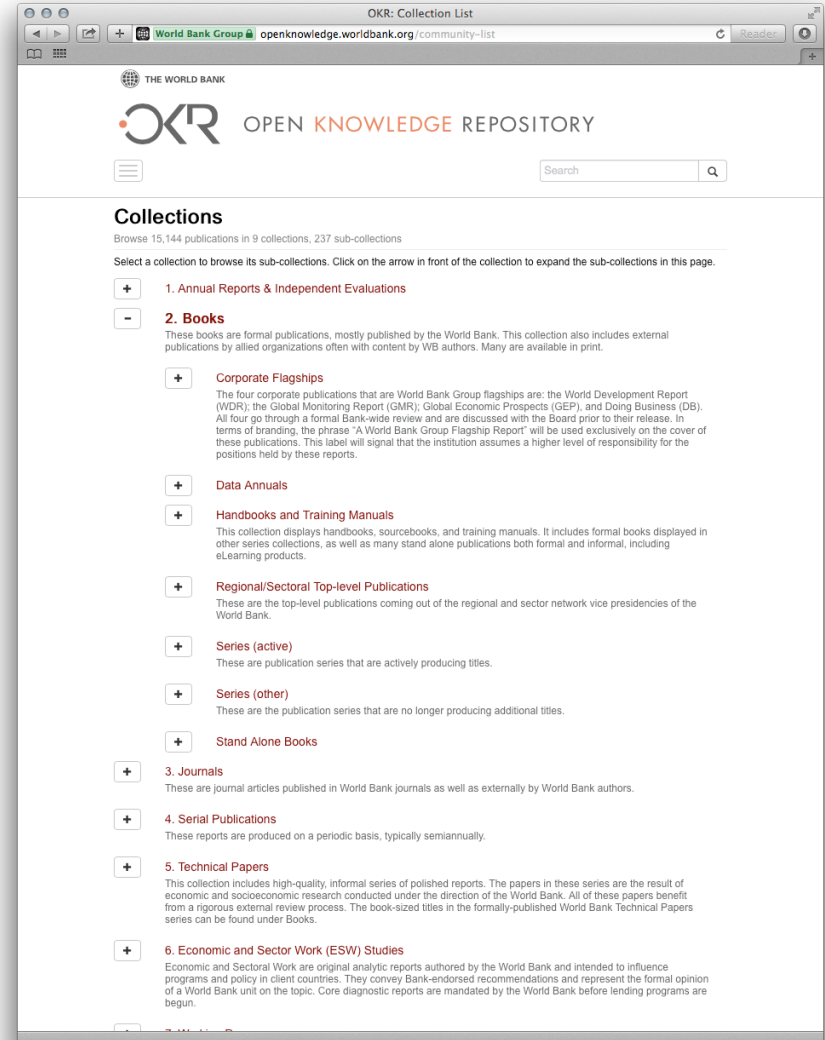
## Tablet

- ✦ Portrait orientation
- ✦ Facets collapsed into “Refine” button



# Collection list

- ✦ Includes collection descriptions
- ✦ Alternate layout for phones



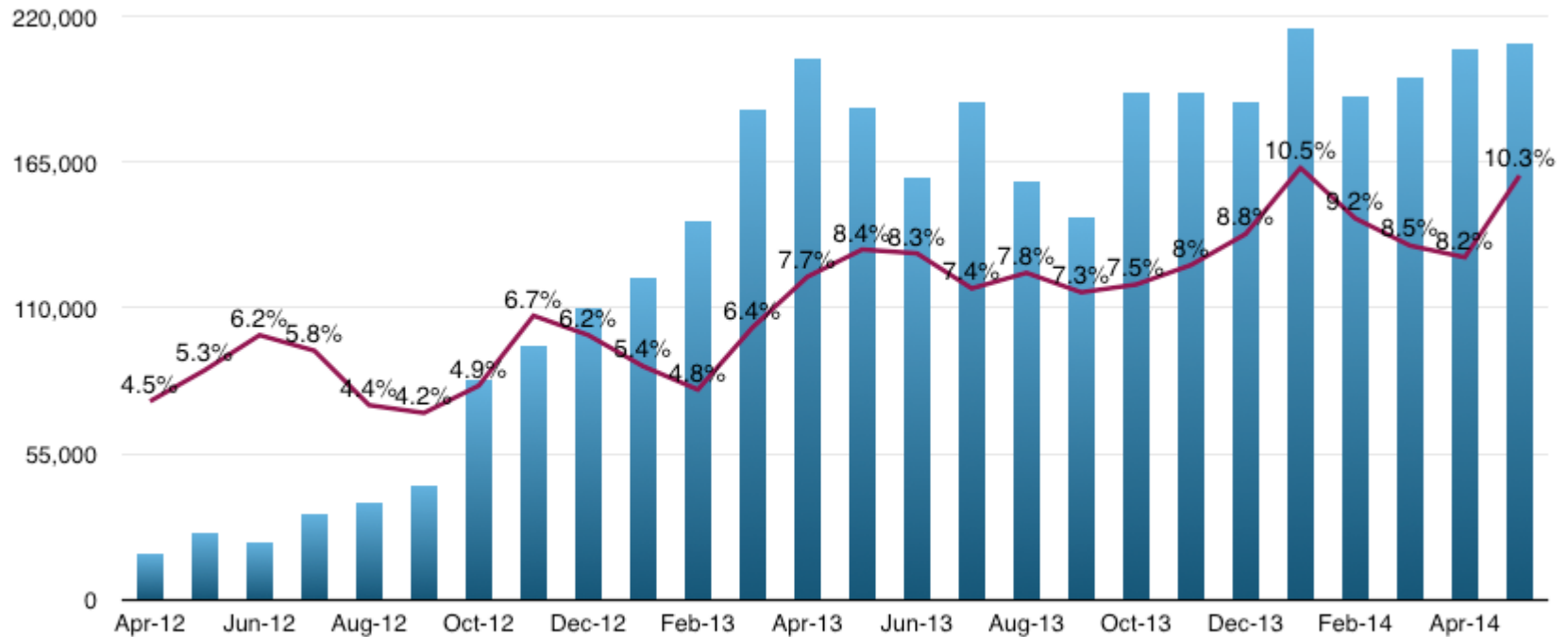


# Item record

- ✦ Position bitstream download links to top left
- ✦ “At a glance” metadata in left column
- ✦ License information under title

The screenshot shows a web browser window displaying the Open Knowledge Repository (OKR) page for the 'World Development Report 2013 : Jobs'. The page features the World Bank logo and the OKR logo at the top. Below the title, there is a search bar and a 'Reader' button. The main content area includes a thumbnail image of the report cover, a 'Download' section with links for various languages and formats (English PDF, Text file, and overviews in multiple languages), a 'Published' date of 2012-10, 'Author(s)' as World Bank, 'Share' options for Facebook, Twitter, and LinkedIn, 'Metadata' options to show full item record metadata or download as XML, and a 'Related items' section. A large block of text provides a detailed summary of the report's content, discussing job creation, economic growth, and the challenges of unemployment in developing countries. The page also includes a 'Citation' section with the report's title, year, location, and license information, and a 'URI' section with the handle URL.

# Graph of mobile traffic % and PDF downloads



# Future

## Include filetypes that are mobile friendly

- ✦ XML, ePub

## Update statlets to be responsive

- ✦ E.g. 3 months of data for phone, 12 months for tablet etc.

## Improve layout of user controls

- ✦ Contextual layout is even more important for navigation on a phone
- ✦ E.g. the control for filtering should be close to the search results

# Download

The development of the OKR interface is in partnership with @mire and based on Mirage 2.

The source code for the beta is available at <http://atmire.com/website/?q=download-mirage-2>



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Thank you

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