From EPEF to ELICO ROI

**Value perspective**

- **EPEF: 2010**
  - Evidence about usage of big deals in France
  - Evidence about French journal usage specificities

![Graph showing usage trends from 2001 to 2009 for Elsevier, IOP, Springer, Wiley, and TOTAL.](image-url)
From EPEF to ELICO ROI

Value perspective

- ROI ELICO : 2012
  - New research question
    • How e-journals usage impacts researchers publication activity?
  - A french contribution to ROI studies
    • Lib-Value ; Ciber

- Agenda
  - Submitted in June 2012
  - Started in September 2012
  - Final report : December 2013
Study objectives

- Any evidence of relationship between journal usage and impact (publication, citations) ?
  - Variation by subject? By institution type?

- Any evidence of causality phenomena?
  - Evolution in time?
Shaping the study

- **ROI defined as**
  - Publication and impact
    - Articles and citation

- **Sample longitudinal perspective**

- **Combine 2 complementary approaches**
  - Descriptive: Bibliometry
  - Explicative: Econometry
The partners and the data

- **Couperin**
  - The national consortium
  - JR1 reports (Elsevier, Springer, Wiley, IOP)
    - Big Deals costs: no comprehensive and reliable data on expenditures

- **Elsevier**
  - Scopus for bibliometric data
  - Coverage: more exhaustif for french academic institutions
    - HSS fields
    - Language
    - Affiliations issue
      - Scopus Index reliability
        - ((AF-ID("Universite Claude Bernard Lyon 1" 60023578) OR AF-ID("Universite de Lyon 1 Faculte de Medecine Alexis Carrel" 60029483)) OR ((AFFIL(«lyon AND 1») OR AFFIL(«lyon1») OR AFFIL(«lyon AND i») OR AFFIL(«lyoni») OR AFFIL(ucbl))) OR ((AFFIL(ucb) OR AFFIL(«claude AND bernard»)) AND AFFIL(lyon))) AND (LIMIT-TO(PUBYEAR, 2007))
Exploratory approach

- **Two level analysis**
  - Macro Analysis: national level, 68 institutions
  - Micro Analysis: sample level, 13 institutions

- **Different variables, “Proxys”**
  - Usage, production, citation, scientific domain, ESGBU library statistics

- **Develop indicators to understand the mechanisms of ROI**
  - Based on h-Index method
BIBLIOMETRIC ANALYSIS AND RESULTS
Universities by usage
Cross the variables

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# Thematic indexation

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Usage Concentration

![Graph showing usage concentration from 2003 to 2009 with distinct curves for each year. The x-axis represents the usage percentage, ranging from 0 to 100, and the y-axis represents the concentration percentage, also ranging from 0 to 100. The graph includes vertical dashed lines at specific usage percentages to compare the concentration across years. The elico logo is present in the bottom right corner.]
Publication Concentration
The Indicators

- Based on the mathematic calculation principle of the h-Index
  - Publication: Notoriety Impact Factor (RIn)
  - Usage: Usage Impact Factor (Rlc)

- For every institution, two indicators are calculated
Correlation in 2003

The graph shows the correlation between two variables, with the equation:

\[ y = 0.1567x - 3.0386 \]

and the coefficient of determination (R²) is 0.7398.

The data points are grouped into three clusters, each representing different cities or regions.

- **Cluster 1**: Paris 10, Toulouse 1, Le Havre, La Rochelle, Perpignan.
- **Cluster 2**: Angers, Metz, Poitier.
- **Cluster 3**: Paris 5, Paris 6, Lyon1, Nantes.

The clusters are visually represented with different colors and shapes for easier differentiation.
Correlation in 2007

$y = 0.2507x - 9.8414$

$R^2 = 0.8842$
Correlation in 2009

\[ y = 0.2017x - 9.6047 \]

\[ R^2 = 0.8444 \]
Perspectives

- **Extending the study by a qualitative approach**
  - Perceptions and representations
    - Individual Interviews and focus group

- **Extending impact definition to social impact**
  - Social media
    - STM domains
      - What did Mendeley to downloads on *ScienceDirect*
ScienceDirect JR1 decreasing

Diversification (Larsen, 2010) (Solomon, 2013)