

University of Windsor

## Scholarship at UWindsor

---

Leddy Library Presentations

Leddy Library

---

10-19-2018

### Hot topics in recent LIS publications

Guoying Liu  
*University of Windsor*

Follow this and additional works at: <https://scholar.uwindsor.ca/leddylibrarypres>



Part of the [Library and Information Science Commons](#)

---

#### Recommended Citation

Liu, Guoying. (2018). Hot topics in recent LIS publications.  
<https://scholar.uwindsor.ca/leddylibrarypres/12>

This Presentation is brought to you for free and open access by the Leddy Library at Scholarship at UWindsor. It has been accepted for inclusion in Leddy Library Presentations by an authorized administrator of Scholarship at UWindsor. For more information, please contact [scholarship@uwindsor.ca](mailto:scholarship@uwindsor.ca).



第九届上海国际图书馆论坛  
The 9<sup>th</sup> Shanghai International Library Forum (SILF 2018)

图书馆，让社会更智慧更包容

*Library for All: Towards a Smarter and Inclusive Society*

# HOT TOPICS IN RECENT LIS PUBLICATIONS

GUOYING LIU  
UNIVERSITY OF WINDSOR



University of Windsor

# Agenda

- Related Literature
- LIS Category & Core Journals
- Methods
- Results
- Conclusions
- Limitations & Future Work
- References



# An Early Study

Jarvelin, K. & Vakkari, P. (1993)

- LIS topic classification scheme (designed in 1990 by the same authors)
  - Topics: 11 main classes (4 with subclasses)
- Purposive selection of core journals: 40
- Selected research articles in 10yr interval:
  - 1965 – 142; 1975 – 359; 1985 – 449
- Findings:
  - Most popular topics: Library and information service activities; Information storage and retrieval
  - A little on information seeking, scientific communication
  - Shift of interest from classification and indexing to retrieval



# A Similar Study Following

Tuomaala, O., et al. (2014)

- Similar method with the article in 1993, 20yr interval: 1965-2005
- Topics identified:
  - Information retrieval: most popular over years
  - Shift of interest from to Library and information service activities to Information seeking & scientific communication

Limitations of the two studies

- Sample size
- Selection of core journals
- Classification scheme



# A Research Article in 2015

Chang, Y., et al. (2015)

- Identified highly cited articles in 1995-2014
  - Chose journals on Journal Citation Reports (JCR) 2008 in Web of Science (WoS) LIS category
  - Removed non-LIS focused journals
  - Kept 10 journals with highest impact factors
  - Selected LIS-oriented articles: 580 in total
  - Added keywords from LISA descriptors or created referred to LISA descriptors
- Popular topics identified: Information Seeking (IS), Information Retrieval (IR), Bibliometrics appeared in all phases
  - Decreasing on the IS and IR
  - Increasing on Bibliometrics (dominant in 2005-2009, over 80%)



# Another Research in 2015

Jabeen et al. (2015)

- Source: JCR2010, 77 LIS journals in total
- Selected 40 core LIS journals
- Articles retrieved from WoS, 2003-2012, articles, book reviews, bibliographies, meeting abstracts, etc.
- Keyword analysis:
  - Information technology-based theories and applications played a pivotal role
  - Most frequently used keywords: “Internet”, “libraries”, “digital libraries”, “information retrieval”, “information”, “Worldwide web”, “library”, “behavior”, “academic libraries”, “science”



# A Study in 2018

Onyancha, O. B., 2018 (published online June 21, 2018)

- Articles published in WoS during 1971-2015
- Based on author-supplied keywords
- Hot topics identified:
  - 1971-1980: information systems, applications development, database systems
  - 1991-2000: Internet, information technology, information systems
  - 2001-2015: bibliometrics, knowledge management, social media
  - Shifted from information systems design and management in 1970s to scientific communication, information storage and retrieval, information access, information and knowledge management, user education in 2015



# WoS LIS Category

Abrizah, et al. (2015)

- 243 active authors/editors categorized the 83 LIS journals on JCR 2011
  - 39 - information science
  - 23 - library science
  - 21 - information systems
- LS journals are hardly represented among the top 25% of the impact factor distribution of JCR's ranked IS-LS journals.



# LIS Core Journals (Purdue)

- “No professionally accepted tiered list of journals in the US” in LIS field
- Tier1: 18 journals
  - Library Journal: widely distributed, trade
- Tier2: 37 journals
  - WoS: include 24 till 2017 (September 2018)

(Nixon, 2014)



# Methods

- WoS Core Collection:  
SCI-EXPANDED, SSCI, A&HCI, CPCI-S, ESCI
- Time period: 2008-2017
- Article, English: 38,162 records
- Data collected: September 18, 2018
- Source titles: Purdue's list
  - Tier1: 17 (without LJ) all included
  - Tier2: only 24 available in WoS



# Tier1 Journal Articles

- 6,288 articles in the 17 journals
- 2,663 articles have author supplied keywords
  - 5 journals do not have any keywords
  - 3 journals have 100% keywords
  - 9 journals: part of them have keywords
- 2-17 keywords per article
- Total valid keywords: 13,160



# Keywords by WoS Algorithm

- Information
- Science
- WEB
- Model
- Behavior
- Library
- Impact
- Knowledge



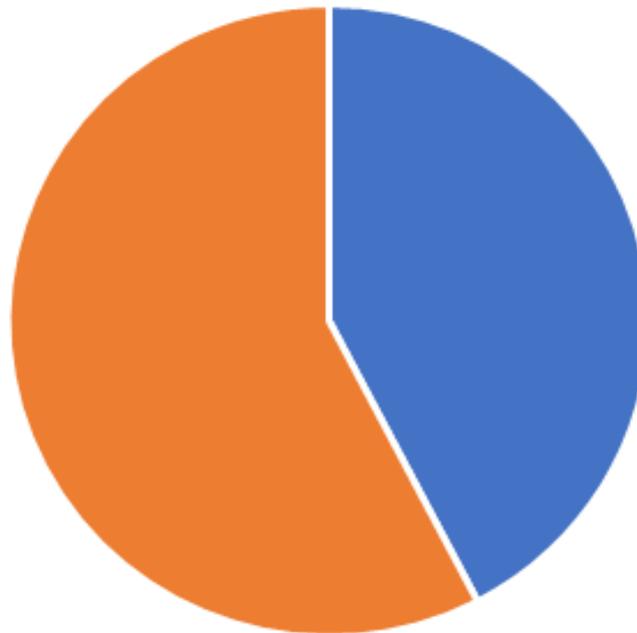
# Grouping Keywords

- Tools: e.g. social media: Twitter, Blog, Facebook, ...
- Forms: e.g. blog, blogs
- Spellings: e.g. behavior, behaviour
- Different terms: e.g. academic libraries, university libraries, research libraries, ...
- Subclasses: e.g. data management, data archive, data policy, data access ...



# Tier1 Journals

Journal with Au-Keywords?

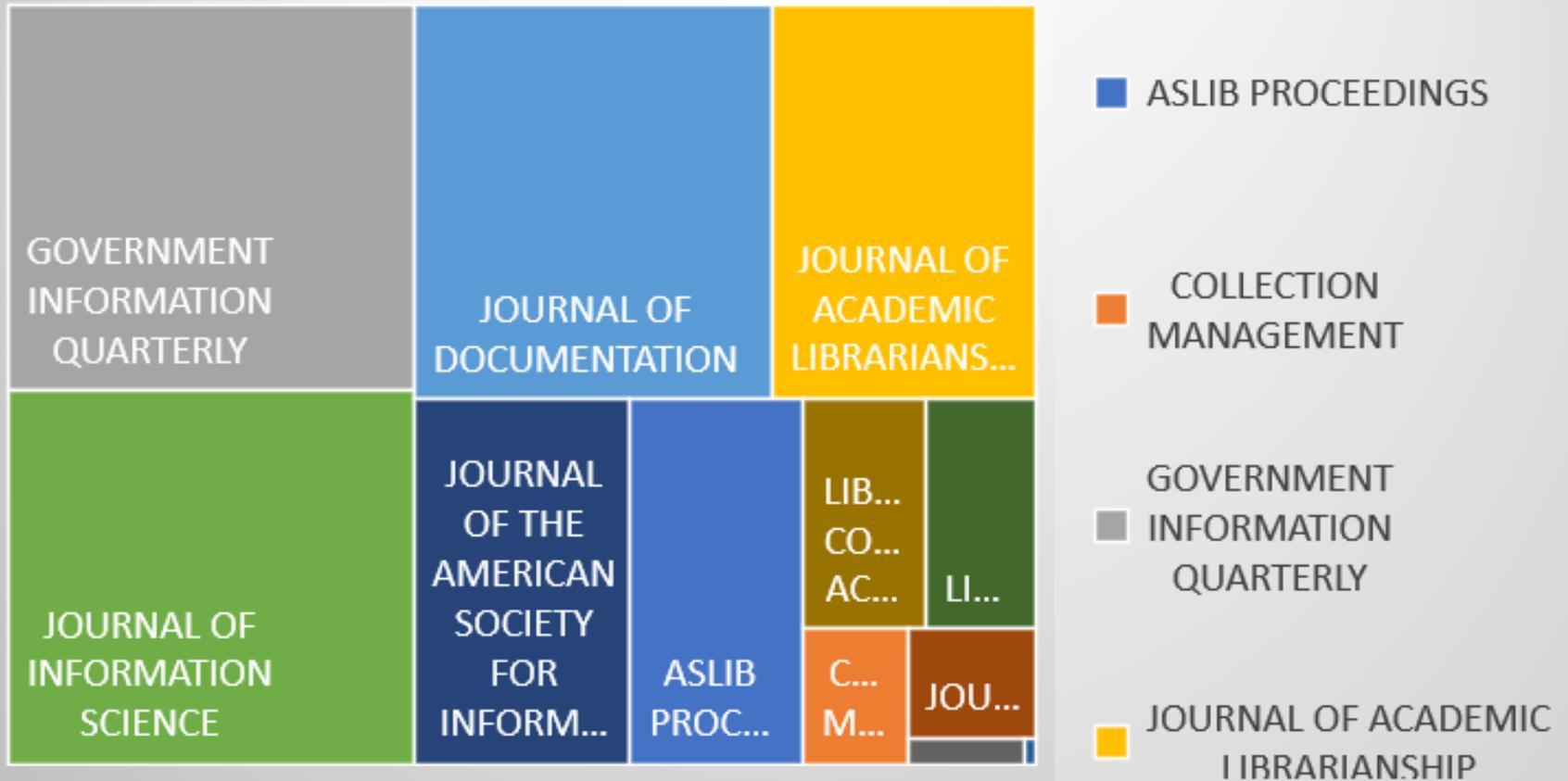


■ Yes ■ No



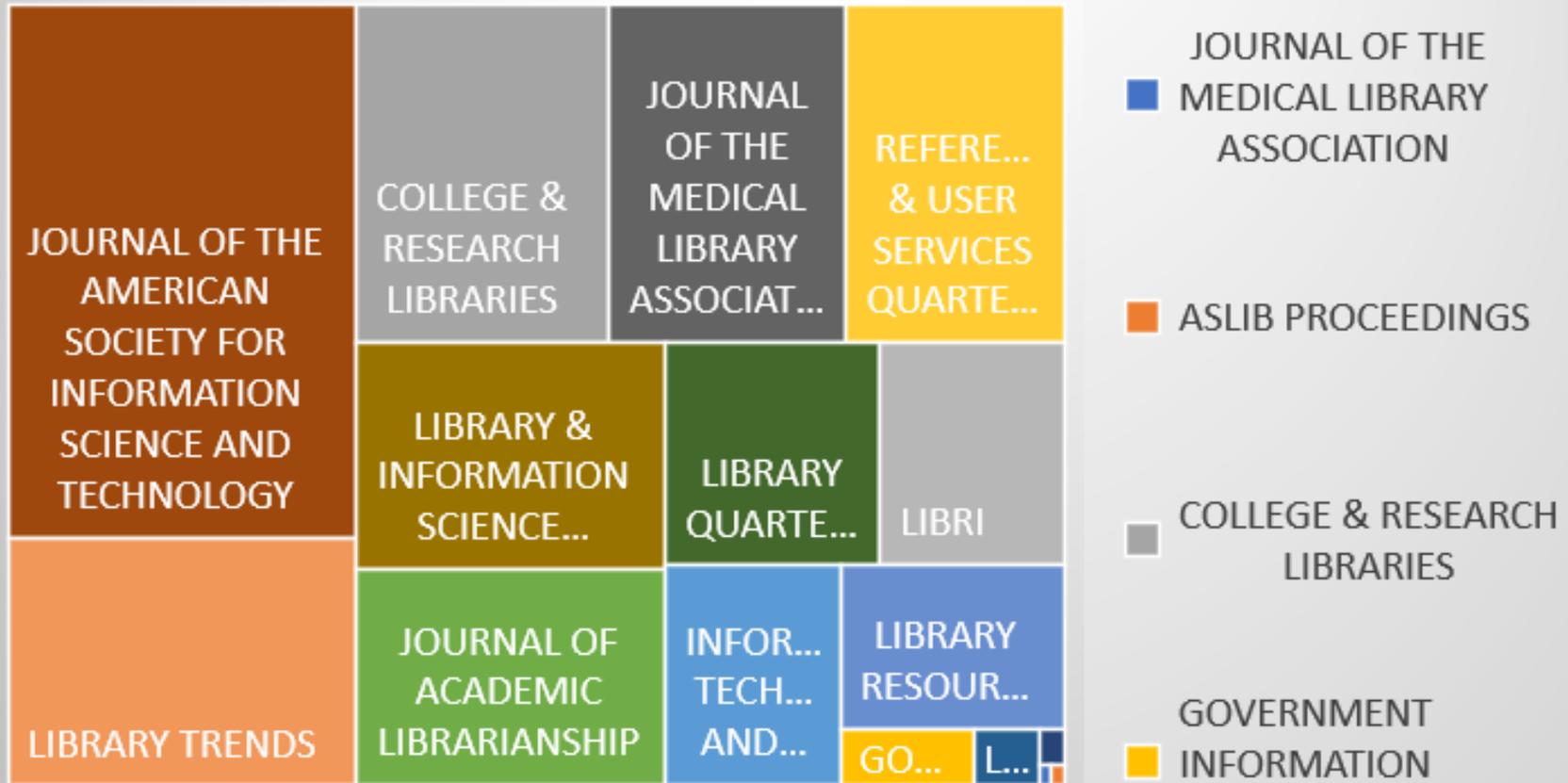
# Tier1 Journals

## Journals with Au-Keywords

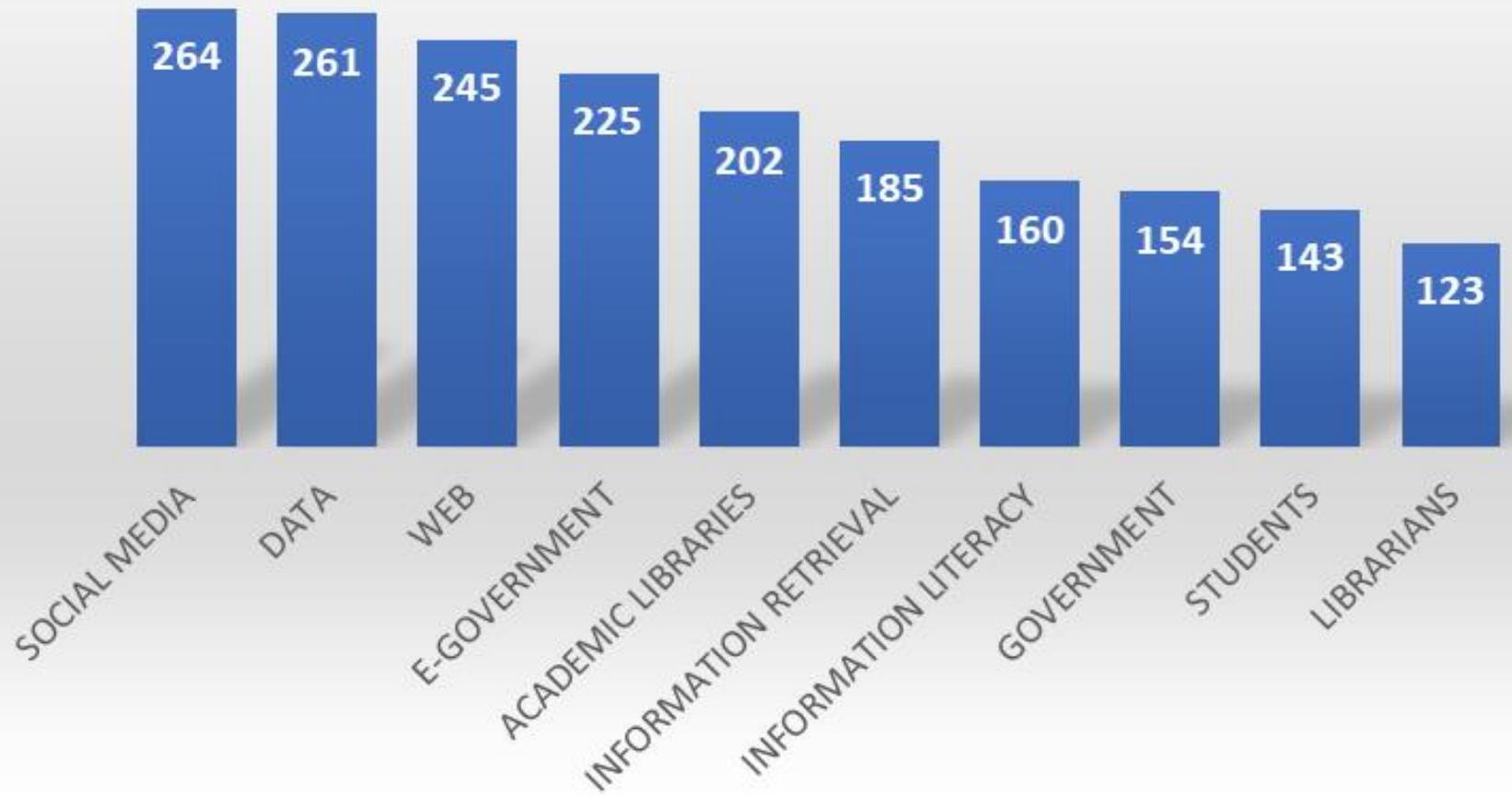


# Tier1 Journals

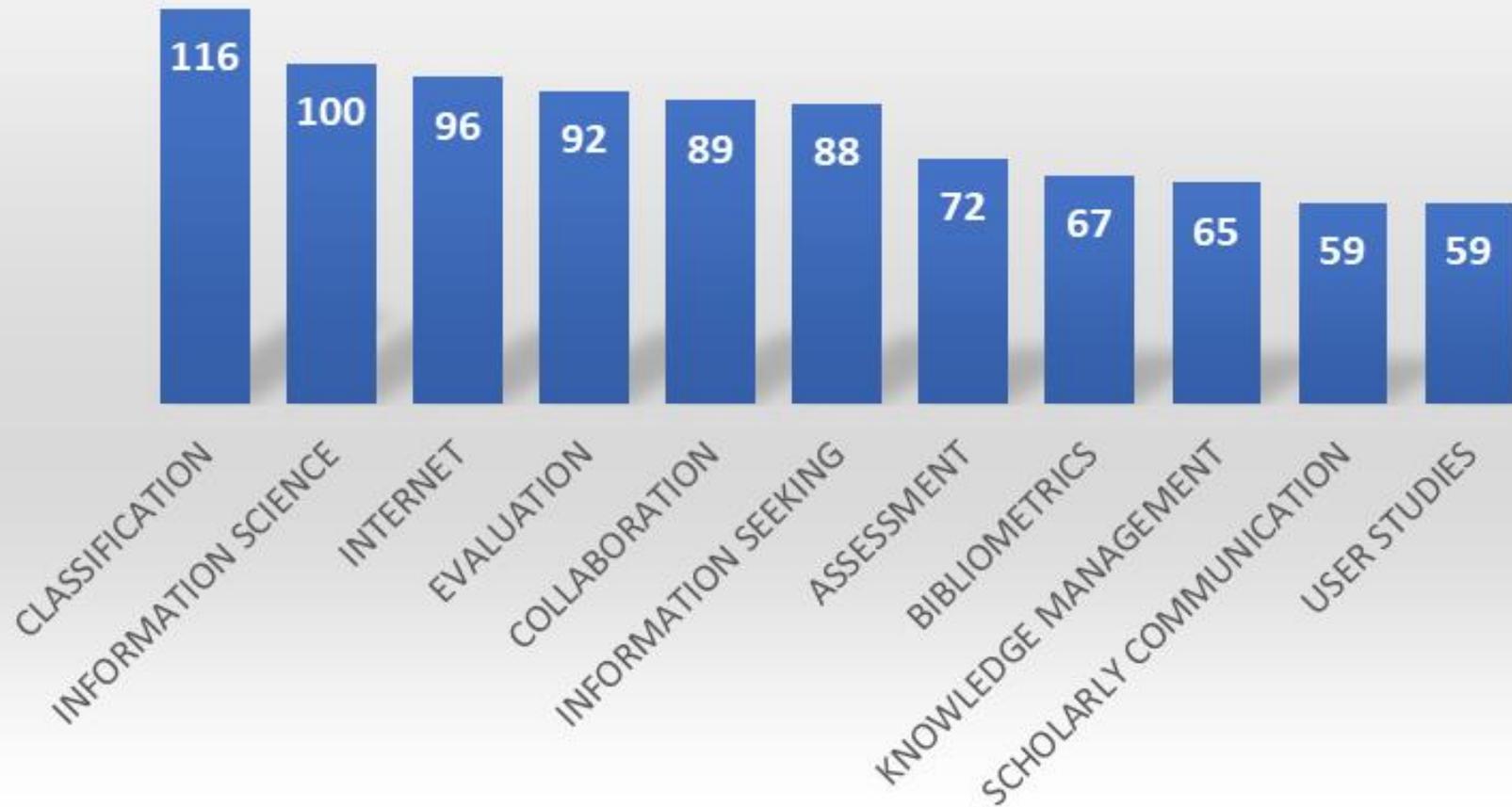
## Journals without Au-Keywords



# TIER 1 JOURNALS - TOP 10 KEYWORDS



# TIER 1 JOURNALS - #10-20 KEYWORDS



# SOCIAL MEDIA RELATED KEYWORDS

(TOTAL OCCURENCES: 264)



- SOCIAL MEDIA
- SOCIAL NETWORK
- TWITTER
- BLOG
- FACEBOOK
- YOUTUBE
- WECHAT



## GOVERNMENT RELATED KEYWORDS (TOTAL: 441 OCCURRENCES)



■ E-GOVERNMENT   ■ GOVERNMENT   ■ OPEN GOVERNMENT   ■ DIGITAL GOVERNMENT

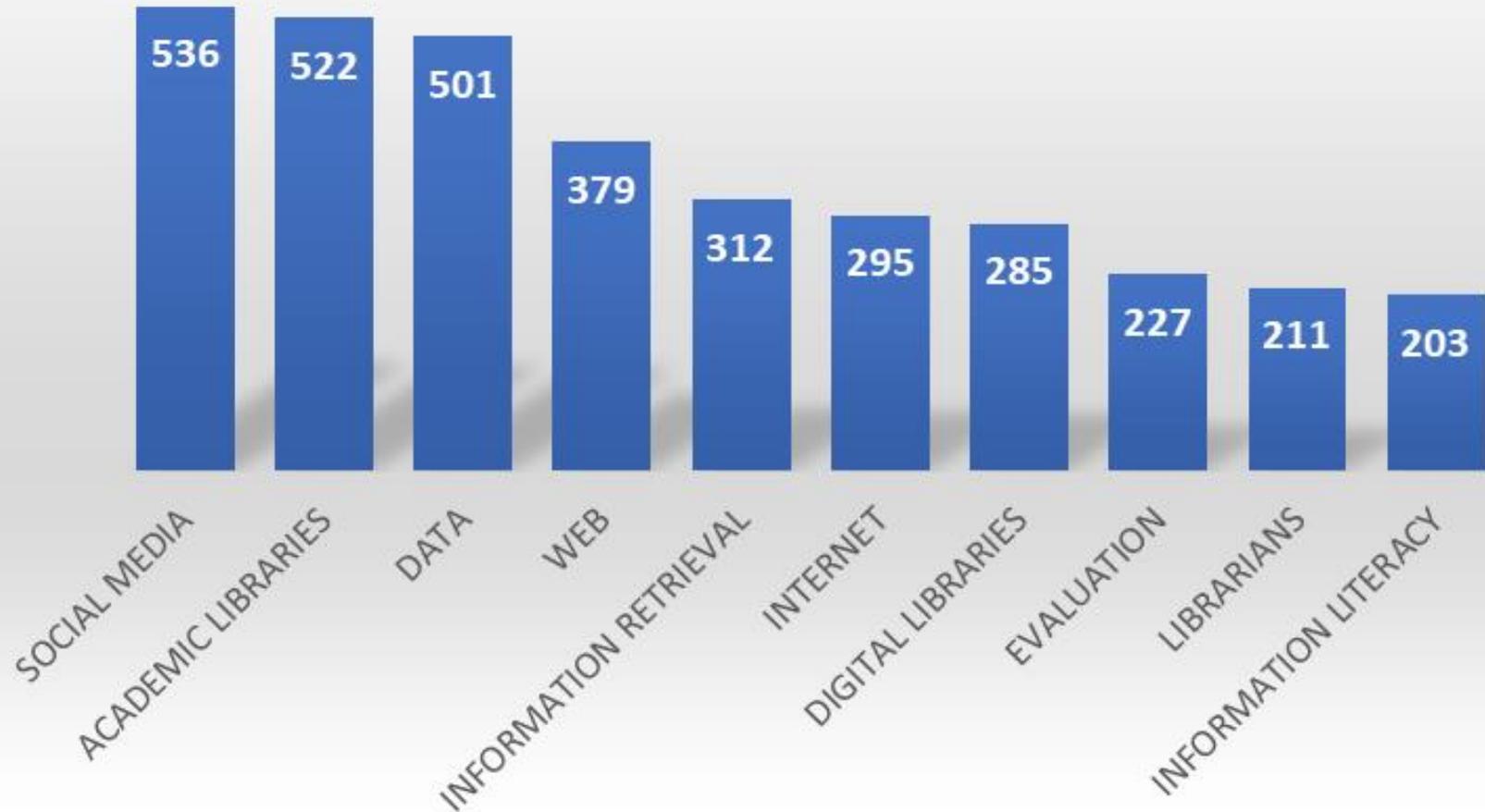


# Tier2 Journal Articles

- 37 journals on the list, 24 journals available in the data set
- 7,099 articles in total, 5,458 (77%) contain authors' keywords
- 27,790 keywords in total

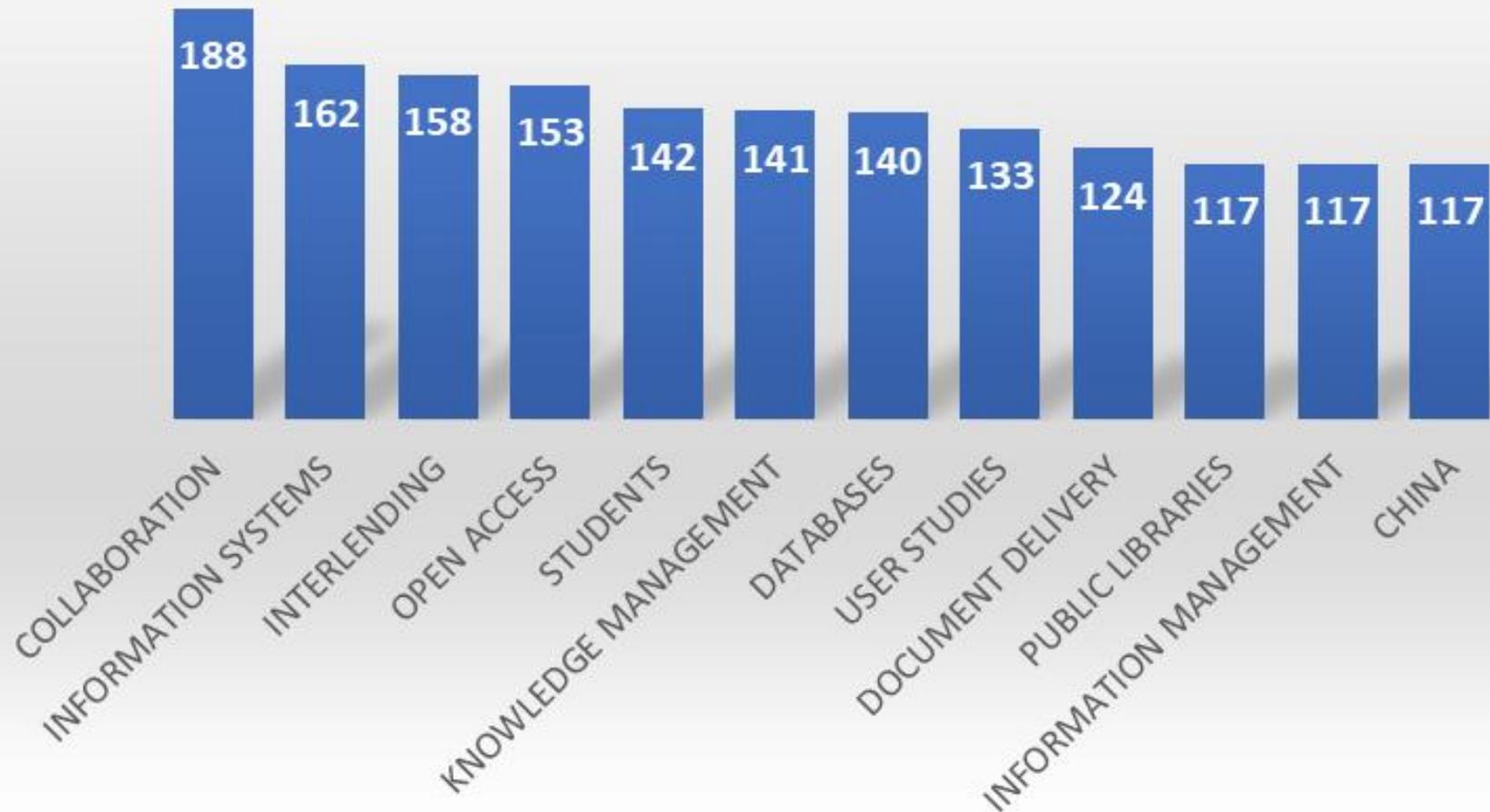


# TIER 2 JOURNALS - TOP 10 KEYWORDS



# TIER 2 JOURNALS - #10-20

## KEYWORDS



# Results

- Most frequently used keywords from both lists:
  - Social media
  - Data
  - Web
  - Academic libraries
  - Information retrieval
  - Information literacy
  - Librarians
- Tier1 only: Government (E-G), Students
- Tier 2 only: Internet, Digital libraries, Evaluation



# Conclusions

- Social media, data management and web related concepts are hot topics in the past ten years
- Academic libraries are the context for most studies although public libraries have some visibilities as well
- Information retrieval is still among the hot topics
- User education has been shifted to information literacy.
- Librarianship is also a hot topic



# Limitations & Future Work

- Data set from WoS do not include all core LIS journals identified by Purdue
- Not all articles in these journals contain author supplied keywords
- Keywords by authors are not controlled vocabulary
- In future, need find a systematic way to group/link keywords together
- It would be useful to create an algorithm using text mining techniques to generate meaningful, controlled keywords for articles.



# References

- Abrizah, A., Noorhidawati, A. & Zainab, A.N. (2015). LIS journals categorization in the journal citation report: a stated preference study. *Scientometrics*, 102(2), p. 1083–1099.
- Chang, Y., Huang, M. & Lin, C. (2015). Evolution of research subjects in library and information science based on keyword, bibliographical coupling, and co-citation analyses. *Scientometrics*, 105 (3), p.2071-2087.
- Jabeen, M., Yun, L., Rafiq, M., Jabeen, M., & Tahir, M.A. (2015). Scientometric analysis of library and information science journals 2003-2012 using Web of Science. *International Information & Library Review*, 47, p.71-82.
- Jarvelin, K. and Vakkari, P.(1993). The evolution of library and information science 1965-1985: a content analysis of journal articles. *Information Processing & Management*, 29(1), p. 129-144.
- Nixon, J.M. (2014). Core journals in library and information science: developing a methodology for ranking LIS journals. *College & Research Libraries*, 75(1), p. 66-90.
- Onyancha, O.B. (2018). Forty-five years of LIS research evolution, 1971-2015: an informetrics study of the author-supplied keywords. *Publishing Research Quarterly*, 34(3), p. 456-470.
- Tuomaala, O., Jarvelin, K. & Vakkari, P. (2014). Evolution of library and information science, 1965-2005: content analysis of journal articles. *Journal of the Association for Information Science and Technology*, 65(7), p. 1446-1462.



# Thank you for your attention!

[gliu@uwindsor.ca](mailto:gliu@uwindsor.ca)

