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# Hot topics in recent LIS publications

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

# HOT TOPICS IN RECENT LIS PUBLICATIONS

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# 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



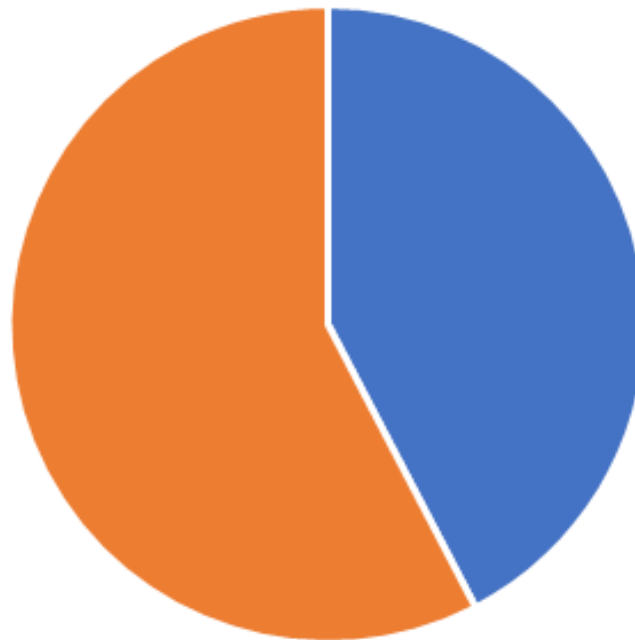
# Grouping Keywords

- 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?

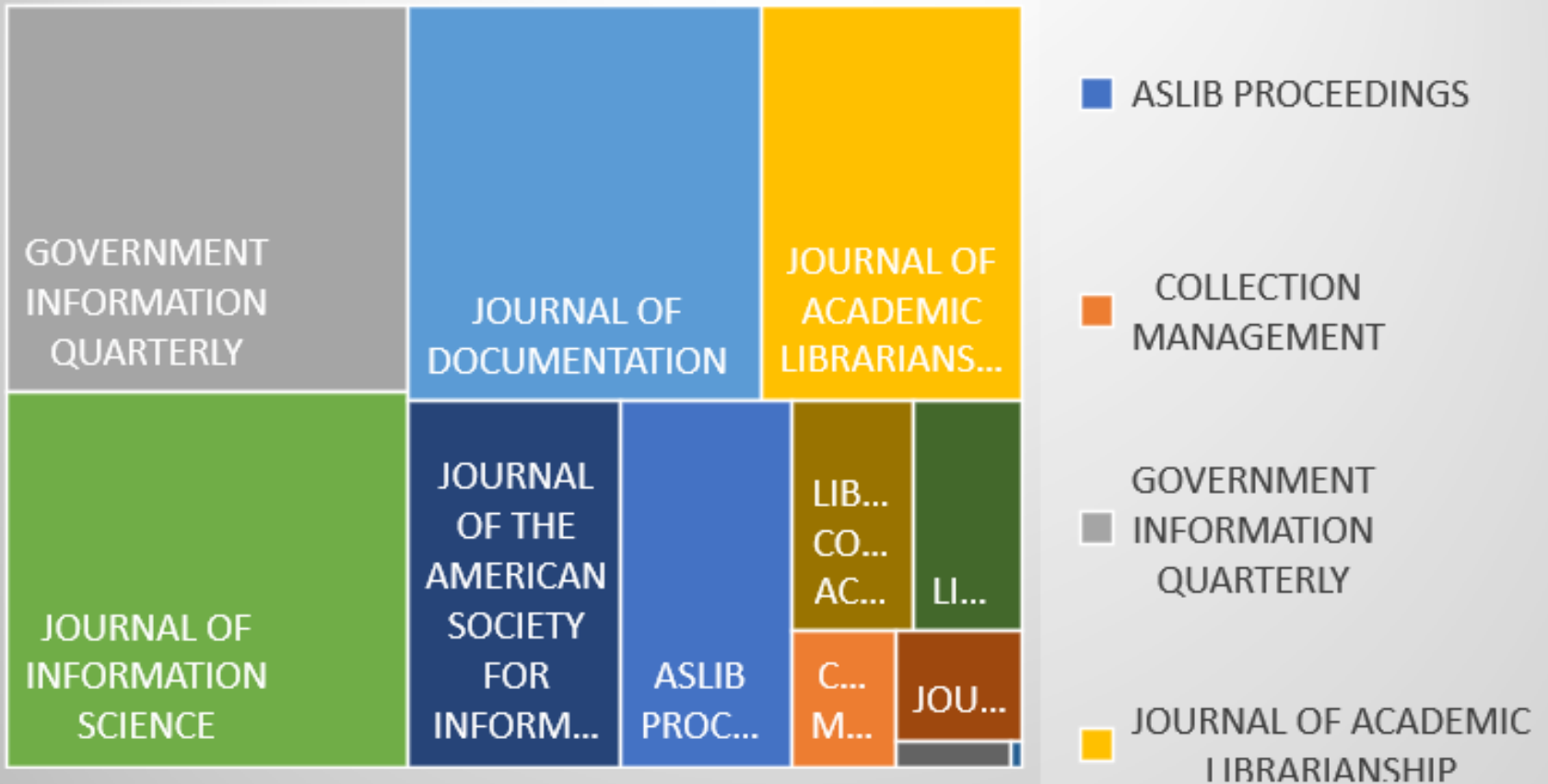


■ Yes ■ No



# Tier1 Journals

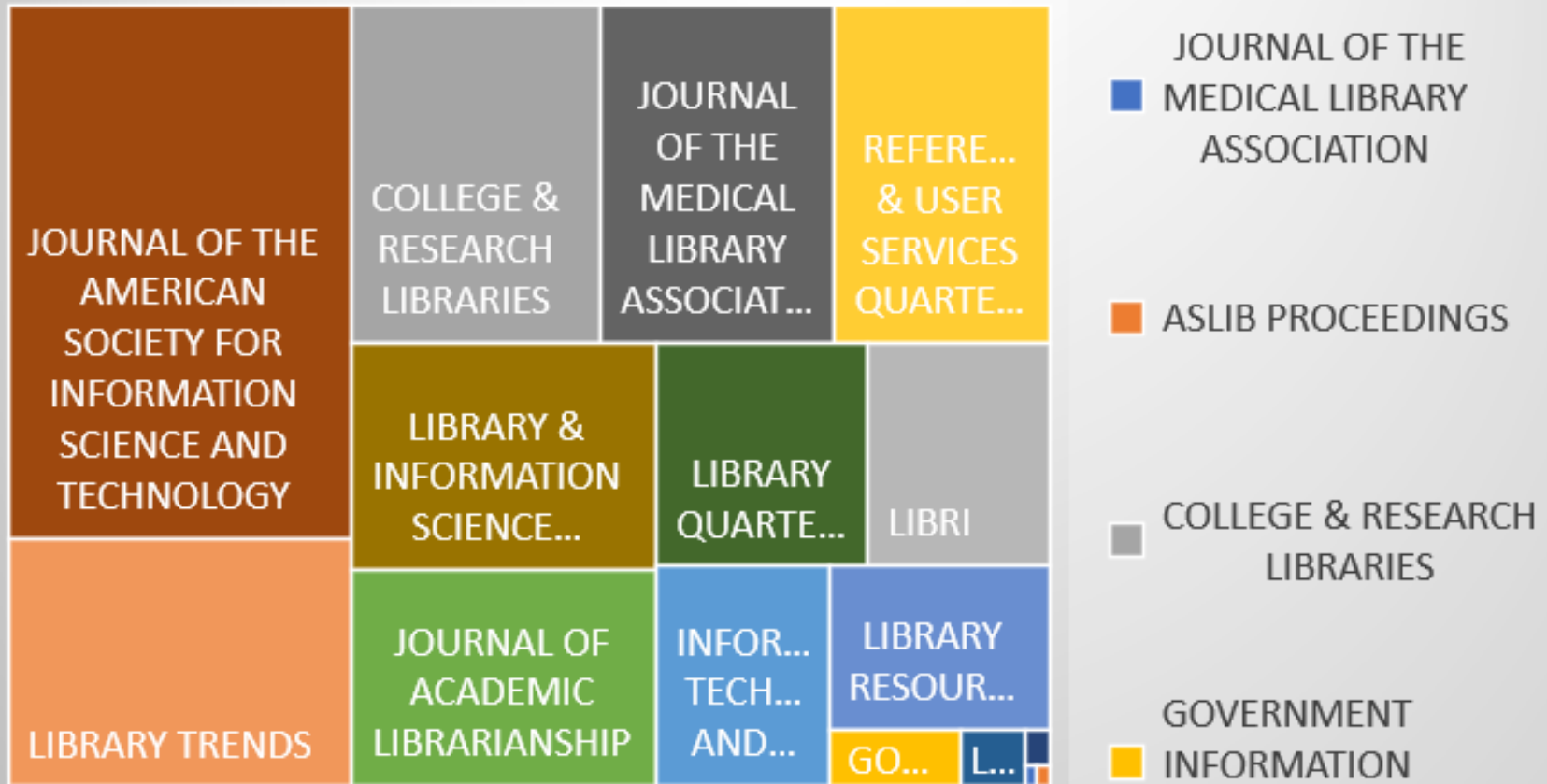
## Journals with Au-Keywords



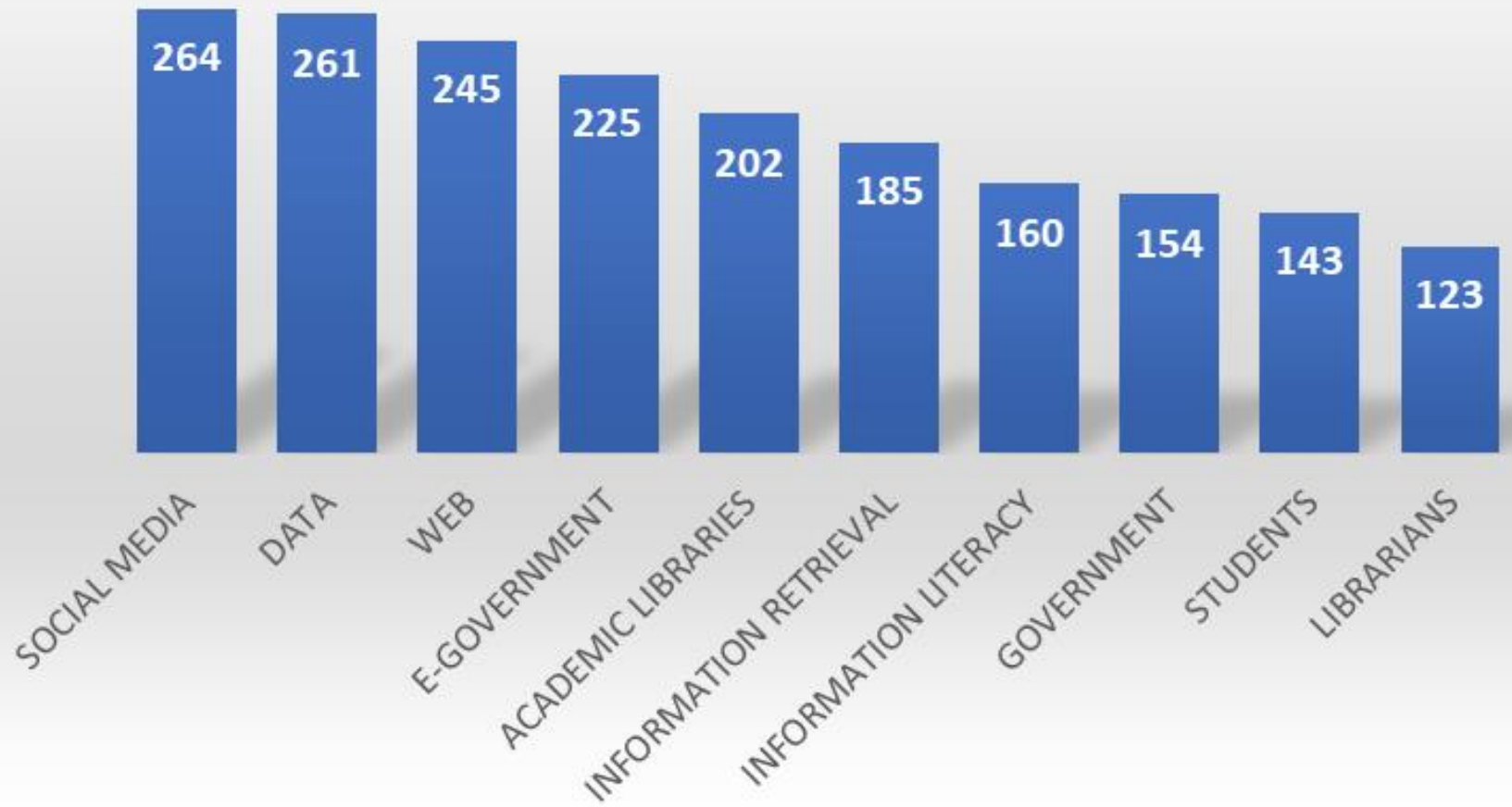


# Tier1 Journals

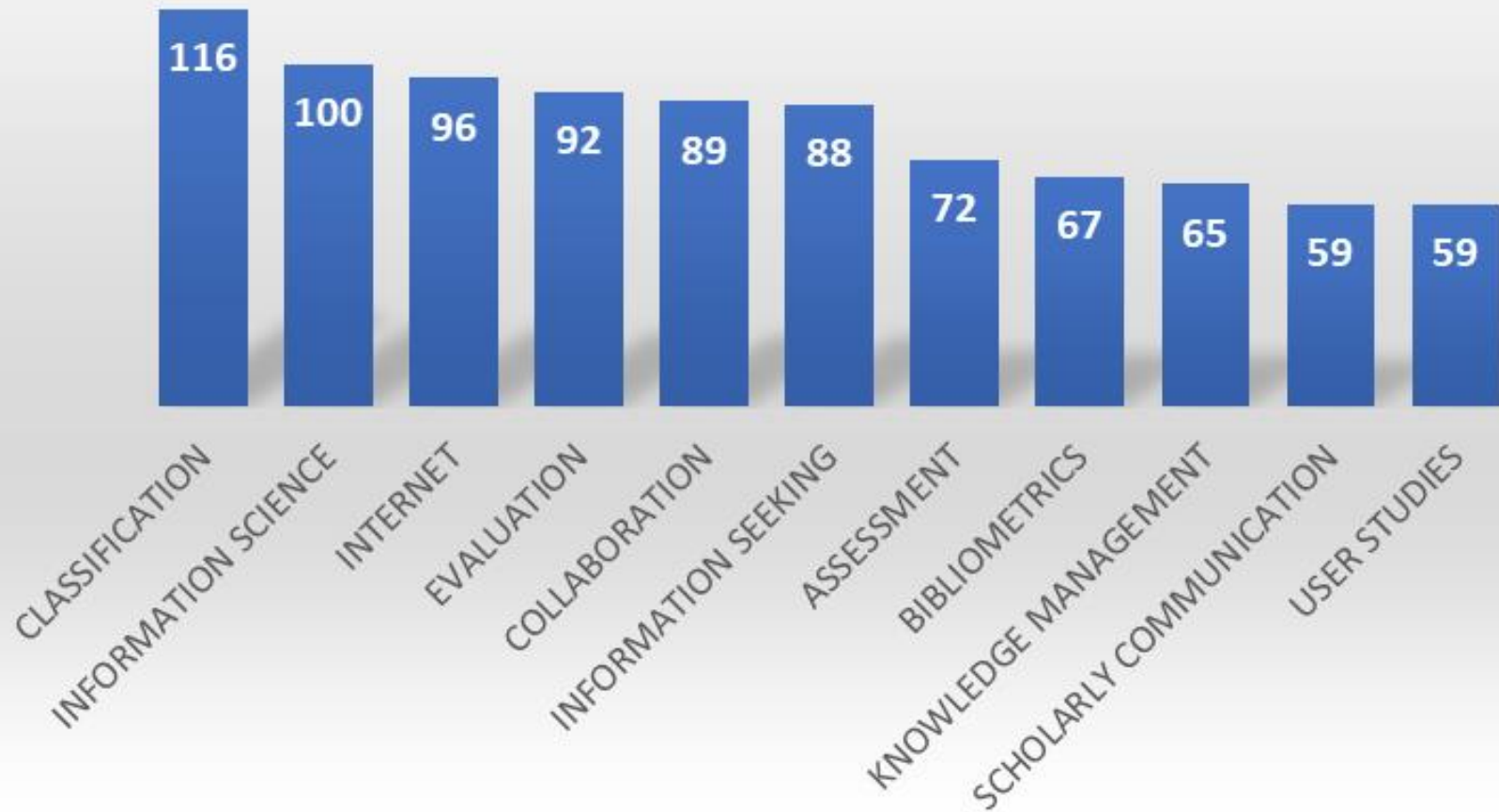
## Journals without Au-Keywords



# 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

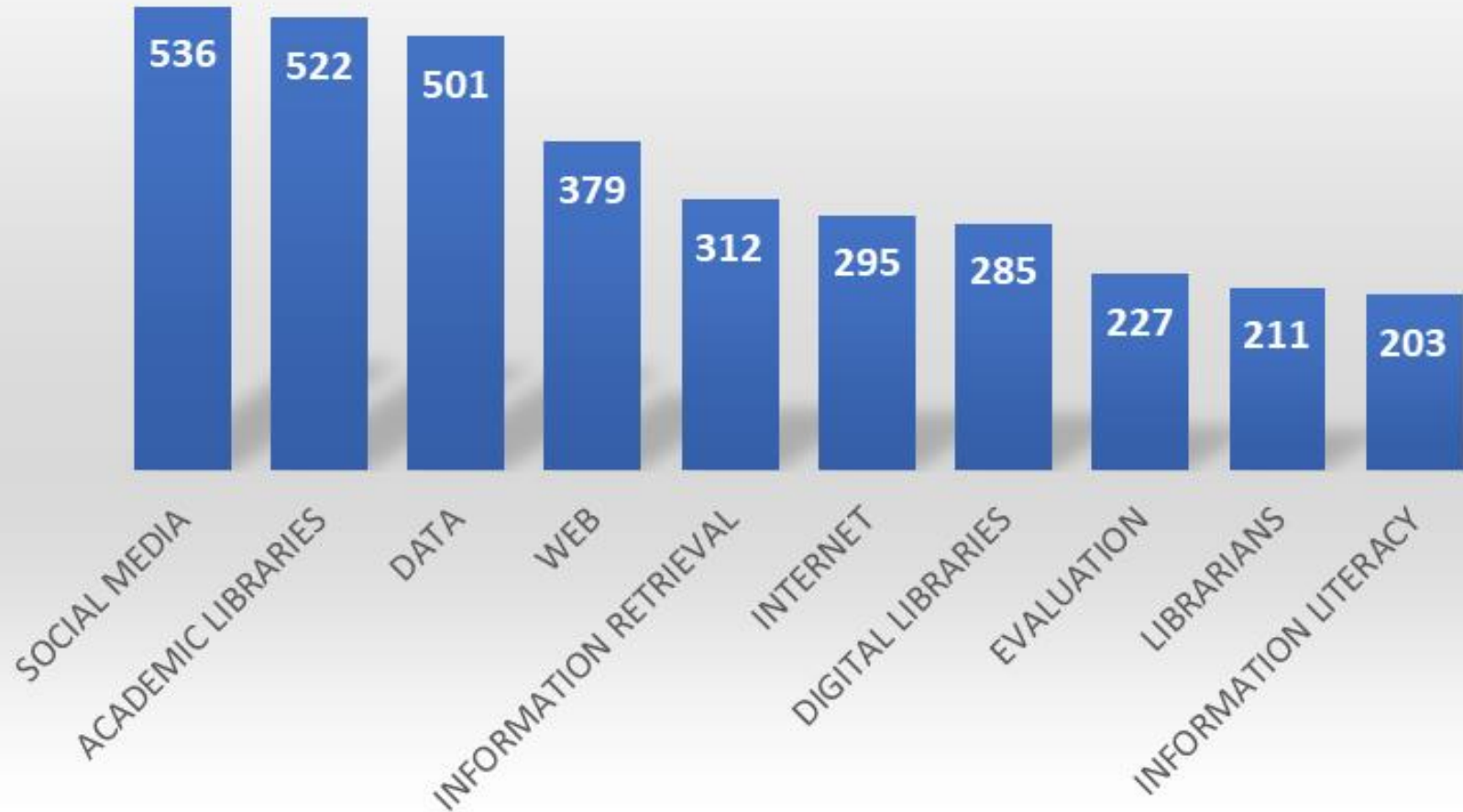


# Tier2 Journal Articles

- 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

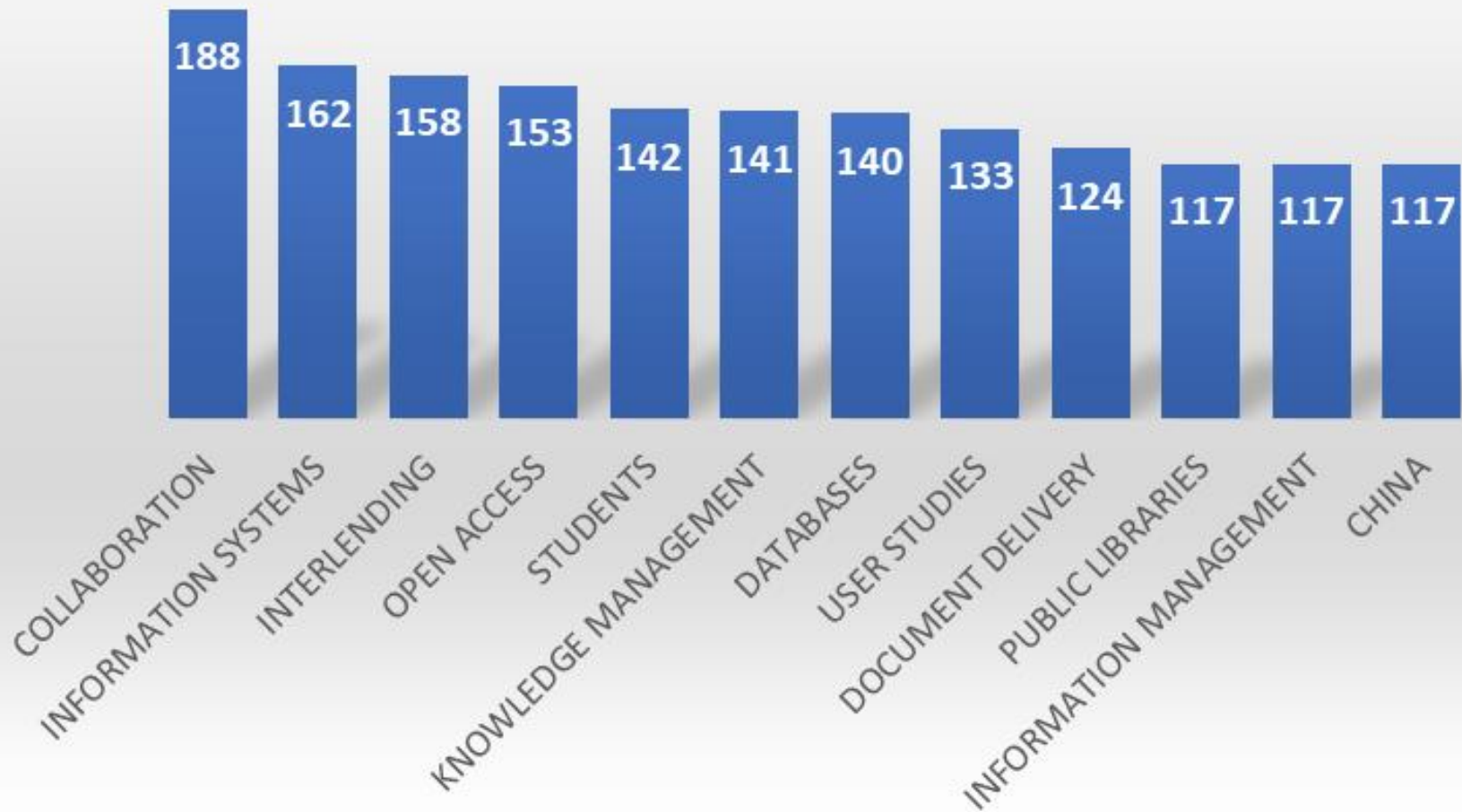


# TIER 2 JOURNALS - TOP 10 KEYWORDS



# 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!

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