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## **Bibliometric analysis of document flow in the field of library-bibliography in Azerbaijan**

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**Abstract.** In the article, the issues of creation and development of the document flow in the field of library-bibliography in Azerbaijan in modern times are reflected from a statistical point of view. Preliminary considerations on the mentioned problem have been examined here. In the article, the flow of documents in the field is grouped and analyzed according to specific indicators. Journals in the field were identified, "Library Studies and Bibliography" magazine was included in the research according to certain characteristics, and tables and graphs were prepared on the results obtained. In addition, the work experience of the Azerbaijan National Library was applied for the purpose of researching the activities of institutions that create and study the flow of documents in the field of library and bibliography.

**Keywords.** Library, bibliography, document, document flow, bibliometric research

### **Introduction**

First of all, let's mention the initial information about "document flow" in the article. In the world, fundamental studies of document flow are conducted in the field of theoretical informatics, the theory of bibliography, as well as the theory of understanding and information communications in general. The decisive points in the document flow in the world are studied: the development stages, properties, structures of the document flow, its development regularities, and the use of the document flow in different historical periods are studied. The role of document flow in human history, the growth rate of world document flow, and organizational aspects of its activity in society are studied. Applied research is conducted to solve specific practical issues. The solution to many methodological issues depends on the result.

Bibliometrics is the use of statistical methods to analyse books, articles and other publications, especially in regard with scientific contents. Bibliometric methods are frequently used in the field of library and information science. Bibliometrics is closely associated with scientometrics, that is the analysis of scientific metrics and indicators, to the point that both fields largely overlap.

Bibliometrics studies first appeared in the late 19th century. They have known a significant development after the Second World War in a context of "periodical crisis" and new technical opportunities offered by computing tools. In the early 1960s, the Science Citation

Index of Eugene Garfield and the citation network analysis of Derek John de Solla Price laid the fundamental basis of a structured research program on bibliometrics.

Citation analysis is a commonly used bibliometric method which is based on constructing the citation graph,[1] a network or graph representation of the citations between documents. Many research fields use bibliometric methods to explore the impact of their field, the impact of a set of researchers, the impact of a particular paper, or to identify particularly impactful papers within a specific field of research. Bibliometrics tools have been commonly integrated in descriptive linguistics, the development of thesauri, and evaluation of reader usage. Beyond specialized scientific use, popular web search engines, such as the pagerank algorithm implemented by Google have been largely shaped by bibliometrics methods and concepts.

The emergence of the Web and the open science movement has gradually transformed the definition and the purpose of "bibliometrics." In the 2010s historical proprietary infrastructures for citation data such as the Web of Science or Scopus have been challenged by new initiatives in favor of open citation data. The Leiden Manifesto for Research Metrics (2015) open a wide debate on the use and transparency of metrics. The recent methodological shifts of the field are highlighted by the repositioning of some key journals, with the Journal of Infometrics becoming Quantitative Science Studies in 2019.

As the main structure in the study of document flow, we can note that the study of documentary information sources depends on their functional and content relationship. The author, type, and thematic structure of the flow are separated. It also depends on the sign of the carrier, distribution methods, circulation, volume of documents, etc. Structural relations can also be separated according to signs. During the bibliographic activity, the structure of the document flow research is considered according to thematic, type-type, geographical, language, publisher, organization, and author characteristics. Bibliography of document flow assessment and analysis during bibliographic service allows facilitating the selection and search of publications. It shows which authors and author collectives, enterprises, companies, and countries should be given special attention.

If we approach the article from a historical point of view, we can note that starting from the 21st century, with the informatization of society, the application of new information technologies in the field of library and bibliography, the formation of new directions in this field, integration into the world, and the expansion of international relations in the field, the intensification of the document flow has begun to be observed. Thus, monographs, textbooks, and teaching aids have been published in these years. These are the following [1]:

1. K.H. Ismayilov's "Methodological support system of library work in the Republic of Azerbaijan 1918-2000 years: (History, modern situation and perspectives)" (2000), "Fundamentals of library management" (2006; 2007), "Library-information technologies" (2009),
2. "Baku libraries" (2000) compiled by Z. Aliyeva and A. Rustamova.
3. I. Zakiyev "Development of the Azerbaijani book: from ancient times to the end of the 19th century" (2000),
4. R. Ismayilov "Azerbaijan publishing house" (2000),
5. "General bibliography" by Z. Aliyev, "Automated library information systems" (2001), "Library informatics" (C1. 2001; C 2. 2002) with the co-authorship of M.S. Khalilov, A.G. Guliyeva, N.N. Musayeva.
6. A. Khalafov's "History of library work in Azerbaijan:  
a) Brief overview"(2001),

- b) "Introduction to the History of Library Work" (2002), "Introduction to Library Science" (2003),
- c) "History of library work in Azerbaijan" (2004),
- d) "Heydar Aliyev and library work in Azerbaijan" (2006),
- e) "The main directions of development of library work in Azerbaijan at the beginning of the XXI century: considerations, proposals, and forecasts" (2006),
- f) "The Heydar Aliyev doctrine on library work continues successfully in Azerbaijan" (2009),
7. "Regulatory documents on library work: Law and a collection of normative documents with legal force" (2001),
8. K.M. "Cleaning and protection of library funds from outdated literature" (2002), compiled by Tahirov.
9. "Living Chronicle of Azerbaijan Bibliography" by N. Ismayilov (2003),
10. "General Book History" by B. Allahverdiyev (2003),
11. "Economics of library work" by R. Kazimov (2004),
12. N. Ismayilov's "Bibliographic activity on country studies (local studies) in libraries" (2004),
13. "The work of librarianship in Azerbaijan" by T. Guliyev (2004),
14. "Prosperous years: Tajaddin Farhad oglu Guliyev (dedicated to the 75th anniversary of his birth and 50th anniversary of his scientific and pedagogical activity)" (2005), compiled by K. Aslan.
15. "Two-digit author's mark tables" (2006) compiled by G. Bakhshaliyeva.
16. "Libraries in the knowledge society: bilingual Azerbaijan-Russia project" (2006), edited by S. Mammadaliyeva.
17. S. Ismayilova's "Bibliography of artistic literature and literary studies in Azerbaijan: 1965-2000 years" (2009),
18. S. Mustafayeva's "Rules for Compilation of Bibliographic Description" (2007),
19. "Fundamentals of computerization of libraries" (2007), co-authored by A. Khalafov and A. Gurbanov.
20. "History of Azerbaijan bibliography" by Z. Aliyev (2007),
21. "Information provision of science and libraries in modern Azerbaijan" by A. Aliyeva-Kangerli, multivolume "Azerbaijani libraries in the information space of the XXI century" project of the Ministry of Culture and Tourism of the Republic of Azerbaijan, "The role of fiction in the formation of personality" by K. Aslan (2008),
22. P.F. Kazimi's "Library work in Azerbaijan during the Safavid period" (2008),
23. "Azerbaijani folklore and book culture" by A. Aliyeva-Kangerli (2008),
24. "Library service" by S. Rzayev (2008),
25. I. Valiyev's "Essentials of the Editor" (2009),
26. "Marketing and fundraising activities in libraries" by K. Anvar-gyzi (2009),
27. K. Sharifli "Azerbaijani manuscript books and libraries" (2009),
28. N. Yarmammadov's materials called "Nineteenth-century Azerbaijani manuscript book", 2010 Professor A.A. Khalafov's "History of library work in Azerbaijan", Professor X. Ismayilov's "Organization and management of library work", Professor B. Allahverdiyev's "Baku State Publishing activity of the University", I. Alasgarova "Artistic and technical design of the book",
29. In 2011, Associate Professor K. Aslan's "History of Ancient and Medieval World Libraries", P. Kazimi's "Information Engineering", Azerbaijan Committee of the "Information for All" Program of the Ministry of Culture and Tourism of the Republic of Azerbaijan, UNESCO. Libraries are a resource for the revival of national culture"

30. Professor B. Allahverdiyev's "Fundamentals of Bibliography",

In 2012 :

31. Associate Professor P. Kazimi, Associate Professor M. Mammadov and Associate Professor A. Gurbanov co-authored "Marketing and Management of Library and Information Activities",
32. "Economics of library and information activities" co-authored by associate professor P. Kazimi, associate professor N. Ismayilova and associate professor A. Gurbanov.
33. E. Ahmadov "Legal basis of library-information business in Azerbaijan",
34. S. Abbasov "Destroyed wealth and destroyed libraries",
35. J. Jafarov "Electronic catalog in the library-information service",
36. P. Kazimi "Book and library culture of Turkish peoples",
37. In 2013, Professor K. Tahirov's "National libraries of the world",

In 2014:

38. Professor A. Khalafov's "History and Methodology of Library Science",
39. I. Sadykh "Book culture in Azerbaijan",
40. P. Kazimi's "Source studies of the book and library culture of the Turkic peoples",
41. "Manuscripts related to Azerbaijan stored in the Vatican Archives" by F. Alekbarli.

In 2016:

42. "Fundamentals of computerization of libraries" co-authored by professor A. Khalafov and associate professor A. Gurbanov.
43. "Social and political information resources" by associate professor S. Sadygova, "Development of technical libraries in Azerbaijan" by M. Mammadov.

In 2017:

44. "Bibliographic description of documents" co-authored by professor X. Ismayilov and S. Mustafayeva.
45. "International information environment and scientific-cultural integration" by N. Babakhanova.

In 2018:

46. "Information resources in centralized library systems" by associate professor Z. Rzayeva.
47. "Electronic libraries" co-authored by A. Gurbanov, P. Kazimi, O. Guliyev.
48. "Organization and methodology of bibliographic work in libraries" co-authored by associate professor N. Ismayilov and X. Aghayeva.
49. "Bibliographic classification of documents" by S. Mustafayeva.
50. Creation and activity of L. Abasova's "Grey Oghuz" publishing house", "Text theory",
51. "Library ethics and linguistic-conceptual issues of librarianship" by A. Aliyeva-Kangarli.
52. "XVII century Azerbaijani manuscript book" by A. Mammadbagiroglu.
53. "Publishing and editing issues" by K. Aslan.

In 2019:

54. Associate professor I. Bayramova's "Library-information provision system of the regions",
55. Doctor of Philosophy R. Gardashov's "Electronic catalog", S. Ibrahimov's "Book and library culture created by the environment of Nakhchivan",
56. "Methodology of internet forums in libraries" co-authored by P. Kazimi and O. Guliyev.
57. "National bibliography of Azerbaijan in the global information space" by S. Sadygova.

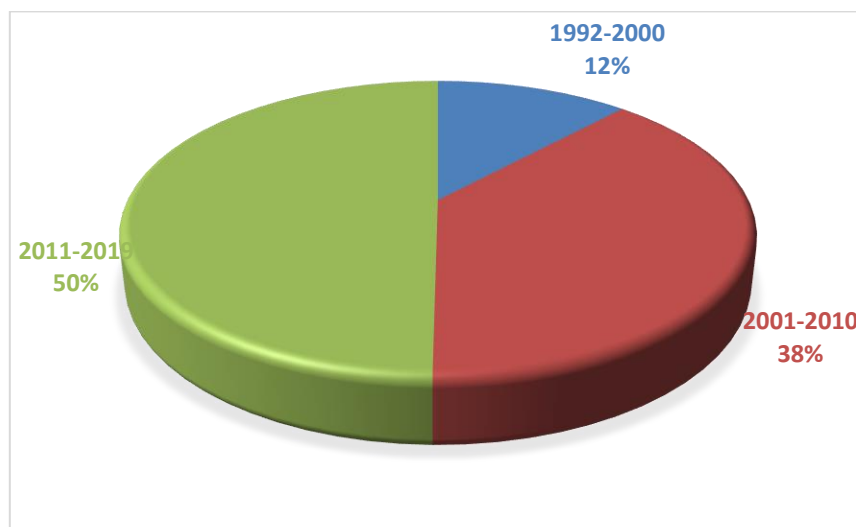
58. "Information culture and libraries in the system of cultural-historical values" by A. Abdullayeva.

In 2020:

59. "History of bookmaking in Azerbaijan: 19-th century manuscript and printed book" by G. Bakhshali, etc.

For your information, it should be noted that the information included in the table was obtained from the "Annual Azerbaijan bibliography" compiled by the Akhundov National Library of Azerbaijan. In the table, only published scientific-research works and methodical publications are reflected in the field. Bibliographic publications and educational programs compiled by individual libraries were not included in the research. As can be seen from the table, the highest indicator of document flow in the field was observed in 2016, and the lowest indicator was observed in 1995. According to the data obtained as a result of the calculations, 227 scientific and methodical publications were published during the years 1992-2019. 12% of the published literature was published in 1992-2000, 38% in 2001-2010, and 50% in 2011-2019 [4].

#### **Indicators of document flow distribution in the library-bibliography during the years of independence**



Graphic 1.

*One of the main problems during the study of document flow in the field of library-bibliography is the prompt organization of access to professional information by specialists. The only way to solve this problem is the creation of secondary documents that occur during the analytical processing of information. Secondary documents are bibliographic resources, analytical reviews, abstracts, etc. appear in the form it is secondary documents that allow you to save time in the field of information search and information processing. In the years of independence, the main creative centres of secondary documents in the field of library and bibliography:*

- 1. Azerbaijan National Library named after M.F. Akhundov;*
- 2. It is considered the Central Scientific Library of ANAS.*

*In addition, individual libraries, scientific-research institutions, and educational centres are included in the list of creators of bibliographic products.*

*The stages of the creation of secondary documents in the field of library-bibliography can be grouped as follows:*

1. Empirical stage
2. Analytical stage

*The first stage reflects the creation of bibliographic indicators in separate fields, along with the creation of a scientific opinion on the bibliographic product. In the second stage, the information obtained as a result of the analytical processing of the created bibliographic product appears [1].*

Development dynamics of methodological publications of the Azerbaijan National Library named after M.F. Akhundov (2016-2021)

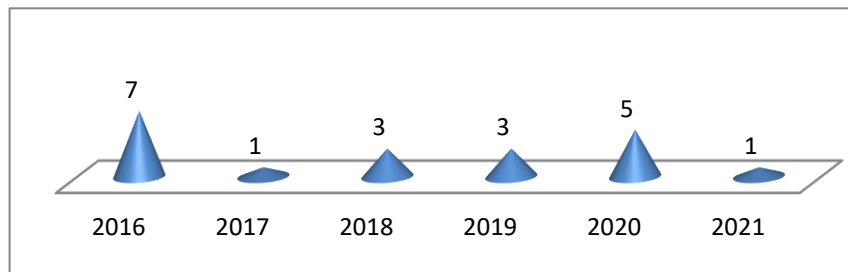


Chart 2.

The ability to analyse the flow of documents allows specialists to create a comprehensive view of the state and development prospects of a particular field of science and to express this view. Different areas in any field of science affect the intensity of its development. Initial information about the emergence and development of any scientific direction is reflected in the rapidly increasing flow of articles in the periodical press. The main value of document flow in this type of publication is measured by covering various aspects of the field and delivering empirical ideas and information to readers promptly [3].

During the research conducted in Azerbaijan on the field of scientific journals on the subject, it is known that the historical role of the scientific and bibliographic series of "Scientific works" of BSU published in 1970-79 should be specially noted.

From 1980 to 1990, this series was published in the form of subject collections. (3, p. 3) "Library studies and bibliography: scientific-theoretical, methodological and experimental journal" created in 1997 laid the foundation of a new stage in the development of scientific opinion in the field. The magazine is published twice a year. (3, p.3) During the years of independence in Azerbaijan, the scientific publications of the period, which were of exceptional importance in the formation of the scientific community and scientific environment for librarianship and information activities, include the following:

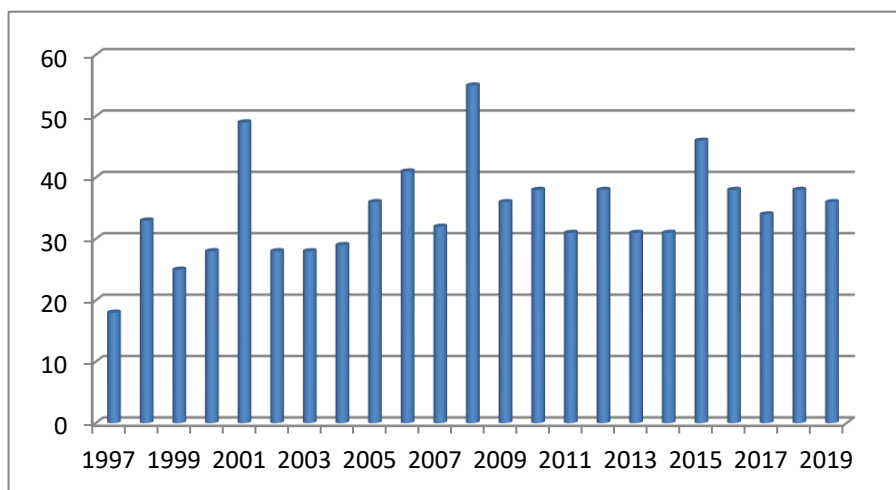
1. Librarianship and bibliography: a scientific-theoretical and practical journal. 1997-
2. Bibliography and publishing work: scientific-theoretical and practical-methodical magazine. 2008-2018
3. Bibliography and editorial art: scientific-theoretical and practical-methodical magazine. 2015-
4. Kitabkhana.az: Independent scientific, methodical and practical magazine. 2008-

5. Scientific Works: Ministry of Culture and Tourism of the Republic of Azerbaijan, AMK
6. Azerbaijan National Academy of Sciences Central Scientific Library: Scientific Works 2006-2013
7. Azerbaijan National Academy of Sciences Central Scientific Library. Journal of Scientific Works: Library and Information Studies. 2019 –
8. Librarianship and information: a scientific-theoretical and experimental journal. 2010-2020 [1].

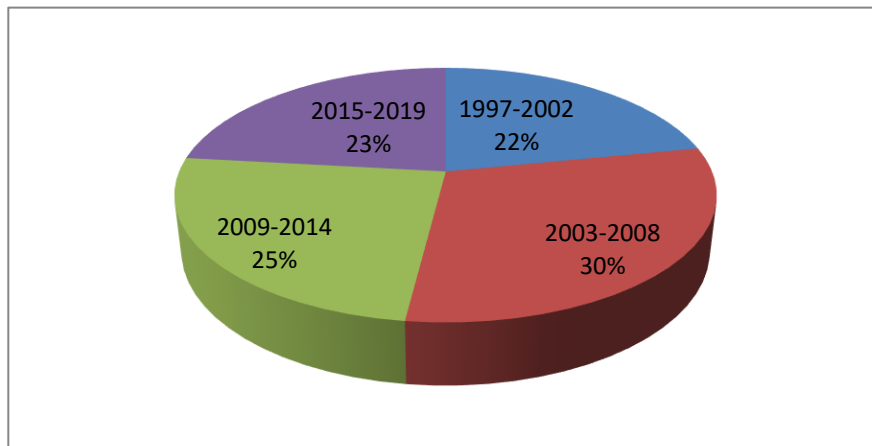
**Table 3. Main indicators of "Library science and bibliography" magazine**

By year	Article number	By year	Article number
1997	18	2009	36
1998	33	2010	38
1999	25	2011	31
2000	28	2012	38
2001	49	2013	31
2002	28	2014	31
2003	28	2015	46
2004	29	2016	38
2005	36	2017	34
2006	41	2018	38
2007	32	2019	36
2008	55		

The table was compiled by the author  
Main indicators of the journal "Library science and bibliography".



**Chart 7.**  
Key indicators for the journal "Library Studies and Bibliography" (for 5 years)

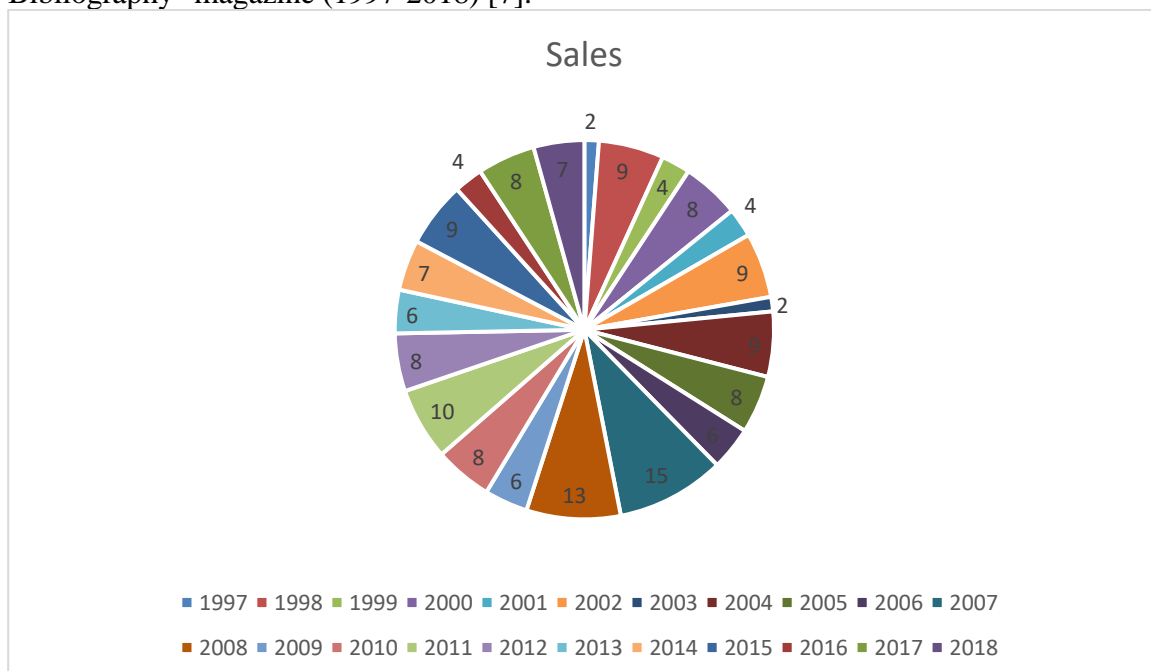


**Chart 8.**

Analyzing the published articles according to the authors, it becomes clear that: professor X. Ismayilov - with 49 articles, associate professor K. Aslan - with 30 articles, associate professor N. Ismayilov - with 29 articles, S. Sadygova and X. Aghayeva - with 21 articles have shown more productive activity in the magazine.

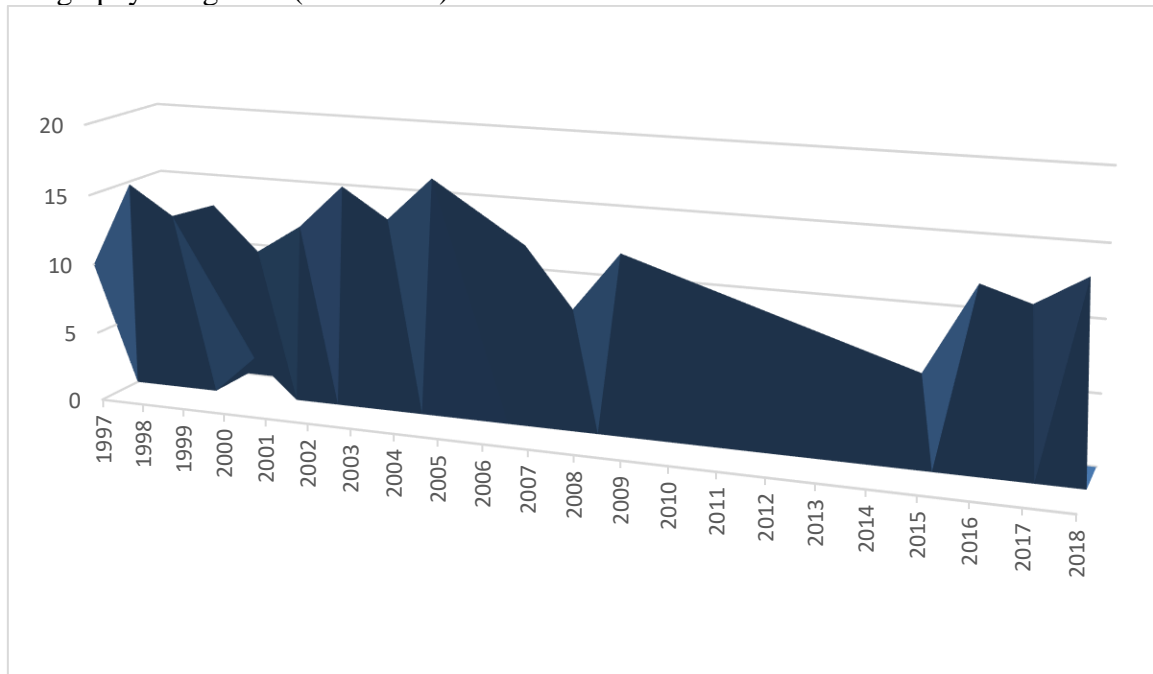
In general, according to the authors whose articles were published, the indicators of the top 20 are reflected in the graph below.

Statistical indicators of general articles on "Bibliography" in "Library Science and Bibliography" magazine (1997-2018) [7].



The diagram above shows the statistical indicators of general articles on "Bibliography" in the "Library Science and Bibliography" magazine for the years 1997-2018. If we look at the general statistics by year, between 1997 and 2018, a four-fold dynamic increase in the number of articles is observed. This is one of the main manifestations of the flow of documents and the creation of new studies in that field.

Statistical indicators of general articles on "Library Science" in "Library Science and Bibliography" magazine (1997-2018)



The diagram above shows the statistical indicators of general articles on "Library Science" in the "Library Science and Bibliography" magazine for the years 1997-2018. If we look at the general statistics by years, between 1997 and 2018, there is a three- to four-fold dynamic increase in the number of articles [1].

In addition, there are several scientific journals published in the country, in which a large number of articles on the researched field have been published. For example, in the journal "Problems of Information Society" of the Institute of Information Technologies, and in the journal "Manuscripts do not burn" of the Institute of Manuscripts of ANAS, articles, and results of scientific research are systematically published in the field [10].

Also, a separate "Librarianship" section in the "Language and Literature" magazine of BSU, "Information Support of Scientific Research, Librarianship" in the magazine "Scientific Works of the Institute of Manuscripts of Azerbaijan" published by the Institute of Manuscripts of ANAS, Bibliography bibliographic studies section is separated. During the research, it is known that the main part of the document flow is made up of journal publications. This is explained not only by the increasing interest of the authors in the problem but also by the possibility of publication in a relatively short time.

When referring to the "Librarianship and Bibliography" magazine, it is known that 846 articles were published in the magazine during the years 1997-2019. 7 of them are in Russian, and 4 in English. The intensity of printing of articles is observed in 2003-2008. Thus, the volume of articles published in this period is 30% of the total articles [1].

### Conclusion

In the article, the selection of evaluation indicators for the study of document flow, and the specification of the research goal were comprehensively analysed. During the conducted research, it became clear that the results obtained in the application of document flow research

should be interpreted accurately; the limitations of the array, the user's request, and the goals and objectives of the applied research should be taken into account.

Because of applied research on the study of document flow, improving the quality of the collection of funds, improving the characteristics of the demand for created information products and services, coordinating and planning the work of information institutions, conditions for the optimal use of intellectual and material resources of the existing enterprise are created.

In addition, the strengthening of technological control during the processing of document flow allows for solving many internal issues related to marketing research in modern conditions, where it is impossible to take an exact position in the world information market. The article describes the creation and management of the document flow research and circulation system, and its advantages.

### References

- [1] Ismayilov, N., Rzayeva, Z. Formation, development and current state of document flow in the field of librarianship and bibliography in Azerbaijan: Monograph / N.I. Ismayilov, Z.T. Rzayeva: scientific editor S.A.Khalafova. - Baku: "Translator",-2021. - 269 p.
- [2] Ismayilov, N., Khalafova, S. General Characteristics of Local Lore Dosumental Network Resources of the libraries of Azerbaijan // Technium social sciences journal.- Vol 33.- Tom 2. pp 628-637.
- [3] Ismayilov, N., Khalafova, S. Library sites that provide information to users // Scientific and Theoretical Almanac GRANI journal.-Vol 25.- Tom 2. pp 22-28.
- [4] Суо Нацуми. Документальный поток: структура и закономерности развития. Режим доступа:<http://m.diary.ru/~shamomist/p209503775.htm?oam>
- [5] Gohberg, L.M. Sagieva, GS "Russian Science: Bibliometric Indicators," Forsyth, 2007, №1, p.44-53.
- [6] Lazarev, V.S. "Bibliometry," Questions of bibliography and library science: interdisciplinary. Sat Minsk, 1991, Issue. 12, p.3-18.
- [7] Study the structure of the document flow. Access mode: <http://www.fellowmanage.ru/xins-632-1.html>
- [8] The structure of the document flow. Access mode: <http://studopedia.org/8-25581.html>
- [9] Tahirov, K.M. World National Libraries. Azerbaijan National Library named after M.F. Akhundzade.- Baku, BUN, - 2013.- 212 p.
- [10] <http://ek.anl.az/search/query?theme=e-kataloq>