Abstract.
All research should make a significant contribution to the academic literature. However, this can only be achieved when research can highlight its novelty. Hence, mapping previous studies on a particular topic is essential to identify the uniqueness of the research. This study aimed to examine the growth of publications on governance issues in Indonesia using the Google Scholar database and manual searches in SINTA. This was a bibliometric analysis that relied on the Publish or Perish, Mendeley and VOSviewer tools. Studies from 352 journals were collected and analyzed to determine the development of publications on governance topics in Indonesia. Furthermore, using VOSviewer, co-authorship was analyzed and co-occurrence maps were created. The co-occurrence maps showed that the topics of corruption, public service and local governance were over-researched. On the contrary, the topics of district governance, good governance value, elite capture, and humanistic approach were under-researched. Hence, it is recommended that further research is conducted on these under-researched topics.

Keywords: Indonesia governance, governance, bibliometric analysis

1. Introduction
According to the Cambridge Dictionary, governance is defined as how organizations or countries are managed at the highest level and the system for doing this. Meanwhile, The Canadian Institute of Governance argues that governance is a process in which people or organizations make important decisions, determine whom they involve, and hold accountable. Additionally, the OECD defines public governance as the formal and informal procedures that control how public choices are made, and actions are carried out, to preserve constitutional principles in the face of challenges and a changing environment. Governance is paramount to society, as it supports promoting the economic development and well-being of the population. Therefore, with good governance, it is possible to identify improvements in organizational performance by reducing conflict; directing and aligning government action strategies. Furthermore,
according to Santos et al (1), public governance can be regarded as a system that promotes the balance of power. Citizens, elected representatives, senior management, managers, and employees all play a significant role in public governance since they enable the common good to prevail over the interests of groups or individuals.

Many scholars, both at the national and international levels, have conducted scientific research on governance. However, a bibliometric analysis of publications on governance in Indonesia is lacking. This essay aims to analyze the development of publications on governance in Indonesia to understand publication trends on governance topics. According to Hamidah et al (2), bibliometrics analysis effectively provides datasets that can be used by policymakers, researchers, and other stakeholders to improve the quality of research. Bibliometric analysis is helpful to see the development of publications on governance from year to year, the names of the most ‘productive’ researchers in writing specific topics, the names of journals that are ‘productive’ in publications, and their affiliated institutions. In addition, this essay shows a visualization map of the network, overlay, and density with the help of the VOSviewer tool in co-authorship and co-occurrence analysis to find research gaps and novelty.

2. Methodology

This section will discuss the methodology used to conduct the bibliometric analysis and the tools or software used.

The method used is bibliometric analysis. Three hundred fifty-two (352) journals were collected from the Google Scholar database. At this stage, we did not limit the publication scope and found that journal articles were published between 1983 and 2021. Further, for the analysis, the authors gathered the journals articles SINTA database and Mendeley Web Search. Thus, we use both national and international journals in conducting this analysis. The analysis is done with the assistance of three tools which as described as follows.

Publish or Perish

We carried out data mining in Google Scholar Database to find research on Governance in Indonesia. We use two keywords, "Indonesian governance" and "governansi di Indonesia." All the identified journal articles were then classified according to their relevance to the selected topic. The result was then stored in ris format to enable further analysis and visualization in Mendeley and VoS viewer.
2.1. Mendeley

The result of data mining from Publish or Perish is then imported to Mendeley. As an addition, manual searches in SINTA web and in Mendeley Web Search were also conducted. In total, we were able to collect 352 journal articles. The results are saved in .ris format to be analyzed in VOSviewer.

Figure 1: The use of Publish or Perish to gather research articles on Indonesia governance from Google Scholar using “Indonesia governance” as keywords.

Figure 2: The use of Mendeley Desktop.
2.2. VOSviewer

VOSviewer is used to create bibliometric visualization maps. It enables us to conduct co-authorship and co-occurrence analyses. The VOSviewer as bibliometric analysis allows us to map out the research topic of governance in Indonesia. VOSviewer also offers text mining functionality that can be used to build and visualize co-occurring networks of key terms extracted from metadata of scientific literature. The explanation of the analysis results by VOSviewer is explained further in the Results and Analysis section.

3. Results and Analysis

This section will discuss the findings that are obtained and the analysis. As shown in the figure below (Fig. 3), literature searches are retrieved from the Google Scholar database using indonesia governance and governansi indonesia as keywords. There are 352 publications retrieved from the year 1983 to 2021. Further, the analysis is conducted with three different software, but VOSviewer will be emphasized to create a visualization map of co-authorship and co-occurrence in this section. Three different kinds of maps will be presented in this essay: network, overlay, and density.

![Figure 3: Bibliometric Analysis Framework for ‘governance research in Indonesia’](image_url)
3.1. Year of Publication

The table below shows the development of publications on governance topics. The oldest research article is from as early as 1983, and the latest is from 2021. The graph below shows that publications on governance in Indonesia are experiencing developments throughout the years, with exception in the year of 2021.

![Publication Trends](image)

*Figure 4: Publication trends of governance research in Indonesia.*

3.2. Authors

The table below shows the number of writers who have written about the most governance topics and the number of journals they have published. Antlöv, H and McCarthy, J F has written the most with three published journals.

3.3. Publisher

The table below shows the publishers who publish the most journals on governance topics in Indonesia. Journal of Governance published the most publications, with 9 published journals.
TABLE 1: The author who published the most research on governance in Indonesia.

| Author                | Number of Published Journals |
|-----------------------|-----------------------------|
| Antlöv, H             | 3                           |
| Astuti, R             | 2                           |
| Bardhan, P K          | 2                           |
| Bebbington, A         | 2                           |
| Berenschot, W         | 2                           |
| Brinkerhoff, D        | 2                           |
| Hapsari, M            | 2                           |
| Lewis, B D            | 2                           |
| Mallarangeng, D       | 2                           |
| Mardiasmo, D          | 2                           |
| McCarthy, J F         | 3                           |
| Prasojo, E            | 2                           |

TABLE 2: The publishers who publish the most publications on governance topics in Indonesia.

| Name of Publication/Publisher                                      | Number of Published Journals |
|--------------------------------------------------------------------|------------------------------|
| World Development                                                  | 4                            |
| Third World Quarterly                                              | 4                            |
| Publisia: Jurnal Ilmu Administrasi Publik                          | 3                            |
| PUBLIK Jurnal Ilmu Administrasi                                    | 4                            |
| Policy Studies                                                     | 3                            |
| Policy & Governance Review                                         | 5                            |
| Jurnal Ilmiah Ilmu Administrasi Publik                             | 4                            |
| Jurnal Borneo Administrator                                        | 5                            |
| Journal of Public Administration and Local Governance              | 3                            |
| Journal of Governance                                             | 9                            |
| Jurnal Kebijakan dan Administrasi Publik                           | 5                            |
| Bulletin of Indonesian Economic Studies                           | 5                            |
| Bisnis & Birokrasi, Jurnal Ilmu Administrasi dan Organisasi        | 3                            |

3.4. Affiliations

The table below shows the institutions that publish the most journals on governance topics in Indonesia. Sultan Ageng Tirtayasa University is the affiliation that publishes the most journals, with nine publications.

The table below shows the ten most-cited journals about governance topics in Indonesia. It also shows the name of the authors, title, year of publication, the name of publication, and the publisher’s name.
Table 3: The Institutions that publish the most journals on governance topics in Indonesia.

| Publication Name                  | Institution/Affiliation                  | Number of Published Journals |
|-----------------------------------|------------------------------------------|------------------------------|
| Journal of Governance             | Sultan Ageng Tirtayasa University        | 9                            |
| Policy & Governance Review        | Indonesian Association for Public Administration | 5                            |
| Jurnal Kebijakan dan Administrasi Publik | Gadjah Mada University                   | 4                            |
| Third World Quarterly             | Routledge                                | 4                            |
| World Development                 | Elsevier                                  | 4                            |

3.5. Co-Authorship Map Visualization

The co-authorship map enables the researchers to understand the pattern of collaboration between authors in writing publications on governance. There are a total 559 authors. The minimum publication threshold for each author is 25 publications. Hence, there are 3 clusters of green, blue, and red.

Within these 3 clusters, scientific publications are in the form of national and international journals. The first group in blue consists of 1 author, Wahyu Sutiyono (13). Important publications written in this cluster include Introduction to the mini special issue: Understanding Governance in Indonesia. Then, there are two authors in the second cluster with green color: Agus Pramusinto and Bambang Subatin (14). Important
### Table 4: The most cited articles.

| Number of Citation | Authors | Title | Year | Publication | Publisher |
|--------------------|---------|-------|------|-------------|-----------|
| 457                | Martinus P. Abednego, Stephen O. Ogunlana (3) | Good project governance for proper risk allocation in public-private partnerships in Indonesia | 2006 | International Journal of Project Management | Elsevier |
| 238                | Anthony Bebbington, Leni Dharmawan, Erwin Fahmi, Scott Guggenheim (4) | Local Capacity, Village Governance, and the Political Economy of Rural Development in Indonesia | 2006 | World Development | Elsevier |
| 204                | Gordon Crawford (5) | Partnership or power? Deconstructing the 'Partnership for Governance Reform' in Indonesia | 2003 | Third World Quarterly | Taylor & Francis |
| 153                | Ndaruningpuri Wulandari (6) | Pengaruh Indikator Mekanisme Corporate Governance terhadap Kinerja Perusahaan Publik di Indonesia | 2006 | Fokus Ekonomi: Jurnal Ilmiah Ekonomi | STIE Pena |
| 116                | Christian von Luebecke (7) | The political economy of local governance: findings from an Indonesian field study | 2009 | Bulletin of Indonesian Economic Studies | Taylor & Francis |
| 75                 | Eko Prasojo, Teguh Kurniawan (8) | Reformasi Birokrasi dan Good Governance: Kasus Best Practices dari Sejumlah Daerah di Indonesia | 2008 | The 5th International Symposium of Jurnal Antropologi Indonesia | |
| 73                 | Christopher Silver (9) | Do the donors have it right? Decentralization and changing local governance in Indonesia | 2005 | Globalization and Urban Development | Springer |
| 66                 | Keith Green (10) | Decentralization and Good Governance: The Case of Indonesia | 2005 | - | SSRN |
| 61                 | Ross H. McLeod, Harun Harun (11) | Public Sector Accounting Reform at Local Government Level in Indonesia | 2014 | Financial Accountability & Management in Governments, Public Services and Charities | Wiley |
| 43                 | Ronald Holzhacker, Rafael Wittek, Johan Woltjer (12) | Decentralization and Governance for Sustainable Society in Indonesia | 2016 | Development and Governance | Springer |

Publications written in this cluster include Collaborative Governance in Off-site Anoa Conservation at The Anoa Breeding Center of The Manado Environment and Forestry.
Research. Finally, the last cluster with red color consists of 2 authors: Teguh Kurniawan and Eko Prasojo (8). Important publications written in this cluster Reformasi Birokrasi dan Good Governance: Kasus Best Practices dari Sejumlah Daerah di Indonesia.

3.6. Co-Occurrence Map Visualization based on Text Data

This map aims to visualize frequently occurring terms based on titles and abstract fields. The results of this visualization will help identify research gaps and find new things or research topics that have not been or are still rarely done. From 352 journals collected in .ris format, 3831 terms were found with a minimum of three occurrences. Thus, there are 121 most relevant terms. The co-occurrence map and table below yield 10 clusters that are represented with few different colors.

| Cluster | Keyword |
|---------|---------|
| Cluster 1 (Red) 25 items | bum desa, business, case study, challenge, complexity, democratization, district governance, good governance di Indonesia, growth, indigenous person, Indonesian government, local governance, partnership, political economy, public accountability, public governance, public-private partnership, punishment, realization, relation, sustainability, village, village governance, village regulation, world bank |
| Cluster 2 (Green) 19 items | boundary, civil society, company, contribution, degree, democracy, democratic governance, economic crisis, effect, elite capture, evidence, good governance concept, outcome, poor governance, progress, public company, public spending, radicalism issue, Suharto |
| Cluster 3 (Blue) 15 items | agent, audit committee, bank pembangunan daerah, board, commissioner, commissioners, condition, conflict, diversity, emergence, existence, form, influence, ownership |
| Cluster 4 (Yellow) 15 items | acceptance, bureaucracy reform, collaboration, collaboration process, conservation, covid, governance system, ict, implication, key factor, pandemic, smart city, smart governance, success, trust |
| Cluster 5 (Purple) 10 items | corruption, firm value, good governance value, good public governance, governance policy, imf, intellectual capital, national committee public service quality, public trust |
| Cluster 6 (Baby Blue) 10 items | Administration, assessment, civil registry office, delivery, humanistic approach, population, public service, public service agency, public service apparatus, regional autonomy |
| Cluster 7 (Orange) 9 items | cooperation, dimension, human resource, international partnership, law enforcement, mechanism, openness, revitalization program, sound governance |
| Cluster 8 (Maroon) 8 items | accuracy, applicability, case, domain, pemerintah, protocol, reformasi, success rate |
| Cluster 9 (Fuchsia) 7 items | author, governance, Indonesia, npm, pelayanan publik, public administration, public administration reform |
| Cluster 10 (Light Coral) 3 items | achievement, good governance principles, weakness |
The number of links is 612, and the total link strength is 2595. The co-occurrence map visualization signifies that the greater the number of publications, the more robust the relationship between the terms. This co-occurrence map can determine which are the over-researched and under-researched topics. For example, the term “corruption” often appears in the figure below, with 30 occurrences, 31 links with other terms, and 140 total link strengths. According to Bovaird and Löffler (15), ethics is the main problem in public sector governance. Public trust in the government can be escalated by increasing public and other stakeholders’ involvement and increasing transparency. Another topic with the most occurrences is “public service,” with 40 occurrences, 24 links, 311 total link strength. And the third topic is “local governance,” with 29 occurrences, 26 links, and 63 total link strengths.

![Co-occurrence visualization network map.](image)

**Figure 6:** Co-occurrence visualization network map.

Meanwhile, under-researched topics have the fewest occurrences and the number of links, and their total link strength. In the picture below, the terms “district governance” and “good governance value” only appear three times, with two links and three total link strengths.

And the third topic is “elite capture” with the appearance of 3, links as many as 2, total link strength 4.

As for overlay map visualization, it can be used to show the novelty of research. The brighter the color, the newer a publication. While the darker the color, the more outdated the publication. For example, the topic “humanistic approach” shows novelty because it displays a bright yellow color.
Finally, a density map visualization is also beneficial in bibliometric analysis. The density map visualization determines that when a term is highlighted with the light-color it indicates that the topic is over researched. Conversely, the fainter a color, the less research is done. It is important to note that in this analysis, not all terms are visible on the map.

Figure 11 shows that the term "local governance" shows a lighter color than other terms. On the other hand, the term "humanistic approach" shows fainter color.

The visualization maps above provide evidence that the topic of "corruption," "public service," "local governance" has been widely researched under the topic of Indonesian governance. Meanwhile, the topics of "district governance," "good governance value," "elite capture," "humanistic approach" are topics that under-researched.
Our analysis using VOSviewer enables us to see new topics in Indonesian governance that should be developed more through research. This can be employed as the first stepstone to identify research novelty refers. Research Novelty refers to the elements new to the research, including new methodologies or new observations that lead to the discovery of new knowledge. A novelty may contribute to scientific progress, as the philosopher, Imre Lakatos, stated that good research is "progressive." According to Noor M (16), the novelty of the research and impact can be a strategic way to attract the reader’s attention in a study. The essence of the novelty of the research results obtained needs to be related to its importance for science as well as to practical interests.

Conclusion
We conclude that research on the topic of governance in Indonesia is indeed growing every year. Based on the analysis from VOSviewer, it is evident that publications on governance with the topics of "corruption," "public service," "local governance" were over-researched. Meanwhile, the topics about "district governance," "good governance value," "elite capture," "humanistic approach" are topics that are still under-researched. These topics that have not been widely researched provide opportunities for researchers to conduct research related to these topics. Good research needs to find elements of new findings to contribute both to science and to life. Scientifically, seeking new knowledge is carried out through correct research activities with procedures that are in accordance with scientific principles, which can produce valuable information. Therefore, researchers can present, expand, and elaborate new information, carry out empirical work that has never been done before, synthesize new information in different ways, or produce a critical analysis that has never been done before based on topics about governance in Indonesia which is still not much research.

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