Trend Transformation in Population Administration in Indonesia: A Bibliometric Analysis 2012-2024

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ABSTRACT

This research aims to analyze trends in public service innovation and population administration using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology. The focus of the research problem includes the distribution of articles per year, types of research, targets of innovation, geographical distribution of articles, most cited articles, and dominant fields of study. Articles were selected through a systematic selection process using inclusion criteria related to public service innovation and demographics. After screening, the articles were analyzed based on annual distribution patterns, types of research, and innovation targets. The research results show a significant increase in the number of articles related to public service innovation since 2019, peaking in 2022 and 2023, before experiencing a decline in 2024. The analysis type has become the most dominant type of research (125 articles), while experiments and model development are used less frequently. Society is the main target of innovation (103 articles), while the government and academic sectors are relatively underrepresented. In terms of geographical distribution, South Sulawesi dominates with the highest number of articles, while several other provinces have very little contribution. The most cited articles focus on technology-based innovations, such as e-government and public service applications. Overall, this research reveals that public service innovations tend to focus on the application of technology and involve the community, with an analytical approach dominating the research methodology.

1. INTRODUCTION

Population administration in Indonesia is a vital component of an efficient and transparent governance system. Its main function is to ensure that population data is managed accurately and can be accessed to support various public services. Since the early 2010s, Indonesia has begun introducing a number of innovations in the population administration system, including the launch of the Electronic Identity Card (e-KTP) program in 2011. This innovation is designed to create a single integrated population database across the country, avoid identity duplication, and facilitate more efficient access to public services. As a system that unifies various population information, the e-KTP has become the foundation for further developments in the population administration sector in Indonesia. The findings of the obstacles include the lack of public awareness regarding population data [1], insufficient socialization to the public [2], the suboptimal implementation of the Birth Certificate and Child Identity Card Readiness Program (Program SI ADIK) [3], public comfort [4], the need for socialization to the public [5], lack of socialization in governance management [6], improving the quality of population administration services

[7], and public knowledge [8].

The period between 2012 and 2024 has witnessed various significant changes in population administration, with the adoption of digital technology as one of its main catalysts. The development of information and communication technology (ICT) has driven the digitization of population services, allowing the public to access services online without having to visit government offices. This digital transformation is also supported by various policies that strengthen infrastructure and technology systems, ensuring that population data can be processed more quickly, accurately, and securely. This digitization effort is crucial, especially to expedite services in areas with large populations, such as urban areas, which previously faced challenges in terms of queues and slow administrative processes. The research findings indicate that the "6 In 1" innovation significantly improves the quality of public services, making them more efficient and effective [9]. The population administration information system can assist in processing population data [10], effectively addressing population administration issues [11]. The community can be served systematically and subsequently receive an invoice via SMS confirming that the letter is ready for use [12]. It simplifies the delivery of population documents [13], and the

booking system prevents the accumulation of excessive queues (beyond the department's quota) [14]. The service is easy, fast, and free [15], and it reduces the backlog of administrative service applicants' files [16].

However, this innovation is not without challenges. The disparity in technological infrastructure between urban and rural areas remains one of the main obstacles. In more remote areas, access to the internet and digital devices is still limited, so many residents have not yet been able to fully enjoy the benefits of digital services. In addition, digital literacy in Indonesia also varies, with some segments of the population still needing assistance in using increasingly sophisticated technology. These obstacles slow down the process of innovation adoption in several regions and highlight the importance of more inclusive and comprehensive policies in expanding access to technology for all Indonesian citizens. The research findings indicate a lack of human resources, particularly operators/technicians [17]. Additionally, the implementation of the Digital Population Identity (IKD) application has been effective [18]. The e-government application can help manage population data more quickly [19]. This e-government application can adequately help manage population data more quickly [20], providing services that are easier and faster [21], with adequate facilities and infrastructure [22], thereby improving the quality of public services as a responsibility in public service [23].

In addition to infrastructure challenges, bureaucratic issues often hinder the smooth implementation of innovations in the population administration sector. Complex bureaucracy, lack of coordination between agencies, and differing interpretations of policies at the local level can slow down the implementation process. In some cases, innovations implemented at the central level encounter difficulties when applied at the regional level, especially in areas with limited human resources and infrastructure. These factors indicate that the transformation in population administration requires a more systemic and collaborative approach between the central and regional governments to ensure long-term success. Additionally, the findings indicate that there is a lack of information available to the public [24], timeliness of services [25], synergy in administrative services [26], technological skills for staff and employees [27], public information about the existence of the website [28], weaknesses in Human Resources (HR) [29], availability of facilities and infrastructure [30], public responsiveness [31], the need for connectivity and cross-sector cooperation [32], and a lack of public awareness and knowledge [33].

Therefore, this systematic review aims to examine trends and transformations in population administration in Indonesia during the period 2012-2024. By analyzing the research that has been conducted, this review will identify successful innovations, challenges faced, and opportunities for further development in the future. This evaluation is expected to provide better guidance for policymakers, practitioners, and academics in understanding the dynamics occurring in this sector. This systematic review is also expected to offer strategic recommendations to strengthen population administration services in the future, especially in facing the increasingly advanced and complex digital era.

In the past decade, research related to the transformation of population administration in Indonesia has developed in line with the increase in digitalization and policy reforms in the public service sector. One of the most significant innovations that became the focus of research is the implementation of the

e-KTP, which was launched in 2011 and became the center of attention in research for several years thereafter. In the early stages, the research focused on the implementation and impact of the e-ID card on the accuracy of population data, the reduction of identity duplication, and its effects on public services. Researchers also extensively discussed the initial challenges faced in data distribution and collection, including technical and bureaucratic issues that slowed down the implementation of e-KTP in several regions.

Closer to the years 2020 to 2024, there has been an increased interest in research evaluating the impact of the COVID-19 pandemic on population administration. The pandemic has driven the wider adoption of online services, with many local governments shifting most population administration services to digital platforms to avoid physical contact. Research during this period focuses on the effectiveness of digital services during the pandemic, including the extent to which this technology facilitates access for the community amidst social restrictions. Additionally, the research is beginning to review the sustainability of these innovations after the pandemic ends, as well as their impact on long-term population administration reforms. The management of civil registration documents during the pandemic became much faster, the quality of service remained maintained, and the number of people served did not decrease [34], facilitated the online birth certificate creation process [35], network constraints [36], lack of HR and problematic internet networks [37], benefits of digital civil registration applications [38].

The research trend in population administration has undergone significant shifts since the COVID-19 pandemic, particularly with the increased focus on service digitalization. The existence of the pandemic has prompted recent studies highlighting the adaptation of information technology in the administration of population services, in line with the implementation of social restrictions that hinder face-to-face services. Many researchers have begun to explore the effectiveness of online services such as application-based population document creation, online queue systems, and the use of digital signatures. Research themes dominate scientific publications in the period from 2012 to 2024, indicating that the issue of digital transformation has become a mainstream topic in population administration research. Moreover, the trend of increased publications post-pandemic indicates a continued research interest in digital innovation and public services. Thus, the pandemic not only changed the way services are provided but also directed the latest studies in the agenda of population administration research and studies on public service innovations relevant to the challenges and needs of the digital era.

Overall, research over the past decade has shown significant changes in population administration in Indonesia, from the use of simple technology to the adoption of more complex and integrated systems. Although many achievements have been made, the research also highlights various challenges that need to be addressed, particularly in terms of infrastructure, digital literacy, and data security. As digital transformation and population administration policies continue, future research is likely to focus more on innovations that emphasize technological inclusivity as well as the protection of citizens' privacy and data. The findings on the innovation of population administration services, namely the Kadoku Sehati Innovation, have been well implemented [39], weak communication and human resources [40], online service satisfaction, benefits of

digital-based services [41], good cooperation between urban and rural areas [42], and a shortage of administrative staff [43], although there has been progress, there are still challenges in sustainability and equitable distribution of research, necessitating further collaboration and innovation to enhance impact in this field [44].

In a systematic review focusing on the transformation of population administration in Indonesia over the past 10 years, there are several important issues that need to be addressed. First, the distribution of articles per year needs to be analyzed to see research trends, whether there are spikes in certain years related to the launch of major policies like the e-KTP or the impact of the COVID-19 pandemic. Second, the types of research conducted, whether more quantitative, qualitative, or mixed-methods, need to be mapped to understand the dominant methodological approaches in this field. Third, the research targets are also important, whether they focus more on the government, technology, or the service-using community, to identify which parts of the transformation are most studied. Next, the distribution of research by province needs to be explored to determine whether there are geographical imbalances in the research, whether most of it focuses on major cities or if remote areas are also represented. Fifth, identifying the most cited articles is important to see the contributions of the most influential research in the scientific community. Lastly, an analysis of the journals that publish the most articles on this topic will provide an overview of the main publication channels in the field of population administration transformation. Overall, the findings from this review are expected to reveal trends, challenges, and opportunities for further research in the development of population administration in Indonesia.

2. METHOD

The research method used in this study follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) approach, which aims to systematically identify, screen, and select relevant articles. This process consists of several main stages, namely identification, screening, eligibility, and inclusion of articles. The description of the PRISMA method can be outlined as follows.

Identification Stage (Figure 1): In this stage, articles are collected from two main sources, namely the Crossref database (881 articles) and Scopus (13 articles), resulting in a total of 994 articles. The goal of this stage is to gather as many articles as possible that are relevant to the research topic. Screening Stage: After the articles are collected, a duplication elimination process is carried out, where the same articles in both databases are removed. This process leaves 994 articles that are free of duplicates.

Eligibility Stage: From the remaining articles, further screening is conducted. First, articles that are not in the form of journals (such as books, proceedings, or other manuscripts) were excluded, leaving 199 articles. Next, articles that do not have a PDF file were also eliminated. Inclusion Stage: The final screening was conducted based on language criteria, where only articles in Indonesian were retained. At this stage, 171 articles remain and are used in the research.

Overall, this research method employs systematic and transparent procedures to identify and select relevant articles, with the aim of producing a comprehensive and data-based literature review that is reliable. Second, previous articles also lack in exploring the social dimensions, particularly how society responds to technology-based population administration transformations. Many studies focus on technical and legal aspects, but few deeply analyze user experiences, access barriers, and impacts on vulnerable community groups, such as residents in remote areas or those with technological limitations. Previous research has also not extensively examined the implications of the COVID-19 pandemic on the acceleration of digital population services, which is important to understand in the broader context of digital transformation in the public administration sector.
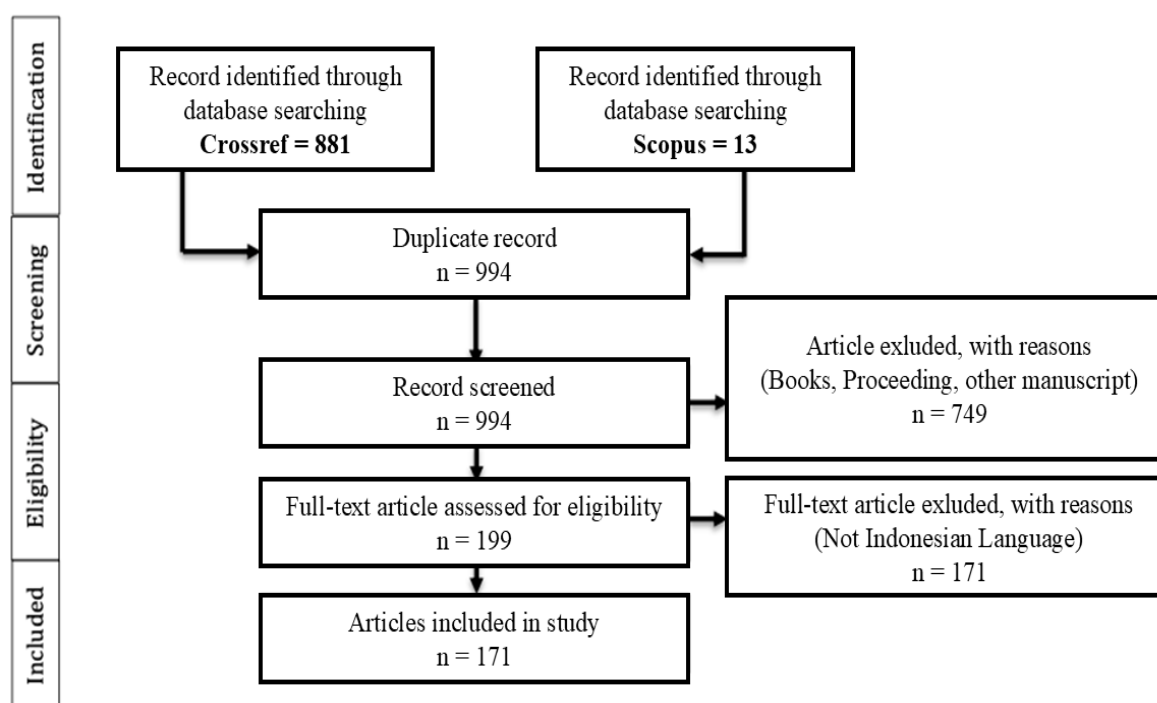

Figure 1. Method PRISMA

Referring to Figure 1, the article selection process in this study applied strict inclusion and exclusion criteria to ensure the accuracy and relevance of the data analyzed. The inclusion criteria included articles obtained from two main databases, namely Crossref and Scopus, with a focus on scientific journal publications available in PDF format. Furthermore, only articles in Indonesian were retained, in line with the national context of the topic being studied. The exclusion criteria include the removal of duplicates across databases, filtering out non-journal documents such as books, proceedings, and other manuscripts, as well as eliminating articles that are not fully accessible or written in a foreign language. This selection strategy not only demonstrates a systematic and transparent approach but also strengthens the replication of studies by clarifying the boundaries of the analyzed literature and the validity of the data used.

3. RESULT AND DISCUSSION

This research aims to analyze the trend of population administration transformation in Indonesia. The sub-discussions consist of the distribution of articles per year, types of research, research targets, distribution by province, most cited articles, and fields of research as follows.

3.1 Distribution of articles per year

Figure 2 indicates the trend of publication research from authors originating from Indonesia:
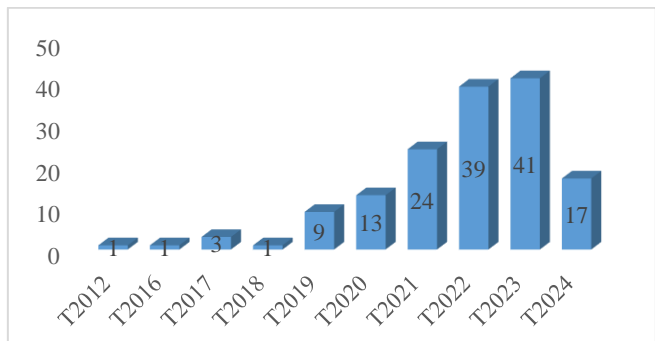

Figure 2. Distribution of articles from 2012-2024
Source: Crossref Data, 2024

This data shows a significant growth trend in the number of studies or activities measured from 2019 to 2023. In the period from 2012 to 2018, the recorded numbers were very low, with most years showing figures of zero or only one to three entries. However, starting in 2019, these numbers began to increase, with 9 in that year, then rising to 13 in 2020, 24 in 2021, and peaking in 2022 and 2023 with 39 and 41 respectively. This reflects a significant surge in interest or activity on the measured topic during this period. However, in 2024, there was a notable decline, with the number dropping to 17, which may indicate a change in trend or a reduction in related activities. This trend illustrates a significant temporary surge followed by a quite sharp decline in the last measured year.

The findings show an increase in the number of publications each year, with the highest surge occurring in 2019. This indicates a growing interest in this issue during that period. Indonesia is recorded as the country with the highest number of publications, highlighting the relevance of this topic,

particularly in the context of population data management issues [45]. Meanwhile, research findings from the Surabaya City Population and Civil Registration Office indicate the implementation of a modern agile governance model in the delivery of population administration services, comprising seven key components: excellent governance, software-based processes, community involvement, employee motivation, adaptive approaches, service design, and external monitoring [46].

3.2 Type of research

Figure 3 illustrates the type of research on the issues of transformation and population administration: A Systematic Review of Articles from 2012-2024. The image in Figure 3 type of research can be described as follows:
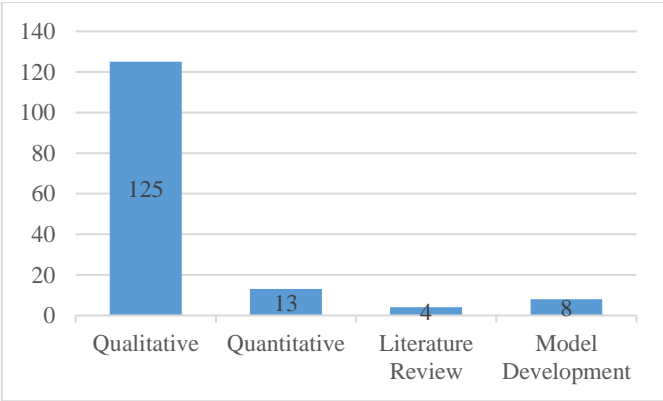

Figure 3. Type of research
Source: Crossref Data, 2024

Based on the presented data, qualitative research is the most dominant type of research with a total of 125. This shows that the majority of the research conducted uses an analytical approach, where researchers focus on the collection and interpretation of data, whether primary or secondary, to understand the phenomenon being studied. This approach is very commonly used in various fields of science because it allows researchers to identify patterns, trends, and relationships between variables without the need for experimental manipulation. The dominance of this type of research indicates that most studies tend to be observational, evaluative, and interpretative, providing a deep understanding of existing issues without directly testing hypotheses through experiments.

On the other hand, quantitative research is recorded only 13 times, indicating that this method is less frequently used compared to analytical research, the research findings on the implementation of SILOKA in the queue number retrieval process have a positive effect on optimizing population administration services [47], whereas the findings from Septiana and Putra [45] indicated the limitations of facilities and infrastructure and the lack of public understanding of population administration [48]. Innovations in population administration can make it easier for the community to obtain services quickly and easily through a door-to-door service model in villages [49]. Quantitative research, which typically involves hypothesis testing under strictly controlled conditions, may require greater resources or face more constraints in its application, Rudi et al. [50] conducted a survey method to

analyze the implementation of Smart era service innovations through villages (Lesehan), which has been effectively using 5 indicators: system, behavior, and facilities and infrastructure [50]. Meanwhile, Abbas et al. [51] used a survey method approach and SPSS version 26, with research findings indicating a positive and significant relationship between technological innovation and employee performance. The research method used by Sakawati et al. [52] employed a quantitative method using the Smart PLS 4.0 application. The analysis results showed that the effectiveness of public services at the Public Service Mall in Maros Regency is influenced by organizational culture. Meanwhile, the research findings from Mulana and Ansari [53] indicated a lack of budget and the low quality of human resources for optimizing the online-based frontline service (Petaba On) in Pidie Regency. Additionally, the research findings from Gushidal et al. [54] identified that public service obstacles are caused by limited facilities and infrastructure as well as human resources in Pekanbaru City. Model development is recorded as 8, indicating that although there are efforts to develop new models or theoretical frameworks, this still constitutes a small part of the overall research, the research method used by Hamdani et al. [55]. The Waterfall method is a systematic, sequential approach to software development. This research automates web-based population administration and has been successfully developed to facilitate community applications and make it easier for village officers to archive population data, the limitations of the community and the technological capabilities of public services [56], and the factors for the successful implementation of population administration innovation effectively due to resource factors, funding, and the facilities and infrastructure of the Sidoarjo People's Service System [57]. Literature review, with a total of 4, is the least common type of research, indicating that systematic reviews or syntheses of previous research are not widely used methods in this dataset [58]. One researcher used the quantitative PLS-SEM method in the field of population administration. The results of the study showed that service quality had a significant influence on user satisfaction with the population administration system in the city of Surabaya [59].

3.3 Research objectives

Answering the research question about the research objectives outlined as follows (Figure 4):
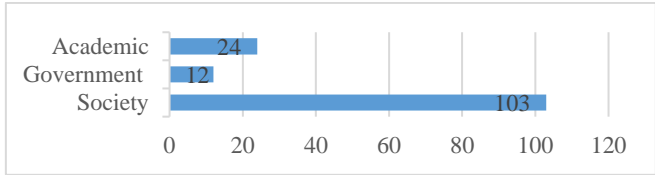

Figure 4. Answering the research question about the research objectives
Source: Crossref Data, 2024

The graph shows that most innovations are directed towards the community, with a total of 103, making it the primary target of the developed innovations. This indicates that the primary focus of these innovations is to provide direct benefits to the community, such as through improved public services, easier access, or community empowerment in various aspects. On the other hand, the government only recorded 12 innovations, a number that is much lower compared to

innovations targeting the community. This shows that although there are efforts to improve efficiency, transparency, or reforms in governance, attention to innovation in this sector is relatively small. The academic sector is in the middle position with 24 innovations, indicating that innovations in the fields of education, research, and knowledge development also receive considerable attention, although not as much as the focus on society. Innovations in the academic sector may include the development of educational technology, curriculum improvements, or new teaching methods. Overall, this data indicates that innovations are more directed towards providing direct benefits to the wider community, with moderate attention to the academic sector, and relatively little attention to the government as the target of innovation. The findings of research in the legal field propose a reconstruction of the legal framework to address important aspects of data management such as collection, utilization, security, exchange, and prevention of misuse while establishing clear access rights, prohibitions on illegal activities, and a structured system of proportional sanctions [60]. In the public service aspect, the development of AKUOnline-NG accommodates six service innovations, improvements to the detailed service information system (SIM) beyond just a login page, and the development of a service monitoring interface to enable evaluation of public services [61]. Positive contributions to improving service quality can influence regional development [62], research findings from Irmawati et al. [63] indicated that the implementation of transparency and accountability principles in population administration has not been maximized, the functions and authority of government employees in East Seram Regency have not been optimized [64], research findings by Lebetubun et al. [65] indicated that the implementation of the Maluku Creativity and Innovation Program (Kreasiku) can support the acceleration of bureaucratic reform and improve the quality of public services in Maluku.

3.4 Distribution per province

Table 1 outlines the distribution of publications on the theme of population administration by researchers from Indonesia. The distribution of publications by province illustrates the spread of publications per province, which can be explained as follows:

Table 1. Distribution per province

Province	Total	Province	Total
West Java	13	North Sumatera	4
East Kalimantan	3	Palembang	1
West Nusa Tenggara	8	Bali	4
Daerah Istimewa Yogyakarta	4	West Sumatera	8
East Nusa Tenggara	1	Bangka Belitung	1
Jakarta	13	Gorontalo	1
Southeast Sulawesi	2	Central Kalimantan	2
Central Java	15	Lampung	1
South Sulawesi	1	Riau	4
Jambi	2	Pekanbaru	2
South Sulawesi	4	Banten	3
East Java	50		

Source: Crossref Data, 2024

The distribution of articles per province shows a significant variation across the region. East Java stands out with the

highest number of articles, reaching 50, which is significantly higher than other provinces. This indicates that the province has much more active research activities or a greater academic focus related to the topics being studied. On the other hand, South Sumatra and West Java also recorded a significant number of articles, with 15 and 10 articles respectively. Other provinces such as Southeast Sulawesi and NTB recorded 13 and 9 articles, which also indicates quite active participation. However, there are several provinces with very low numbers of articles, such as Riau, Central Kalimantan, Bangka Belitung, Palembang, and NTT, each recording only one to two articles. This indicates a significant gap in the distribution of articles between provinces that are more academically active and those with minimal contributions. This gap could be caused by differences in resources, academic capacity, or interest in different research topics across regions. This distribution illustrates the disparity in scientific article production among provinces, where some provinces dominate research contributions while others are less involved.

East Java's dominance in research contributions can be explained by several key factors. As one of the provinces with the highest number of higher education institutions in Indonesia, including renowned institutions such as Airlangga University and the Sepuluh Nopember Institute of Technology (ITS), East Java has a highly productive academic ecosystem. The availability of high-quality human resources, adequate research facilities, and a strong research culture are key factors supporting the high production of scientific articles. Additionally, the local government's responsiveness to population issues and the digitalization of public services has further driven the development of research topics relevant to population administration. Furthermore, the numerous collaborations between academics, local governments, and the private sector in East Java create strategic collaboration opportunities for applied research development. Therefore, the high contribution of research from East Java reflects the synergy between academic capacity, institutional support, and the high relevance of local issues to the research topics. The focus of some studies conducted by Pramuditha et al. [66] study contributes to the application of e-government to increase citizen satisfaction and trust, while the research by Putri [58] confirms that the application of text mining is very effective in identifying the root causes of complaints in an efficient manner, while the findings of Viontita et al. [67] highlight the priority stages of the birth certificate application process and changes to family card biodata using the e-government system. The research findings of Kumaladewi et al. [68] reveal deficiencies in the SIAK system, particularly in terms of system quality, information quality, and service quality, which do not significantly affect usage.

Meanwhile, provinces with moderate research contributions, such as Southeast Sulawesi, West Nusa Tenggara, South Sumatra, and West Java, show fairly active but inconsistent participation. This is likely influenced by limited research infrastructure, fewer researchers, or a research focus that is not yet fully directed at population administration issues. On the other hand, regions with low contributions, such as Riau, Central Kalimantan, Bangka Belitung, East Nusa Tenggara, and Palembang, show minimal involvement in the production of scientific articles. The low publication rates from these regions may be due to various factors, including limited access to research resources, a lack of higher education institutions with a strong research orientation, and low institutional support for academic activities. Additionally, population

administration issues may not yet be a priority for local research in these regions. This situation reflects a gap in research capacity between provinces that requires attention, particularly in efforts to promote equitable development of science and research-based policies across all regions of Indonesia.

3.5 Most cited article

Table 2 outlines the number of articles cited by authors sourced from Crossref data from 2012 to 2024 with the theme of population administration in Indonesia. The number of citations can be outlined as follows:

Table 2. Number of article citations

Document Title (Year)	Cited
Inovasi Pelayanan Melalui Aplikasi "Dukcapil Dalam Genggaman" Oleh Dinas Kependudukan Dan Pencatatan Sipil Kota Surakarta. Anisa Cahyaningrum, Rino Ardhian Nugroho (2019)	3
Inovasi Pelayanan Publik Melalui E-Government Di Dinas Kependudukan Dan Catatan Sipil Kota Gorontalo. Fenti Prihatini Tui, Rosman Ilato, Andi Yusuf Katili (2022)	3
Inovasi Pelayanan Akta Kelahiran Melalui Website Plavon Dukcapil Di Dinas Kependudukan Dan Pencatatan Sipil Kabupaten Sidoarjo. Tri Prasetijowati, Bagus Ananda Kurniawan, Amara Nasya Damayanti (2023)	2
Inovasi Pelayanan E-Ktp Oleh Dinas Kependudukan Dan Pencatatan Sipil (Studi Kasus Mall Pelayanan Publik Kabupaten Bangkalan). Siska Amelia Fitri, Galih Wahyu Pradana (2022)	2
Replikasi Model Inovasi Pelayanan Administrasi Kependudukan Di Indonesia. Wisber Wiryanto (2019)	2
Studi Inovasi Sakera Jempol Di Kabupaten Pasuruan. Yusrin Rahmawati, Erva Mutiara Hati, Indah Lukmawati (2020)	2
Tipologi Inovasi Pelayanan Publik Di Dinas Kependudukan Dan Pencatatan Sipil Kota Surakarta Chindy Fita Yanartin. Tiyas Nur Haryani Haryani, Chindy Fita Yanartin (2020)	2

Source: Crossref Data, 2024

The table of article citations shows variation in the number of citations received by articles related to public service innovation at the Department of Population and Civil Registration. (Disdukcapil). The two most cited articles, each with 3 citations, are "Service Innovation Through the 'Dukcapil Dalam Genggaman' Application" by Anisa Cahyaningrum and Rino Ardhiansyah Nugroho (2019) and "Public Service Innovation Through E-Government at the Gorontalo City Population and Civil Registration Office" by Fentri Prihanti Tui and colleagues (2022). These articles stand out because they focus on the use of technology, such as mobile applications and e-government systems, which seem to attract more attention and are more relevant in the academic literature related to public service innovation. Meanwhile, most of the other articles, such as those discussing innovations in birth certificate services, E-KTP, and case studies in various regions like Sidoarjo and Bangkalan, received 2 citations. Although these topics are still considered important, the attention they receive is slightly lower compared to technology-based articles. This indicates that public service innovations involving technology tend to be more recognized and cited in related research. Overall, these articles reflect a

significant interest in innovations in public administration services, particularly those related to the application of modern technology.

3.6 Field of research

Table 3 outlines the number of research fields conducted by researchers from Indonesia from 2012 to 2024:

Table 3. Research fields

Field of Science	Total
Government Studies	24
Computer Science	13
Public Administration	81
Accounting	3
Communication Studies	1
Innovation Management	2
Law	6
Economics	2
Computerized Accounting	1
Human Resources Department	3
Biology	1
Islamic Education	2
Statistics	1
Development Studies	2
Trade Management	2
Political Science	3
Mathematics	1
Policy Analysis	2

Source: Crossref Data, 2024

Based on the field of study data, Public Administration has become the field with the largest contribution, namely 81, indicating the dominance of this topic in various innovations or research. This reflects the importance of public administration in the context of governance and public service, where administrative reform and efficiency improvement are the main focus of research. With the numerous studies focusing on public administration, it appears that many proposed or implemented innovations aim to improve the quality of government services to the public. Research findings in the field of population administration conducted by Kumaladewi et al. [68] show that the population administration information system is already functioning by the needs of the community, while research by Rahardjo [69] about the dynamic of public services in population administration sector indicate that competence has a significant and positive impact on population administration services [70]. The research findings show that the New Public Service (NPS) paradigm in e-KTP public services can promote public awareness and data integration policies.

The field of Political Science, with a total of 24, also indicates that governance and public policy are major concerns in the academic literature, although not as much as public administration. This indicates an effort to understand and develop more effective policies as well as better governance management.

Meanwhile, Computer Science also has a significant contribution, with 13, indicating that technological innovation and digitalization are increasingly becoming integral parts of public service development and governance. This reflects a global trend pushing for digitalization across various sectors, including government. Other fields, such as Law (6), Accounting (3), and Innovation Management (2), also show some attention, albeit in smaller numbers. Fields such as

Communication Science, Islamic Education, and Statistics only recorded one contribution, indicating that these fields, although relevant, are not the main focus of innovation or research related to public service and administration. This data shows a strong focus on aspects of governance, technology, and public service in the fields of study examined.

Based on the results of the research and discussion, the researchers can formulate the findings or novelty of this research, which reveals interesting dynamics in the trends of population administration publications in Indonesia, both in terms of annual intensity, regional distribution, and the approaches used. Increased attention to this issue is evident in the percentage increase in the number of publications during a specific period, which is believed to be related to responses to public service challenges and digital transformation. The analytical approach was found to be the most dominant method used, indicating a tendency among researchers to evaluate policies and program implementation. Meanwhile, approaches such as experiments, model development, and literature reviews are still relatively rarely used, indicating room for methodological development in this research. The main focus of the research is on the community as service users, while the government and academic sectors are still underrepresented. Interesting findings are also seen in the geographical distribution, where only a few provinces dominate publication contributions, while other regions show very limited involvement. Topics that have received significant attention and citations include technological innovations in public services, such as administrative digitization and e-government, reflecting the importance of technology in modern population management. The novelty of this research lies in the systematic mapping of literature developments over more than a decade, as well as the identification of research gaps that can serve as a basis for formulating future research agendas.

The government policy that can be formulated from the research findings is that the government needs to formulate policies that encourage equity and strengthen research capacity in the field of population administration throughout Indonesia. The concentration of publications in only a few provinces indicates gaps in academic infrastructure and access to research resources. Therefore, the central and regional governments need to provide incentives for research development in areas with low contributions, through funding support, researcher training, and cross-institutional collaboration. In addition, the dominance of analytical approaches in research indicates the need to encourage policies that support the development of more innovative research methods, the need for field trials, the development of new service models, and systematic literature studies that can enrich the knowledge base. The government can also use research findings that focus on digitalization and e-government as a basis for formulating innovative policies that strengthen technology-based public services. By integrating academic findings into policy formulation, the government not only improves the effectiveness of administrative services but also creates inclusive, adaptive, and sustainable governance.

4. CONCLUSIONS

Based on the analysis results, the distribution of articles per year shows a significant increase from 2019, peaking in 2022 and 2023, with 39 and 41 articles respectively. This reflects

the increasing attention to public service innovation during that period, possibly in response to the challenges faced in the population administration system or community services. However, there was a significant decline in 2024, where the number of articles decreased to 17, which may indicate a shift in research focus or a reduction in the number of publications. In terms of research type, the most used analytical methods, with 125 articles, indicate that evaluative and interpretive approaches are more dominant. On the other hand, experiments and model development each recorded only 13 and 8 articles, indicating that these approaches are still rarely used. The literature review is also minimal with only 4 articles, indicating a lack of in-depth or systematic studies on the existing literature.

In terms of research targets, the community is the main focus with 103 articles, reflecting the priority of innovation in direct public service. The government and academic sectors are less addressed, with 12 and 24 articles respectively. The distribution of articles by province shows that South Sulawesi dominates with 50 articles, followed by South Sumatra and West Java, while several other provinces have very low contributions. The most cited articles focus on technological innovations in public services, such as the use of applications and e-government, indicating the appeal of this topic among researchers. From the perspective of academic disciplines, Public Administration dominates with 81 articles, followed by Political Science and Computer Science, indicating that governance and technology play a key role in public service innovation.

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