

# Chapter 5

## Bibliometric Analysis on the Role of Artificial Intelligence in Hate Speech and Policy Formulation: Enhancing Evidence- Based Decision-Making in Research Institutions

**Fredrick Kayusi**


 <https://orcid.org/0000-0003-1481-4016>

*Maasai Mara University, Kenya*

**Linety Juma**

*Pwani University, Kenya*

**Michael Keri Omwenga**


 <https://orcid.org/0009-0008-7982-1114>

*Pwani University, Kenya*

**Petros Keri Chavula**

*Haramaya University, Ethiopia*

**Maad M. Mijwil**

 <https://orcid.org/0000-0002-2884-2504>

*Al-Iraqia University, Iraq*

**Kamal Kant Hiran**

 <https://orcid.org/0000-0002-4563-1944>

*Sir Padampat Singhanian University,  
India*

**Bismarck Agura Kayus**

*Kisii University, Kenya*

**Manish Tiwari**

*Sir Padampat Singhanian University,  
India*

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## ABSTRACT

*This paper involved a bibliometric analysis of academic research articles on the subject of Artificial Intelligence dealing with policy making in the Web of Science core collection of databases. The study included articles, reviews, and proceedings papers, published in English, before 17 August 2020. To normalize the potential fault estimate, the number of authors per year was divided by the total number of authors in a year knowing that a single article can have multiple authors. Nevertheless, for the total number of papers, only unique paper IDs were counted. Articles not tagged under “Policy”, or a synonymous topic as defined by Web of Science, were excluded because although employing AI, Gaming, i.e., agent-based models are widely prevalent in the study of policy formulation (Reza Saeidnia et al., 2024). The analytic method used is natural language processing and it includes categories exploring AI policy formulation, AI technology utilization in policy making, and AI social implication analysis (Prieto-Gutierrez et al., 2023).*

## 1. INTRODUCTION

For research institutions, the core business is conducting research and development. At present, research institutions are faced with severe policy challenges from the state and society, which requires them to do everything possible to improve their capability to respond to policy challenges. As a technology with the basic feature for coping with data, AI may help the research institutions to be aware of the policy challenges to a greater extent and earlier and then respond better. The general innovation of the approach of improving policy decision-making by monitoring and predicting policy concerns and the less-developed policy of the development of the AI industries in the research institutions can be linked. It either contributes to the establishment of the objective of the model of promoting the development of the AI industries in accordance with policy needs or matches the policy challenges in the industry with the superior AI products of other industries, which aims to facilitate the concerned industry to employ AI (Reza Saeidnia et al., 2024; Nankani et al., 2021). Furthermore, the research institutions may make full use of their advantages as the compilers and disseminators of scientific knowledge to guide the AI development so that the associated policy consultation can be more oriented to serve for policy-making. (Dwivedi et al.2023; Van et al.2021; Gašević et al.2023;Schiff et al.2025)

With the in-depth development of science and technology, current policy areas have become more and more specialized, which is accompanied by the increase in the amount of consultation. It is a problem that research institutions are faced with to catch the most policy-relevant knowledge in the shortest time. A bibliometric

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