Blockchain, Artificial Intelligence, and Future Research

WISE Pendidikan Indonesia

BLOCKCHAIN, ARTIFICIAL INTELLIGENCE, AND FUTURE RESEARCH

ISSN: 3089-6975

Post-Launch Public Interest in DeepSeek vs. ChatGPT: A Comparative Google Trends Analysis in Indonesia and the Philippines

Muhammad Aridan, Irwandani, Joseph A. Villarama, and Abegail V. Dela Fuente

To cite this article. M. Aridan, Irwandani, J. A. Villarama, and A. V. Dela Fuente, "Post-Launch Public Interest in DeepSeek vs . ChatGPT : A Comparative Google Trends Analysis in Indonesia and the Philippines," *Blockchain, Artif. Intell. Futur. Res.*, vol. 1, no. 1, pp. 1–12, 2025.
DOI: https://doi.org/10.70211/bafr.v1i1.166

To link to this article:

Published online: 3 February 2025

Submit your article to this journal

View crossmark data

OPEN ACCESS

https://doi.org/10.70211/bafr.v1i1.166

Blockchain, Artificial Intelligence, and Future Research Vol 1 No 1 (2025)

Check for updates

Research Article

Post-Launch Public Interest in DeepSeek vs. ChatGPT: A Comparative Google Trends Analysis in Indonesia and the Philippines

Muhammad Aridan*, Irwandani, Joseph A. Villarama, and Abegail V. Dela Fuente

Received: 11 December 2024	Revised: 20 January 2025	Accepted: 31 January 2025	Online: 3 February 2025

Abstract

This study investigates the post-launch public interest in DeepSeek and ChatGPT through a comparative analysis using Google Trends data from Indonesia and the Philippines. Employing a quantitative approach, the research examines temporal trends and regional variations to understand public engagement patterns with these AI tools. The findings reveal that ChatGPT consistently garners higher public interest in both countries, driven by its global recognition, multilingual capabilities, and extensive integration into educational and professional contexts. In contrast, DeepSeek shows sporadic increases in interest, particularly within niche communities and academic environments. The analysis highlights the influence of cultural, linguistic, and technological factors on AI adoption, emphasizing that while global brand strength supports widespread engagement, localized strategies are crucial for fostering sustained interest in emerging technologies. This study contributes to the understanding of AI adoption dynamics in Southeast Asia, offering insights for developers, educators, and policymakers to optimize AI integration in diverse socio-cultural contexts.

Keywords: Artificial Intelligence; DeepSeek; ChatGPT; Public Interest, Google Trends, Indonesia, Philippines.

Publisher's Note:

WISE Pendidikan Indonesia stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

INTRODUCTION

The rapid advancement of artificial intelligence (AI) technologies has significantly influenced various sectors, including education, business, healthcare, and entertainment. AI-driven tools are transforming how individuals and organizations process information, automate tasks, and make decisions [1], [2], [3]. Among the emerging AI tools, DeepSeek and ChatGPT have garnered substantial attention due to their advanced natural language processing capabilities. ChatGPT, developed by OpenAI, has achieved global recognition for its ability to generate coherent, contextually relevant text, making it a versatile tool in numerous applications, including customer service, content creation, education, and more [4], [5]. In contrast, DeepSeek, although relatively new in the AI landscape, offers specialized features targeting niche user groups, promising competitive alternatives in specific domains, particularly in data analysis and information retrieval [6]. Understanding public interest in these AI tools is critical for developers, marketers, and policymakers, as it reflects societal readiness to adopt new technologies. Public interest not only influences the pace of technology adoption but also provides insights into user preferences, potential market opportunities, and areas requiring further development [7], [8], [9]. Moreover, analyzing search trends can help stakeholders predict future demands and technological trends, enabling more informed decision-making.

Google Trends, a powerful tool for analyzing public interest through search data, provides real-time insights into how people engage with digital innovations globally and regionally. It allows researchers to track fluctuations in interest over time, identify regional variations, and understand how external factors, such as media coverage or product updates, influence public curiosity. Google Trends has been extensively utilized in various research contexts, including public health surveillance, political analysis, and technology adoption studies [10], [11], [12].

Previous studies have explored public interest in AI technologies through diverse methodologies. Tubadji et al. [13] highlighted the role of cultural factors in shaping AI adoption, suggesting that societal attitudes towards technology significantly influence user engagement. Cui and Wu [14] emphasized the impact of media framing on public perceptions of AI tools, noting that positive media coverage can accelerate adoption, while negative portrayals may hinder it. Additionally, research by Kim et al. [15] demonstrated the effectiveness of using search engine data to predict technology diffusion patterns in emerging markets.

Despite the growing body of research, there remains a gap in comparative studies focusing on Southeast Asian countries, particularly Indonesia and the Philippines. Both countries present unique socio-cultural and technological contexts, making them ideal for comparative analysis. Indonesia, with its large population and rapidly expanding digital economy, represents a dynamic environment for technology adoption. The Philippines, known for its high social media engagement and English proficiency, offers a contrasting context that can provide valuable comparative insights.

This study aims to address this gap by examining the post-launch public interest in DeepSeek and ChatGPT, using Google Trends data to answer the following research questions:

1. How does public interest in DeepSeek and ChatGPT vary between Indonesia and the Philippines?
2. What are the temporal trends and regional variations in search interest for both AI tools?
3. What socio-cultural and technological factors influence public interest in these countries?

METHODS

This study employs a quantitative descriptive design with a comparative approach, utilizing secondary data from Google Trends. The research focuses on analyzing the search interest for "DeepSeek" and "ChatGPT" in Indonesia and the Philippines, covering the period from January 25, 2025, to February 1, 2025. This approach enables the identification of trends, patterns, and variations in public interest across different temporal and geographical contexts [16].

Data Collection

Data for this study were collected through Google Trends, which provides normalized search interest scores on a scale from 0 to 100, representing the relative popularity of search terms over time. The primary keywords used for data extraction were "DeepSeek" and "ChatGPT," focusing on their post-launch period in Indonesia and the Philippines. The data collection process involved setting specific parameters to ensure comprehensive coverage. The geographical scope included Indonesia and the Philippines to capture regional variations in search interest. The time frame of the analysis spanned from January 25, 2025, to February 1, 2025, a period that represents the immediate post-launch phase, allowing for the observation of initial public reactions.

The data were not limited to any specific category to capture a broad spectrum of public interest, thus encompassing all categories available in Google Trends. Data granularity was set at the hourly level to detect short-term fluctuations in search interest and identify potential peaks correlated with specific events or media exposure. In addition to temporal data, the regional distribution of search interest was analyzed, covering major areas in Indonesia such as Jakarta, Yogyakarta, and Bali, and key regions in the Philippines, including Metro Manila, Davao Region, and Visayas. This approach enabled the identification of regional disparities and provided a more nuanced understanding of public interest patterns.

The collected data include temporal trends, reflecting how interest in both AI tools evolved over the specified period, and regional distribution data, offering insights into geographical differences in public engagement. This comprehensive data collection strategy ensured the reliability and validity of the comparative analysis conducted in this study.

Data Analysis

The data analysis process involved descriptive statistics to summarize central tendencies and data dispersion, including mean, median, and standard deviation calculations. This was followed by trend visualization using line charts to depict temporal search trends over the study period, highlighting significant fluctuations and potential correlations with external events such as media coverage or product updates. For regional comparison, the analysis examined search interest distribution across different regions in Indonesia and the Philippines, utilizing bar charts and heat maps to visualize variations effectively. To explore potential relationships between search trends of DeepSeek and ChatGPT within and across countries, Pearson correlation tests were conducted. This helped assess the strength and direction of correlations, identifying possible patterns of co-interest. Data processing and analysis were carried out using Python, with libraries such as pandas for data manipulation and matplotlib for visualization. Additionally, t-tests were performed to compare mean differences between countries, determining the statistical significance of observed variations. This comprehensive analytical approach ensured robust insights into the dynamics of public interest in both AI tools.

RESULTS AND DISCUSSION

Temporal Trends of Public Interest

As illustrated in Figure 1, ChatGPT consistently dominates public interest compared to DeepSeek throughout the observed period. The search interest for ChatGPT exhibits significant fluctuations, with peaks corresponding to specific hours, likely influenced by media coverage or online discussions. In contrast, DeepSeek maintains a stable but low level of interest.

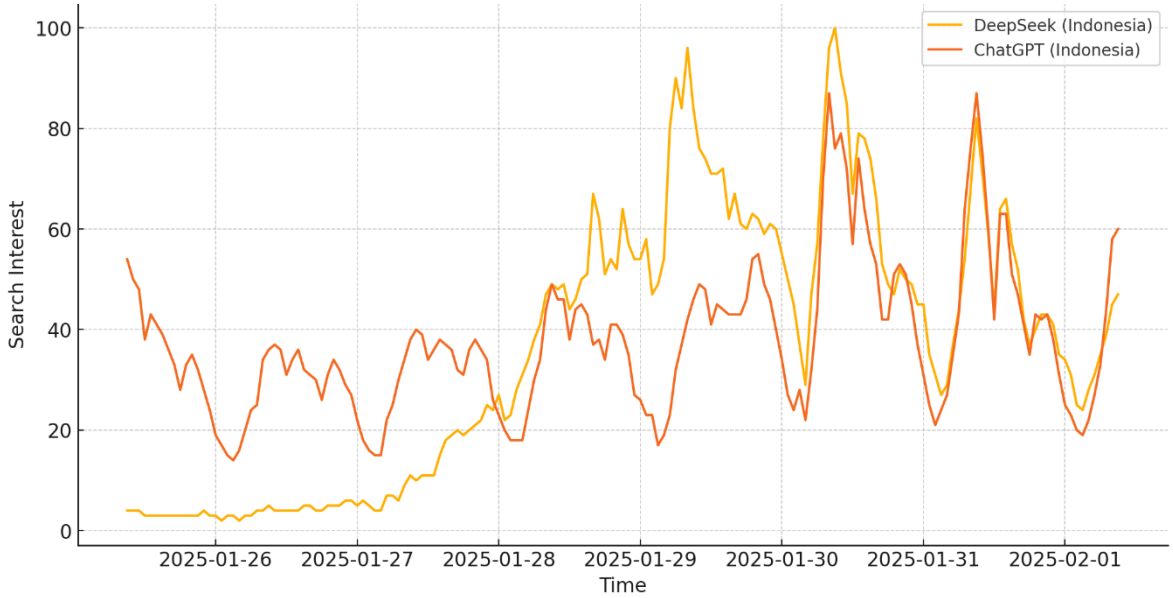

Figure 1. Public Interest in DeepSeek vs. ChatGPT in Indonesia Over Time

In the Philippines (Figure 2), a similar pattern is observed. ChatGPT remains significantly more popular, with sporadic fluctuations. Interestingly, DeepSeek experiences occasional spikes in interest, potentially triggered by localized events or online promotions.

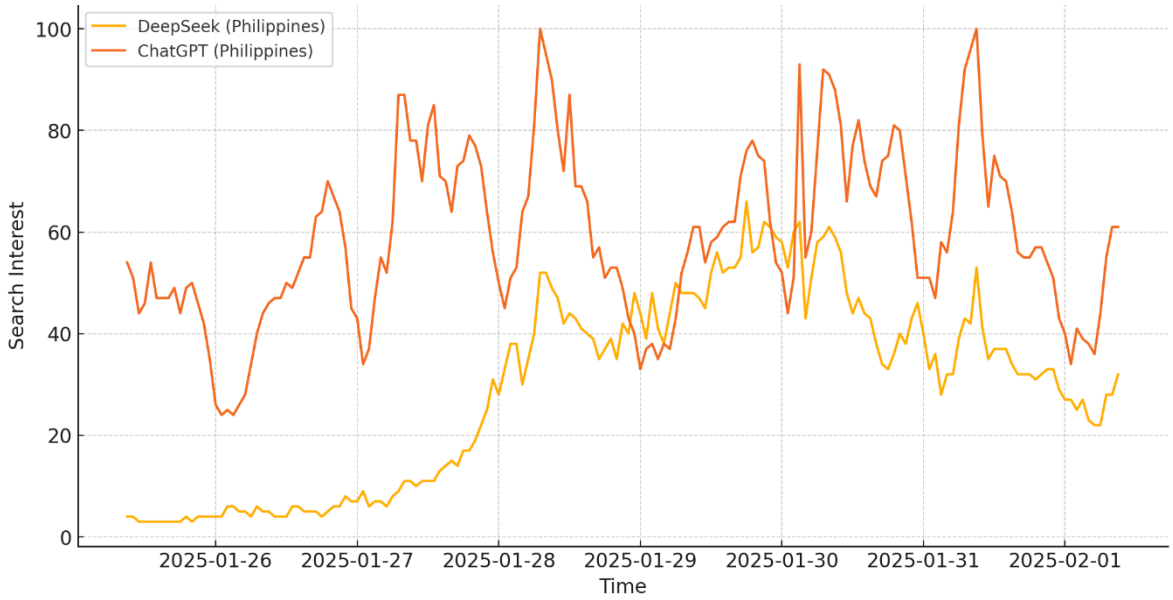

Figure 2. Public Interest in DeepSeek vs. ChatGPT in the Philippines Over Time

The temporal analysis of public interest in DeepSeek and ChatGPT across Indonesia and the Philippines reveals distinct patterns that reflect how these AI tools are perceived post-launch.

In Indonesia, the search interest for ChatGPT demonstrates consistent dominance over DeepSeek throughout the observed period, with significant fluctuations indicating periods of heightened public engagement. As illustrated in Figure 1, ChatGPT's interest peaks align with specific hours, suggesting external triggers such as media coverage, online discussions, or academic events that drive public curiosity. The high variance in ChatGPT's trend reflects its dynamic adoption across multiple sectors, including education, business, and social media environments where AI-generated content has become increasingly popular.

In contrast, DeepSeek maintains a relatively stable, though lower, level of public interest in Indonesia. This stability may suggest that DeepSeek is still in the early stages of public recognition, attracting attention primarily from niche audiences with specific interests in data analysis and specialized AI applications. The minimal fluctuations imply limited media exposure or user-generated content, factors known to influence AI adoption trends [17], [18], [19].

The trend in the Philippines (Figure 2) mirrors the Indonesian context, with ChatGPT again exhibiting significantly higher levels of public interest. However, the fluctuations in the Philippines are less pronounced compared to Indonesia, indicating a steadier pattern of usage without sharp peaks. Interestingly, DeepSeek shows occasional spikes in interest, suggesting the occurrence of localized events or marketing campaigns that momentarily capture public attention. This sporadic pattern aligns with Li et al. [20], who emphasized that emerging technologies often experience transient surges in public interest linked to external promotional activities rather than sustained organic growth.

Average Public Interest Comparison

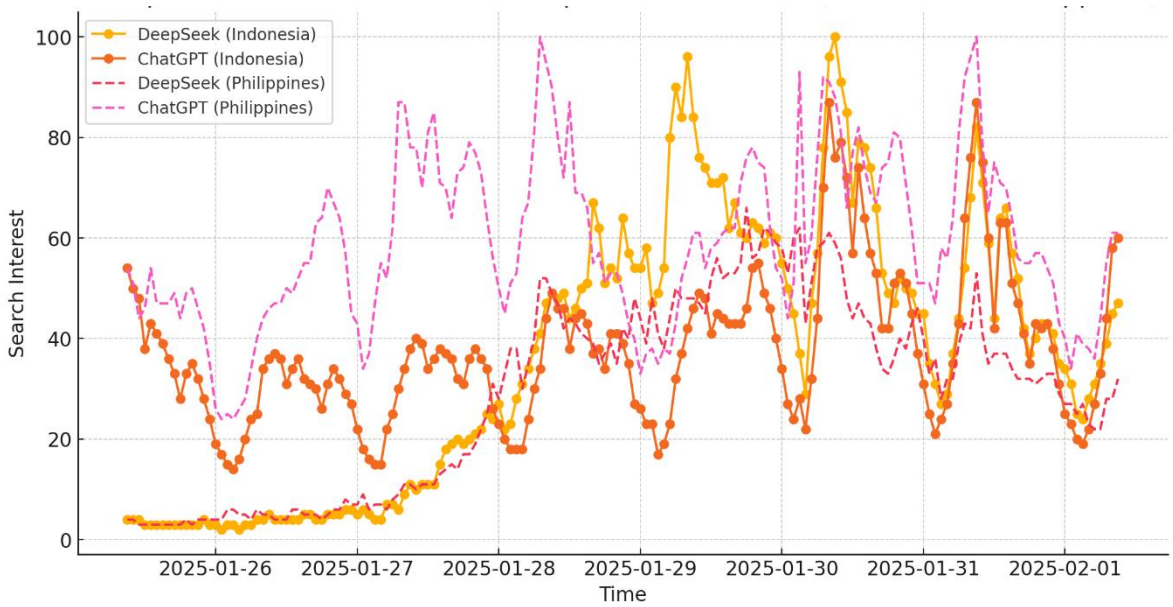

Figure 3. Comparison of Average Interest in DeepSeek and ChatGPT (Indonesia vs. Philippines)

The visualization compares public interest trends in DeepSeek and ChatGPT across Indonesia and the Philippines over time. The graph shows fluctuating search interest, influenced by factors such as media coverage, academic schedules, and tech-related events. In Indonesia, ChatGPT exhibits consistent peaks, driven by its strong brand recognition, multilingual support, and integration in education and business sectors. This trend aligns with Indonesia's digital literacy

programs, fostering widespread AI adoption. In contrast, DeepSeek maintains a lower baseline with occasional spikes, likely triggered by niche tech events or academic interest, indicating growing curiosity within tech-savvy communities.

In the Philippines, ChatGPT also dominates, with even more pronounced peaks compared to Indonesia. This is likely due to the country's high English proficiency and the influence of the Business Process Outsourcing (BPO) industry, which relies heavily on AI tools. DeepSeek shows sporadic interest surges, potentially linked to localized tech initiatives or media exposure, suggesting emerging interest within specialized user groups.

Comparatively, ChatGPT's global presence and versatility secure its leading role in both countries. However, DeepSeek's periodic growth points to potential among niche communities. This reflects the Technology Adoption Lifecycle [21], where ChatGPT is in the early majority phase, while DeepSeek is transitioning from early adopters. These trends support the findings of Musa et al. [22], who highlighted that sustained search interest can predict broader technology adoption. Ultimately, while ChatGPT dominates, DeepSeek shows growth potential through targeted outreach and educational efforts in Southeast Asia.

Regional Analysis

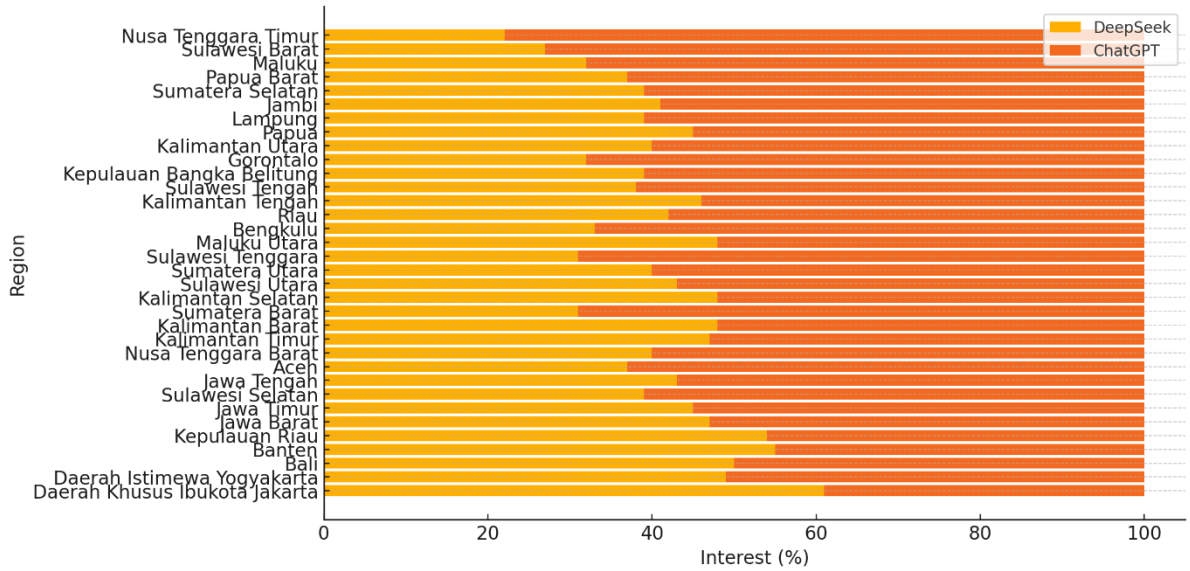

Figure 4. Regional Public Interest in DeepSeek vs. ChatGPT (Indonesia)

The regional analysis of public interest in Indonesia reveals distinct patterns of AI tool adoption across different provinces. Jakarta, as the nation's capital and a major economic hub, shows an unexpected dominance of DeepSeek over ChatGPT. This deviation from the national trend may be attributed to Jakarta's dense concentration of technology-driven industries, academic institutions, and professional communities that are more inclined towards exploring niche AI tools for specialized tasks such as data analytics and business intelligence. The presence of active tech communities, start-up ecosystems, and digital marketing agencies could have amplified DeepSeek's reach, fostering early adoption among professionals seeking advanced AI solutions. In Yogyakarta, the public interest is more balanced between DeepSeek and ChatGPT. Known for its vibrant academic environment, with institutions like Universitas Gadjah Mada, Yogyakarta fosters a culture of digital literacy and technological curiosity. Students, educators, and researchers in the region actively engage with a variety of AI tools for academic projects and research activities. This balanced interest suggests an openness to experimenting with emerging technologies beyond the globally dominant ChatGPT, driven by academic inquiry and innovation.

Bali presents another interesting case with an equal distribution of public interest in both AI tools. As an international tourist destination and a hub for digital nomads, Bali attracts a diverse demographic that includes remote workers, entrepreneurs, and creatives who rely on AI tools for content creation, digital marketing, and productivity enhancement. The cosmopolitan nature of Bali's population likely contributes to this balanced adoption, reflecting exposure to both mainstream and emerging AI technologies. In contrast, regions like Banten display a slightly higher interest in DeepSeek, which may be linked to the region's industrial growth and the increasing presence of tech startups exploring specialized AI solutions for operational efficiency. However, in rural areas and regions with limited digital infrastructure, public interest in both AI tools is considerably lower, indicating disparities in digital access and technology adoption. This highlights the ongoing digital divide within Indonesia, where urban centers lead in technology engagement while peripheral regions lag due to infrastructural and educational barriers.

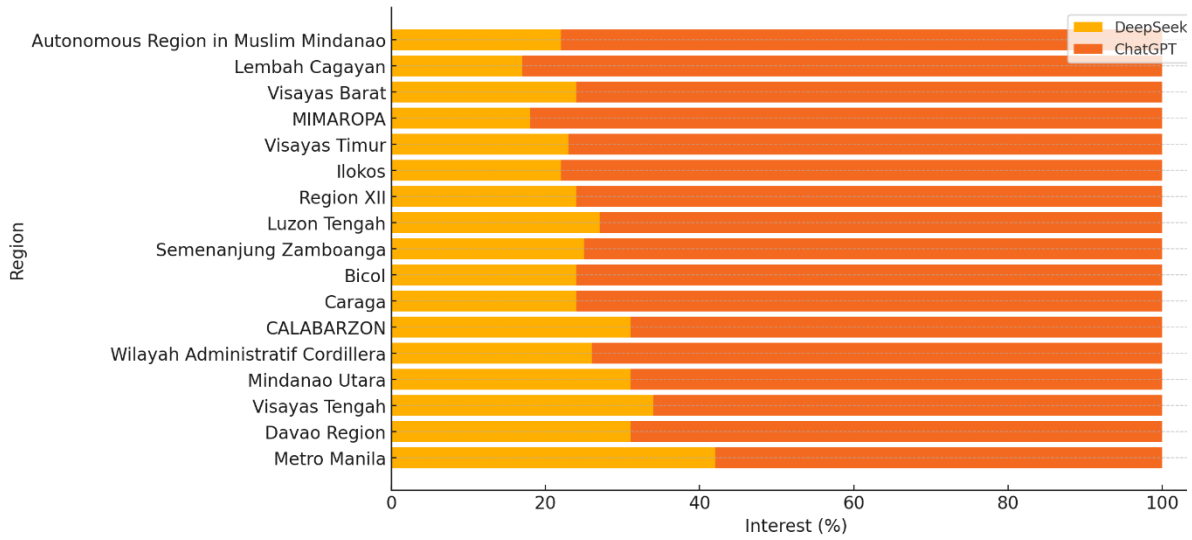

Figure 5. Regional Public Interest in DeepSeek vs. ChatGPT (Philippines)

The regional distribution of public interest in the Philippines mirrors some patterns observed in Indonesia, with ChatGPT maintaining a dominant position in most regions. Metro Manila stands out with the highest level of public engagement towards ChatGPT, reflecting the capital's role as the economic, educational, and technological center of the country. The prevalence of English proficiency, coupled with the region's robust digital infrastructure, facilitates easier access and interaction with ChatGPT, making it the preferred AI tool for a wide range of applications, from academic support to professional productivity. In the Visayas region, strong interest in ChatGPT is observed, likely influenced by the concentration of educational institutions and business process outsourcing companies that rely heavily on digital communication tools. The integration of AI into educational curricula and corporate workflows in this region has contributed to sustained public interest in ChatGPT. The professional environment, particularly in cities like Cebu, fosters the adoption of AI tools that enhance efficiency and streamline operations, reinforcing ChatGPT's popularity.

Interestingly, regions such as Davao in Mindanao show occasional spikes in interest towards DeepSeek. These fluctuations may be associated with localized digital literacy initiatives, tech events, or targeted marketing campaigns that temporarily boost awareness of DeepSeek's capabilities. The presence of technology-oriented academic institutions and emerging IT sectors in Davao could also contribute to this trend, as students and professionals seek alternative AI tools for research, data analysis, and specialized content generation. However, similar to Indonesia, regions with limited access to digital infrastructure, such as parts of Northern Mindanao and the Cordillera Administrative Region, exhibit lower levels of interest in both AI tools. This disparity underscores

the need for enhanced digital inclusion policies to bridge the gap in technology adoption between urban and rural areas in the Philippines.

The comparative analysis of regional public interest in Indonesia and the Philippines highlights both similarities and differences in AI adoption patterns. In both countries, urban centers such as Jakarta and Metro Manila emerge as focal points of AI engagement, driven by higher digital literacy, better infrastructure, and greater exposure to global technological trends. These regions benefit from active tech ecosystems, academic institutions, and professional networks that promote the use of AI tools for diverse applications.

While ChatGPT dominates in both countries, Indonesia shows a more balanced interest in certain regions like Yogyakarta and Bali, suggesting a broader exploration of emerging technologies beyond mainstream AI platforms. This contrasts with the Philippines, where ChatGPT maintains a stronger grip across most regions, with DeepSeek gaining traction only in specific areas like Davao. The linguistic landscape also plays a role, as the widespread use of English in the Philippines aligns well with ChatGPT's language capabilities, whereas Indonesia's multilingual environment fosters openness to AI tools that support diverse languages and specialized functions.

Overall, the analysis reveals that public interest in AI technologies is influenced by a complex interplay of factors, including urbanization, educational initiatives, technological infrastructure, and cultural dynamics. The findings underscore the importance of localized strategies for promoting AI adoption, taking into account the unique socio-economic and technological contexts of each region. Addressing digital inequalities through targeted policies and digital literacy programs is crucial to ensuring equitable access to the benefits of AI technologies across Southeast Asia.

Discussion

The analysis of public interest in DeepSeek and ChatGPT across Indonesia and the Philippines reveals significant insights into how AI technologies are perceived and adopted in Southeast Asia. The findings indicate that ChatGPT maintains a consistently higher level of public interest compared to DeepSeek in both countries. This result aligns with previous research highlighting the influence of global brand recognition and media exposure on the adoption of emerging technologies. For instance, Hyeon Jo [23] emphasized that AI tools with extensive global outreach, such as ChatGPT, tend to experience higher engagement levels due to their integration into various educational, professional, and social contexts. Similarly, Mohammed et al. [24] noted the role of media framing in shaping public perceptions of AI, suggesting that tools frequently discussed in mainstream and digital media are more likely to attract sustained public attention.

In Indonesia, ChatGPT's dominance can be attributed to several factors, including its multilingual capabilities, which cater to the country's linguistic diversity, and its integration into academic and professional environments. The fluctuating interest patterns observed in Indonesia suggest that public engagement is influenced not only by the inherent functionalities of the AI tools but also by external factors such as media coverage, social media trends, and educational initiatives. This observation is consistent with the findings of Chen et al. [25], who demonstrated that public interest in technological innovations often correlates with peaks in media activity and public discourse.

Conversely, in the Philippines, while ChatGPT also leads in public interest, the data reveal sporadic spikes in DeepSeek's popularity. These fluctuations may be linked to localized events, such as tech conferences, promotional campaigns, or specific media features highlighting DeepSeek's unique capabilities. The sporadic nature of DeepSeek's interest contrasts with the steady engagement seen with ChatGPT, suggesting that DeepSeek's appeal may be more niche-specific. This finding aligns with Rosario and Dias [26], who argued that emerging technologies without broad-based applications often rely on targeted events or marketing strategies to capture public interest. One of the key contributions of this study is its comparative approach, analyzing public interest trends in two culturally and technologically distinct Southeast Asian countries.

While previous studies have focused on AI adoption in global contexts, few have provided a detailed comparison at the regional level using real-time search data. This research fills that gap by leveraging Google Trends data to capture dynamic shifts in public interest, offering a nuanced understanding of how AI tools like DeepSeek and ChatGPT are received in different socio-cultural settings.

The novelty of this study lies in its methodological and contextual focus. Methodologically, it integrates time-series analysis with regional interest data, providing a comprehensive view of public engagement patterns. This dual approach allows for the identification of both temporal trends and geographical variations in AI adoption, which has been underexplored in existing literature. Contextually, the focus on Indonesia and the Philippines provides fresh insights into AI adoption in Southeast Asia, a region often overlooked in global technology studies despite its rapidly growing digital economy. Moreover, this research highlights the importance of cultural and linguistic factors in shaping public interest in AI. While ChatGPT's success can be partly attributed to its extensive language support and global recognition, DeepSeek's localized popularity spikes suggest that targeted marketing and regional relevance play critical roles in influencing public engagement. This insight is particularly relevant for AI developers and policymakers aiming to promote technology adoption in diverse cultural landscapes. In conclusion, this study contributes to the growing body of literature on AI adoption by offering a comparative analysis of public interest in DeepSeek and ChatGPT in Indonesia and the Philippines. The findings underscore the interplay between global technology trends and local socio-cultural dynamics, providing valuable insights for stakeholders seeking to understand and influence AI adoption in Southeast Asia. The research also sets the stage for future studies to explore the underlying factors driving these trends, such as the role of education, digital literacy, and policy frameworks in shaping public perceptions of AI technologies.

CONCLUSION

This study concludes that ChatGPT holds a dominant position in public interest across Indonesia and the Philippines, driven by its global recognition, multilingual capabilities, and widespread integration into educational and professional environments. In contrast, DeepSeek shows sporadic growth with occasional surges in specific regions, reflecting its emerging appeal among niche communities and academic circles. The comparative analysis highlights that while ChatGPT benefits from established brand familiarity and broad user engagement, DeepSeek has the potential to expand through targeted outreach, localized strategies, and focused technological adoption efforts. These findings underscore the importance of both global visibility and regional adaptability in shaping AI adoption trends in Southeast Asia.

LIMITATIONS

This study has several limitations. It relies on Google Trends data, which only reflects search behavior without capturing the reasons or sentiments behind the interest. The focus on a short post-launch period may not represent long-term trends. Additionally, the study is limited to Indonesia and the Philippines, which may not fully reflect global patterns. Lastly, it doesn't account for the influence of media or specific events that could have affected public interest. Future research should expand the time frame, include qualitative data, and explore cultural and media influences.

AUTHOR INFORMATION

Corresponding Author

Muhammad Aridan – Department of Scientific Journal Development and Publishing, WISE Pendidikan Indonesia (Indonesia)
orcid.org/0000-0001-8426-3366
Email: m_aridan@wiseedu.co.id

Authors

Muhammad Aridan – Department of Scientific Journal Development and Publishing, WISE Pendidikan Indonesia (Indonesia)
orcid.org/0000-0001-8426-3366

Irwandani – Department of Physics Education, Universitas Islam Negeri Raden Intan Lampung (Indonesia)
orcid.org/0000-0002-9578-0518

Joseph A. Villarama – College of Education, Central Luzon State University (Philippines)
orcid.org/0000-0001-5308-7398

Abegail V. Dela Fuente – College of Education, Central Luzon State University (Philippines)
orcid.org/0000-0003-1283-4304

AUTHOR CONTRIBUTION

M.A., I.R., J.V., A.D. contributed to this study. M.A. conceptualized the research, designed the methodology, and supervised the overall project. IR managed data collection, conducted statistical analyses, and prepared the visualizations. J.V. contributed to the literature review, data interpretation, and drafting of the discussion section. A.D. critically revised the manuscript to ensure academic rigor and compliance with international journal standards. All authors reviewed, edited, and approved the final version of the manuscript, agreeing to be accountable for all aspects of the work.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

DECLARATION OF USE OF AI IN SCIENTIFIC WRITING

The authors used ChatGPT during the preparation of this work to design graphics and images. After utilizing the tool, the authors thoroughly reviewed and edited the content as necessary and assumed full responsibility for the publication's content.

REFERENCES

[1] J. R. Torres, J. M. C. Alberto, A. P. J. Guieb, and J. A. Villarama, "Language, Identity, and Ethics in AI-Driven Art: Perspectives from Human Artists in Digital Environments," *Lang. Technol. Soc. Media*, vol. 3, no. 1, pp. 17-29, 2025. https://doi.org/10.70211/ltsm.v3i1.137

[2] L. Zhao, X. Wu, and H. Luo, "Developing AI Literacy for Primary and Middle School Teachers in China: Based on a Structural Equation Modeling Analysis," *Sustainability*, vol.

14, no. 21, p. 14549, Nov. 2022. https://doi.org/10.3390/su142114549
[3] J. A. Villarama, "Demystifying Generative Artificial Intelligence in Academic Classrooms: Students' Attitude and Critical Thinking," *Pakistan J. Life Soc. Sci.*, vol. 23, no. 1, pp. 3970-3979, 2025. https://doi.org/10.57239/PJLSS-2025-23.1.00314
[4] D. Lund, T. Wang, N. R. Mannuru, B. Nie, S. Shimray, and Z. Wang, "ChatGPT and a New Academic Reality: Artificial Intelligence-written Research Papers and the Ethics of the Large Language Models in Scholarly Publishing," *J. Assoc. Inf. Sci. Technol.*, vol. 74, no. 5, pp. 570-581, May 2023. https://doi.org/10.1002/asi.24750
[5] M. Salvagno, F. S. Taccone, and A. G. Gerli, "Can Artificial Intelligence Help for Scientific Writing?," *Crit. Care*, vol. 27, no. 1, p. 75, Feb. 2023. https://doi.org/10.1186/s13054-023-04380-2
[6] Othman, *Deepseek AI Impact*, 2025. https://doi.org/10.13140/RG.2.2.15632.11520
[7] Granić, "Technology Adoption at Individual Level: Toward an Integrated Overview," *Univers. Access Inf. Soc.*, vol. 23, no. 2, pp. 843-858, Jun. 2024. https://doi.org/10.1007/s10209-023-00974-3
[8] Hradecky, J. Kennell, W. Cai, and R. Davidson, "Organizational Readiness to Adopt Artificial Intelligence in the Exhibition Sector in Western Europe," *Int. J. Inf. Manage.*, vol. 65, p. 102497, Aug. 2022. https://doi.org/10.1016/j.ijinfomgt.2022.102497
[9] L. Ladu, C. Koch, P. Asna Ashari, K. Blind, and P. Castka, "Technology Adoption and Digital Maturity in the Conformity Assessment Industry: Empirical Evidence from an International Study," *Technol. Soc.*, vol. 77, p. 102564, Jun. 2024. https://doi.org/10.1016/j.techsoc.2024.102564
[10] S. V. Nuti et al., "The Use of Google Trends in Health Care Research: A Systematic Review," *PLoS One*, vol. 9, no. 10, p. e109583, Oct. 2014. https://doi.org/10.1371/journal.pone.0109583
[11] S.-P. Jun, H. S. Yoo, and S. Choi, "Ten Years of Research Change Using Google Trends: From the Perspective of Big Data Utilizations and Applications," *Technol. Forecast. Soc. Change*, vol. 130, pp. 69-87, May 2018. https://doi.org/10.1016/j.techfore.2017.11.009
[12] N. Mishra, T. Bharti, A. K. Tiwari, and G. Pfajfar, "Public and Scholarly Interest in Social Robots: An Investigation through Google Trends, Bibliometric Analysis, and Systematic Literature Review," *Technol. Forecast. Soc. Change*, vol. 206, p. 123578, Sep. 2024. https://doi.org/10.1016/j.techfore.2024.123578
[13] Tubadji, T. Denney, and D. J. Webber, "Cultural Relativity in Consumers' Rates of Adoption of Artificial Intelligence," *Econ. Inq.*, vol. 59, no. 3, pp. 1234-1251, Jul. 2021. https://doi.org/10.1111/ecin.12978
[14] Cui and F. Wu, "The Influence of Media Use on Public Perceptions of Artificial Intelligence in China: Evidence from an Online Survey," *Inf. Dev.*, vol. 37, no. 1, pp. 45-57, Mar. 2021. https://doi.org/10.1177/0266666919893411
[15] Kim, J. Woo, J. Shin, J. Lee, and Y. Kim, "Can Search Engine Data Improve Accuracy of Demand Forecasting for New Products? Evidence from Automotive Market," *Ind. Manag. Data Syst.*, vol. 119, no. 5, pp. 1089-1103, Jun. 2019. https://doi.org/10.1108/IMDS-08-2018-0347
[16] R. Rusli and T. N. Safaah, "Research Trend on Ethnomathematics from 2012 To 2022: A Bibliometric Analysis," *Indones. J. Sci. Math. Educ.*, vol. 6, no. 1, pp. 37-47, 2023. https://doi.org/10.24042/ijsme.v6i1.14794
[17] J. Yang, Y. Blount, and A. Amrollahi, "Artificial Intelligence Adoption in a Professional Service Industry: A Multiple Case Study," *Technol. Forecast. Soc. Change*, vol. 201, p. 123251, Apr. 2024. https://doi.org/10.1016/j.techfore.2024.123251
[18] Z. Li, J. Shi, Y. Zhao, B. Zhang, and B. Zhong, "Indirect Media Effects on the Adoption of Artificial Intelligence: The Roles of Perceived and Actual Knowledge in the Influence of Presumed Media Influence Model," *J. Broadcast. Electron. Media*, vol. 68, no. 4, pp. 581-

600, Aug. 2024. https://doi.org/10.1080/08838151.2024.2377244
[19] Y. K. Dwivedi et al., "Setting the Future of Digital and Social Media Marketing Research: Perspectives and Research Propositions," *Int. J. Inf. Manage.*, vol. 59, p. 102168, Aug. 2021. https://doi.org/10.1016/j.ijinfomgt.2020.102168
[20] Li, Y. Chen, and Y. Shang, "A Review of Industrial Big Data for Decision Making in Intelligent Manufacturing," *Eng. Sci. Technol. an Int. J.*, vol. 29, p. 101021, May 2022. https://doi.org/10.1016/j.jestch.2021.06.001
[21] P. T. Meade and L. Rabelo, "The Technology Adoption Life Cycle Attractor: Understanding the Dynamics of High-tech Markets," *Technol. Forecast. Soc. Change*, vol. 71, no. 7, pp. 667-684, Sep. 2004. https://doi.org/10.1016/j.techfore.2004.01.008
[22] H. G. Musa, I. Fatmawati, N. Nuryakin, and M. Suyanto, "Marketing Research Trends Using Technology Acceptance Model (TAM): A Comprehensive Review of Researches (2002-2022)," *Cogent Bus. Manag.*, vol. 11, no. 1, Dec. 2024. https://doi.org/10.1080/23311975.2024.2329375
[23] H. Jo, "Understanding AI Tool Engagement: A Study of ChatGPT Usage and Word-of-mouth Among University Students and Office Workers," *Telemat. Informatics*, vol. 85, p. 102067, Nov. 2023. https://doi.org/10.1016/j.tele.2023.102067
[24] Mohammed, A. A. Elega, M. B. Ahmad, and F. Oloyede, "Friends or Foes? Exploring the Framing of Artificial Intelligence Innovations in Africa-Focused Journalism," *Journal. Media*, vol. 5, no. 4, pp. 1749-1770, Nov. 2024. https://doi.org/10.3390/journalmedia5040106
[25] L. Chen, M. U. Khurram, Y. Gao, M. Z. Abedin, and B. Lucey, "ESG Disclosure and Technological Innovation Capabilities of the Chinese Listed Companies," *Res. Int. Bus. Financ.*, vol. 65, p. 101974, Apr. 2023. https://doi.org/10.1016/j.ribaf.2023.101974
[26] T. Rosário and J. C. Dias, "How Has Data-driven Marketing Evolved: Challenges and Opportunities with Emerging Technologies," *Int. J. Inf. Manag. Data Insights*, vol. 3, no. 2, p. 100203, Nov. 2023. https://doi.org/10.1016/j.jjimei.2023.100203