



**EXPLORING JOURNALIST PERCEPTIONS OF ARTIFICIAL INTELLIGENCE
IN NEWS PRODUCTION: A STUDY OF INDONESIAN ONLINE NEWS MEDIA**

UNDERGRADUATE THESIS

**Submitted as one of the requirements to obtain
Sarjana Ilmu Komunikasi (S.I.Kom.)**

by

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CIKARANG

SEPTEMBER, 2023

**Exploring Journalist Perceptions of Artificial Intelligence in News Production: A Study
of Indonesian Online News Media**

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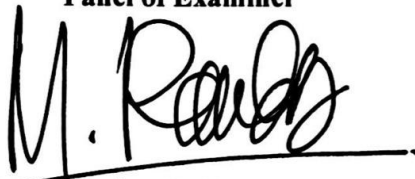
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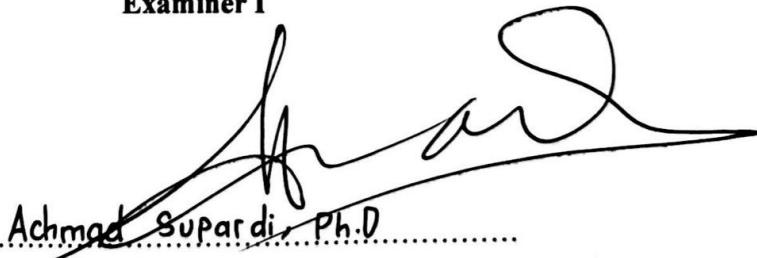
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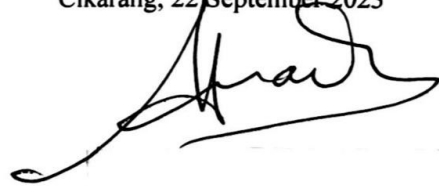
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greatly aided by the quick rise in processing power as well as specialized devices like GPUs and TPUs. GPUs (visuals Processing Units) are specialized electrical circuits mainly used for producing visuals and pictures on computer displays, according to an NVIDIA media article. According to Google's official website, TPUs (Tensor Processing Units) are specially designed ASICs (Application-Specific Integrated Circuits) created by Google expressly for speeding up machine learning workloads. They are excellent at parallel processing and can efficiently complete complex mathematical computations. They are designed to operate on tensors, multi-dimensional arrays often used in deep learning models, in an efficient manner.

These advancements speed up the training and inference of AI models, allowing for more complex and effective AI systems. Because it uses multilayered neural networks, deep learning, a branch of machine learning, has revolutionized the development of artificial intelligence. These algorithms have shown remarkable performance in image recognition, natural language processing, voice synthesis, and autonomous systems.

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CHAPTER I
INTRODUCTION
Background of Study
Artificial Intelligence has been experiencing rapid growth and advancement, with significant progress. From Indonesian cases that showed how AI starts up and innovation hubs are driving AI research, development, and application. Like Zenius, an education technology company that leverages AI to enhance online learning experiences. They provide AI-powered adaptive learning platforms that personalize learning content. Also, as reported by Bayuni (2021), the industries in Indonesia are adopting AI technologies already. For instance, healthcare is leveraging AI for medical imaging analysis, disease diagnosis, and personalized treatments. The Indonesian government has launched initiatives to support AI development. The Ministry of Communication and Informatics' National AI Strategy intends to develop artificial intelligence research, enable the formation of qualified individuals, and promote collaboration among government agencies, enterprises, and academic institutions. According to a study conducted by the Stanford Institute for Human-Centered Artificial Intelligence (2021), tremendous progress in machine learning techniques has been made, accompanied by a huge rise in available data and better processing capacity. The explosion of digital data has given AI systems access to tremendous quantities of information for learning, facilitating the availability of big data. Big data sets have enabled AI systems to train on various representative datasets, improving performance and accuracy (Mayer & Cukier, 2013). The development of AI has been greatly aided by the quick rise in processing power and specialized devices like GPUs and TPUs. According to an NVIDIA media article, GPUs (visual Processing Units) are specialized electrical circuits mainly used for producing visuals and pictures on computer displays. Tensor Processing Units (TPUs) are specialized ASICs (Application-Specific Integrated Circuits) developed by Google expressly for speeding up machine learning workloads. They are excellent at parallel processing and can efficiently complete complex mathematical computations. They are designed to operate on tensors, multi-dimensional arrays often used in deep learning models, in an efficient manner.

Abstract

The rapid advancement of artificial intelligence (AI) has brought about substantial transformations, particularly within the online news media sector, revolutionizing news production, content development, and audience engagement processes. This qualitative study uses a phenomenological approach to explore "how do journalists interpret the perceived implications that are associated with the integration of artificial intelligence in news production?" Through in-depth interviews with informants including a Video Journalist, Chief Editor, News Writer, and Reporter, this research investigates the varied manifestations of AI across different online news media. This study highlights the Journalist perceptions from distinct roles AI assumes in diverse media. Online news media employ AI for event visualization and audio conversion, utilize AI for news writing, streamlining content generation, and linguistic richness. AI's application also initiates thematic concepts and enhances efficiency. The weaknesses of AI into news production include an inability to classify the ethical concerns, lack of depth in news writing and accuracy, a lack of data verification, grammatical and data errors from outdated data. Findings align with Role theory and Technology Acceptance Model (TAM), indicating that AI can coexist with journalists' technical roles and skills like video editing, statistical data-generation and news visualization although AI cannot fully replicate the nuanced expertise, ethical judgment, and contextual interpretation innate to human journalists that upholding critical thinking and ethical considerations intrinsic to the coverage.

Keywords: Artificial Intelligence, Journalist roles, News production, Role theory, TAM

Acknowledgements

To begin with, praises and gratitude for almighty God, Allah SWT, who has given the writer health, strengths, love, endless blessings, mercy, and opportunity so the writer can finally finish my thesis. Go through all kinds of hardships and obstacles with Him by the author's side. The writer would like to express special thanks to President University. They offered in-class learning and supported the professional skills needed in the future endeavors, as a valuable experience for the writer. Furthermore, the writer would also like to express the gratitude to several inspiring people in the author's life.

1. The writer's thesis advisor Mr. Achmad Supardi, Ph.D., has been very patient with me, always supporting me with the feedback and guidance with all of his heart and taking care of me as I am doing my thesis. Thank you for your time, kindness and effort in helping the writer to finish this research.
2. The writer expressed sincere gratitude to Mr. M. Raudy Gathmyr, M.Si as Head of Communications Study Program. Thank you for all of your guidance and support in helping the writer. Author really appreciates him for sparing his valuable time for the writer.
3. The writer sincerely thanks Mr. Abhirama, M.Comn as the writer Academic Advisor. Thank you for all of your guidance and support in helping me. I really appreciate him for sparing his valuable time, for always answering all of my questions that are either administrative urgent or helping the author to make a decision from a consultation.
4. All of the Communications Study Program lecturers, especially for my Convergence Journalism lecturers, Miss Prisca, Sir Joy Astro, Ma'am Dian, and Mas Imung. Thank you for teaching the writer valuable knowledge and new things while studying as a Communication student in President University.
5. All of the writer's informants, Pak Budi, Kak Fathan, Kak Anggah and Kak Balqis. Thank you for your help in collecting relevant information used in this research.
6. The writer expressed sincere gratitude to Mrs. Meri Kristina Simanjuntak. Thank you for helping the writer with the administration things while studying as a Communication student in President University. Thank you for always responding to my email so many times.
7. My beloved parents and family members, for being my main life support, financial support, and source of motivation, as always, to pursue writer's education and finish the thesis. Thank you to the writer's father, Mr.Hardi Duadji, the writer's mother,

Mrs. Ernofia, the writer's brothers, Tio Duadji and Iqbal Duadji, the writer's sister, Gita Atmaretta. Thank you for loving the writer unconditionally no matter what.

8. Opinionated and kind person, Sofyan Amirudin, who is always supporting and trusting if I can finish the thesis maximally. Thank you for always having a positive soul and showing your spirit to finish maximally what he was starting, that was a motivation for the writers that if he can, then I will be more.
9. The writer's fabulous friends, Savita, Febbyenti, Seldha, Paulus, Mellyana, Theresia and Adrian. Thank you for your team work, support, and love during the study as a competitive convergence journalism student.
10. All of the writer's Communications classmates who have helped the writer a lot. Thanks for the learning, and laughter we share. See you guys on top.

Furthermore, the Writer would like to apologize and express the gratitude to whom the author cannot say one by one. Thank you to everyone for helping and supporting me until the writer finally finishes the thesis in a manner of time.

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