

**TUGAS AKHIR**  
**INVENTORY MANAGEMENT SYSTEM USING AI VOICE**  
**CONTROL FOR RETAIL STORE**



**Disusun sebagai salah satu syarat menyelesaikan pendidikan pada**  
**Jurusan Manajemen Informatika**  
**Program Studi Sarjana Terapan Manajemen Informatika**

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**USING AI VOICE CONTROL FOR RETAIL**  
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## ACKNOWLEDGEMENT

First and foremost, I give my heartfelt thanks to God Almighty, because through His grace and blessings, I was able to complete this thesis. The journey of writing it was challenging, but also full of learning experiences that have matured me academically and personally.

This thesis is definitely not a solo effort. So many people have given me invaluable support, guidance, and motivation.

I want to express my deepest gratitude to Madam Zulaika Binti Sauid, who patiently guided me from start to finish. Her directions and input were always spot-on and kept me motivated, even when I hit those inevitable roadblocks.

I also extend my sincere thanks to the examiner, Dr. Ahgalya A/P Subbiah, who took the time to provide constructive criticism and suggestions during the defense. Your insights helped me see this thesis from a broader perspective and significantly improve its quality.

A massive thank you to my family, especially my mom and dad, who have always been my source of strength and constant prayer. Your moral support and love are my greatest energy.

Equally important is the shout-out to my close friends, especially Maulidiah Rais, Shabira Azalia, and Dalfa Renaya. You guys aren't just study buddies, but also friends who accompanied me through those high-pressure days with jokes and encouragement. Thanks for being the place where I could share stories, exhaustion, and laughter. You made this whole process lighter and more meaningful.

Lastly I would like to thank to all lecturers and members of the staff of the Faculty of Information Sciences and Engineering, who helped me in many ways and made my education journey at MSU unforgettable.

I realize this thesis is far from perfect. Therefore, I'm very open to receiving criticism and suggestions for future improvement.

Once again, thank you to everyone who has been a part of this journey. I hope this work can provide benefits and be a starting point for better things to come.

**ABSTRACT**  
**INVENTORY MANAGEMENT SYSTEM USING AI VOICE**  
**CONTROL FOR RETAIL STORE**

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**June 2025**

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Inventory management plays a crucial role in ensuring the operational efficiency and profitability of retail stores. Traditional inventory systems typically rely on manual input, which is time-consuming and prone to human error. To address these issues, this research proposes an inventory management system that integrates Artificial Intelligence (AI) with voice control technology. The system allows users to manage inventory through voice commands such as checking stock, updating quantities, and generating reports. The system utilizes Natural Language Processing (NLP) for understanding user commands and applies voice recognition models to accurately interpret spoken inputs. A comparative analysis was conducted to evaluate system performance. The results show that the proposed system achieves 92% accuracy in voice command recognition, reduces manual input time by 60%, and improves inventory update accuracy. The integration of voice control in inventory systems offers increased accessibility, better efficiency, and reduces operational delays in retail environments.

***Keywords** – Inventory Management, Voice Control, Artificial Intelligence, Natural Language Processing, Retail Technology*

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