

## ABSTRAK

Tercatat Indonesia mempunyai jumlah penduduk sebanyak 272.682,50 juta jiwa yang kemudian mengalami peningkatan sebesar 1,12% dari tahun sebelumnya menjadi 275.773,80 juta jiwa pada tahun 2022. Pertumbuhan penduduk yang pesat akan mempengaruhi ketersediaan pangan di Indonesia khususnya pada komoditas beras, sehingga perlu ditingkatkan untuk memenuhi proyeksi kebutuhan tahunan. Penelitian ini mencoba mengusulkan perbaikan indikator transformasi Industri 4.0 dengan menggabungkan model konsep Industri 4.0 dengan logistik yang beroperasi di sektor pangan. Meningkatkan ketahanan pangan di Indonesia dengan bertransformasi menuju Industri 4.0. Penelitian yang dilakukan dengan pendekatan deskriptif kualitatif menghasilkan 4 kluster dan 15 indikator yang menjadi faktor pengaruh transformasi perusahaan logistik pangan di Indonesia menuju Industri 4.0 diantaranya *Transformation Strategy, Investment, Team Transformation, Culture, Employee Development, Employee Acceptance, Horizontal Integration, Vertical Integration, Customer Needs, Smart Warehouse, Smart Inventory, Smart Transportation, Smart Decision, Cyber Security, dan Smart Maintenance*. Tidak hanya terkait teknologi namun Perusahaan dan sumber daya manusia menjadi faktor berpengaruh dalam bertransformasi.

Kata Kunci: Industri 4.0, Transformasi Digital, Logistik Pangan.



UNIVERSITAS  
MERCU BUANA

## **ABSTRACT**

*It is recorded that Indonesia has a population of 272,682.50 million people, which then experienced an increase of 1.12% from the previous year to 275,773.80 million people in 2022. Rapid population growth will affect food availability in Indonesia, especially rice commodities, so increasing to meet projected annual needs is necessary. This research proposes improvements to the Industry 4.0 transformation indicators by combining the Industry 4.0 concept model with logistics operating in the food sector. Increasing food security in Indonesia by transforming towards Industry 4.0. Research carried out using a qualitative descriptive approach produced 4 clusters and 15 indicators that are influencing factors in the transformation of food logistics companies in Indonesia towards Industry 4.0, including Transformation Strategy, Investment, Team Transformation, Culture, Employee Development, Employee Acceptance, Horizontal Integration, Vertical Integration, Customer Needs, Smart Warehouse, Smart Inventory, Smart Transportation, Smart Decision, Cyber Security, and Smart Maintenance. Not only related to technology, but companies and human resources are influential factors in transformation.*

*Keywords: Industry 4.0, Digital Transformation, Logistics Food.*



UNIVERSITAS  
MERCU BUANA