



**THE INFLUENCE OF TECHNOLOGY TO INDUSTRIAL SOCIETY
TRANSFORMATION: CASE STUDY IN THE MANUFACTURING INDUSTRY IN
BEKASI AREA**

THESIS

**Submitted as one of the requirements to obtain
Magister Manajemen**

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ABSTRACT

This research explores the impact of adoption of technology and perception of technology to industrial society transformation in the Indonesia manufacturing sector, case study in Bekasi area. It examines the impact of the latest digital and industrial technology, including automation, the Internet of Things (IoT), artificial intelligence, big data, and automation robotics on the industrial society landscape. This research performed quantitative method with questionnaires in the industrial society, such as industrial workers and managerial in manufacturing industry. Data were collected using a quantitative method through an online questionnaire distributed via Google Forms. A cluster random sampling technique was applied across major industrial estates, targeting employees with direct exposure to technology. Respondents were selected using cluster random sampling across three major industrial estates Jababeka, MM2100, and Lippo Cikarang Industrial Park and others ensuring diverse representation. Using Cochran's formula, a minimum sample of 260 respondents was determined and achieved. The instrument consisted of 15 question statements covering three key variables: technology adoption, perception of technology, and industrial society transformation. Data were analyzed using SmartPLS-SEM to examine correlations among variables. The results of this research find that the perception and adoption of technology influences on the industrial society transformation. The implication of this research offers valuable insights into the relationship between technology and the industrial society, highlighting the necessity of a balanced approach that promotes technological advancement while maintaining social well-being.

Keywords: *technology adoption, perception of technology; industrial society; society transformation.*

ABSTRAK

Penelitian ini mengeksplorasi dampak adopsi teknologi dan persepsi teknologi terhadap transformasi masyarakat industri di sektor manufaktur Indonesia, studi kasus di wilayah Bekasi. Penelitian ini mengkaji dampak teknologi digital dan industri terkini, termasuk otomasi, *Internet of Things (IoT)*, kecerdasan buatan, *big data*, dan robotika otomasi, terhadap lanskap masyarakat industri. Penelitian ini menggunakan metode kuantitatif dengan kuesioner yang disebarakan kepada masyarakat industri, seperti pekerja industri dan manajer di industri manufaktur. Data dikumpulkan menggunakan metode kuantitatif melalui kuesioner daring yang disebarakan melalui Google Forms. Teknik *cluster random sampling* diterapkan di seluruh kawasan industri utama, dengan target karyawan yang terpapar langsung dengan teknologi. Responden dipilih menggunakan metode acak klaster di tiga kawasan industri utama, yaitu Jababeka, MM2100, dan Lippo Cikarang Industrial Park, serta kawasan lainnya, untuk memastikan representasi yang beragam. Dengan menggunakan rumus Cochran, sampel minimal 260 responden ditentukan dan tercapai. Instrumen penelitian terdiri dari 15 pernyataan pertanyaan yang mencakup tiga variabel kunci: adopsi teknologi, persepsi teknologi, dan transformasi masyarakat industri. Data dianalisis menggunakan SmartPLS-SEM untuk menguji korelasi antar variabel. Hasil penelitian ini menemukan bahwa persepsi dan adopsi teknologi memengaruhi transformasi masyarakat industri. Implikasi penelitian ini menawarkan wawasan berharga tentang hubungan antara teknologi dan masyarakat industri, yang menyoroti perlunya pendekatan seimbang yang mendorong kemajuan teknologi sekaligus menjaga kesejahteraan sosial.

Kata kunci: *technology adoption, perception of technology; industrial society; society transformation.*

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