

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 2, March 2025

AI-Based Resource Management For Remote Teams

Leena Moundekar¹, VaishnaviShreekhande², Yamini kanekar, Bhagyashree Kumbhare⁴

Students, MCA, Smt. Radhikatai Pandav College of Engineering, Nagpur, India^{1,2,3} HOD, MCA, Smt. Radhikatai Pandav College of Engineering, Nagpur, India⁴

Abstract: The rise of remote work has introduced new challenges in resource management, including task distribution, workflow optimization, and team collaboration across different time zones. Traditional methods often struggle to maintain efficiency, leading to misallocated resources and reduced productivity. Artificial Intelligence (AI) offers a transformative approach by leveraging machine learning, predictive analytics, and automation to enhance resource planning, task assignment, and performance tracking. It examines key AI-driven functionalities such as intelligent workload balancing, real-time performance monitoring, and automated decision-making. By analyzing historical data and predicting resource demands, AI enables organizations to improve efficiency, reduce operational costs, and enhance team collaboration.

Keywords: Artificial Intelligence, Analyze, Information and Communication Technology, onboarding, Performance, Remote Employee, Virtual Teams

