

# Robotic Process Automation with Increasing Productivity using Machine Learning

Ayush Mishra<sup>1</sup>, Sauraw Diwase<sup>2</sup>, Rutik Kulkarni<sup>3</sup>, Govind Bhujbal<sup>4</sup>

Assistant Professor, Department of Computer Engineering<sup>1</sup>

Students, Department of Computer Engineering<sup>2,3,4,5</sup>

Sinhgad Institute of Technology, Lonavala, Maharashtra, India

**Abstract:** For any organizations or government, public/private sector who is involve in purchasing & supply chain management for that organizations it is important to know the market trend for particular product sells. As we know that big organizations buy or produce any product in large nubers but to know the trend of that product is very important before buying or producing because it cost a lot for that organization. Organizations profit & loss is directly connected with the market trend. To solve this problem we have come up with a solution which involves integration of three technologies named Robotic Process Automation (RPA), Machine Learning (ML), Power BI. This paper explain how we can solve the issue of purchasing & supply chain management, analysing trend of particular product sells, making right business decisions. Our aim will be to develop a system which will accurately predict the market trend of any product sells.

**Keywords:** Robotic process automation, Purchasing and supply management (PSM), Logistic Regression, Random Forest Classifier, Power BI

## REFERENCES

- [1]. Devansh Hiren Timbadia, Parin Jigishu Shah, Sugosh Sudhanvan, Supriya Agrawal. " Robotic Process Automation Through Advance Process Analysis Model" (IEEE 2020)
- [2]. Stefan Z., JovanoviÄ and S. Ä. Jelena. "Robotic Process Automation: Overview And Opportunities." International Journal" Advanced Quality"
- [3]. Ranjitha P, Spandana M "Predictive Analysis for Big Mart Sales Using Machine Learning Algorithms" (IEEE 2021)
- [4]. Cheng Zhang, junha Wen, and , Xiang gao, "An Improved Random Forest Algorithm for Predicting Employee Turnover", Hindawi Mathematical Problems in Engineering Volume 2019, Article ID 4140707
- [5]. Md. Anisur Rahman Mia\*, Mohammad Abu Yousuf , "Business Forecasting System using Machine Learning Approach" (IEEE 2021)
- [6]. Yada, Katsutoshi, Yuta, Kaneko, "A Deep Learning Approach for the Prediction of Retail Store Sales" , (IEEE 2016)
- [7]. Mohammed Ameer, Simhadri Prem Rahul, Dr.Suneetha Manne V.R.Siddhartha Engineering College Kanuru, Vijayawada-7 "Human Resource Analytics using Power Bi Visualization Tool " (IEEE 2020)
- [8]. Anand Singh Rajawat1 , Romil Rawat1 , Kanishk Barhanpurkar2 , Rabindra Nath Shaw3 and Ankush Ghosh4, " Robotic process automation with increasing productivity and improving product quality using artificial intelligence and machine learning ", ResearchGate January 2021
- [9]. Isabel Pedrosa, Jorge Bernardino, Bruno Varela, " Twitter Sensitivity Analysis in a Higher School Using Power BI " 2020 15th Iberian Conference on Information Systems and Technologies (CISTI) 24 – 27 June 2020, Seville, Spain ISBN: 978-989-54659-0-3
- [10]. M. L. Saini, Shilpi Kulshrestha, " Study for the Prediction of E-Commerce Business Market Growth Using Machine Learning Algorithm " 5 th IEEE International Conference on Recent Advances and Innovations in Engineering- ICRAIE 2020 (IEEE Record#51050)