Business Intelligence (BI) components in human resource management using the Carrotspot Total Performance Index model as an example*

Marzenna MIŁEK1 and Małgorzata ŻMIGRODZKA2

¹Institute of Computer and Information Systems, Faculty of Cybernetics, Military University of Technology, Warsaw, Poland

²Aviation Safety Department, Polish Air Force University, Deblin, Poland

Correspondence should be addressed to: Marzenna MIŁEK, marzenna.milek@wat.edu.pl

* Presented at the 44th IBIMA International Conference, 27-28 November 2024 Granada, Spain

Abstract

Article to: Project number: POIR.01.01.01-00-0854/19.

Title: "Human-centric BI and AI solution for human resources management"

Project co-financed by the European Regional Development Fund under the Smart Growth Operational

Program for 2014-2020. Beneficiary: LUX MED Benefity Sp. z o.o.

The article presents research on the application of advanced technologies, including Business Intelligence (BI), to the analysis and optimization of operations in organizational contexts. Business intelligence (BI) tools facilitate the aggregation, manipulation, and examination of data to enhance the quality of operational decisions. One illustrative example is the Carrotspot platform, which employs the Total Performance Index (TPI) model to evaluate employee engagement and performance. Additionally, the project entails developmental work, as it was founded upon industrial research and experimentation to adapt the technology to the project's particular requirements. As part of the research project POIR.01.01.01-00-0854/19, funded by the Polish National Center for Research and Development (NCBiR), an investigation was undertaken to ascertain the impact of the indicators included in the Total Performance Index (TPI) on employee motivation, engagement, and performance. These solutions can be utilized in a multitude of industries, including the aviation sector, to bolster safety culture and human resource management. The article employs a theoretical research method, as evidenced by an analysis of the extant literature on the subject, and an empirical one, which illustrates the findings of the research conducted as part of the ongoing project.

Keywords: BI, AI, TPI, HRM, machine learning, aviation

Cite this Article as: Marzenna MIŁEK and Małgorzata ŻMIGRODZKA Vol. 2024 (16) "Business Intelligence (BI) components in human resource management using the Carrotspot Total Performance Index model as an example " Communications of International Proceedings, Vol. 2024 (16), Article ID 4430424, https://doi.org/10.5171/2024.4430424