

IMPROVING THE QUALITY OF THE DECISION-MAKING PROCESS FOR MANAGEMENT AND IMPLEMENTATION OF SHARED ARTIFICIAL INTELLIGENCE PLATFORMS

Aurel Mihail ȚÎȚU^{*a}, *Alexandru STANCIU*^b, *Lucian TARNU*^c

^aAcademy of Romanian Scientists, Bucharest, Romania,

^bLucian Blaga University of Sibiu, Romania

^cMicrosoft Romania, Bucharest

ABSTRACT

Abstract: Various industries have already adopted the concept of autonomous, self-evolving, and self-managing artificial intelligence platforms with strong cross-cultural and inter-technological outreach. The development and management of the end-to-end, shared, data-driven software development between multiple organizations and industries is still a rare phenomenon. The decision-making process for adopting and sharing artificial intelligence at scale across various cultures, companies, and groups envisions many factors, including regulatory compliance, privacy, economic, ethical, intellectual property, engineering, cultural bias, transparency, accountability, design, to data science and computer science. This paper addresses the challenges and breakthroughs that advance and elevate artificial intelligence as the new norm of modern life and concludes in the last part with a personal vision and contribution that unlock further research areas.

KEYWORDS: *artificial intelligence, platforms, decision-making process*

1. INTRODUCTION

Enterprises, Organizations, and Governments are already on their journey, enabled by a data-driven and analytical approach, to embrace digital transformation and gain more intelligence and security on the way. In the process of adopting artificial intelligence in a wide range of departments, most executives believe that an adoption rate ranging from 11% to 30% will happen towards their business processes within the next three years, profoundly impacting their operations (MIT Technology Review Insights, 2020). While the definition of artificial intelligence is mainly dependent on the use case and the implemented technologies, understanding the challenges and aspects of the decision-making process is an essential roadblock in adopting artificial intelligence at scale. In a context of a multi-cloud strategy adopted by most of the organizations, having a dynamic workflow and application stack opens the possibility of acquiring superior levels of development and operations (DevOps) and continuous integration/continuous development (CI/CD) cycles' effectiveness and efficiency. Avoiding vendor lock-ins helps to gain significant advantages such as agility, high availability, ease of manageability, and governance. IT departments co-operate with data and business intelligence functions in the race of gaining an edge in time-to-market, time-to-value, time-to-insight, and innovation acceleration key performance indicators. While a wide range of organizations nurtures and creates a collaborative yet isolated work culture, sharing different practices, knowledge, and decision - making processes is key to generating savings, extracting more insights from data, and facilitating technology progress. Can this be achieved according to a specific

* Corresponding author. E-mail address: mihail.titu@ulbsibiu.ro

