

Chapter 8

Did AI Kill My Job?

Impacts of the Fourth Industrial Revolution in Administrative Job Positions in Portugal

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ABSTRACT

People and organizations have been witnessing tremendous changes taking place in the job market. Technologies (ex. AI, machine learning, IoT) are pushing individuals away from their comfort zone and forcing them to adapt, to develop new skills and to reinvent their job positions. Reports on the changes in the workplace and on the workforce have been raising concerns about the potential of AI to replace humans in job positions. The current challenges, brought by the 4th IR, have been providing countless opportunities for business growth, optimization and internationalization; however, tremendous concerns are currently raised regarding the sustainability of the human resources which are currently on the market and of those who are being trained to enter it. In this chapter, the authors focus on administrative job positions, which have been pointed out as one of the most prone to be taken over by AI and identify the already available technologies that can perform the job description tasks, as a current diagnose of the profession.

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INTRODUCTION

For a great diversity of job positions, the answer to the challenges imposed by the new AI-powered workplace has relied on the devise of strategies, either to boost work performance through intensive training aimed at building skills for a higher technology absorption or to completely restructure the job position in order to reconfigure it to the contingencies of the increasingly technological immersed workplace (WEF, 2018). Life-long learning and entrepreneurship emerge as core soft skills for professionals nowadays, namely those whose core tasks are on the verge of being replaced by Artificial Intelligence (AI). Research has actually been pointing out that a great number of new job positions that have never existed, will arise in upcoming years with profile demands that are not possible to foresee at the moment. In other words, it would be necessary to, right now, train future professionals for job positions that don't even exist (WEF, 2018).

Naturally, the impact of such technologies in the workplace/workforce is progressing at a different pace around the globe, and the profoundness of these impacts is also expected to vary according to national/regional contexts, legislation, culture, industry, etc. Nevertheless, we are before a scenario where the human intervention capital is being depreciated by the added value that AI can offer organizations in performing work, efficiently, at a lower cost, greater volume and faster pace.

A climate of instability and uncertainty for the current and future workforce (Workforce 4.0) is installed, thus it is crucial to gather evidence on the impacts of AI in distinct job positions, analyse the extension of those impacts, analyse where human capital is still most valued, and develop educational and entrepreneurial strategies to aid professionals in striving during the current era.

The administrative job occupations have been, for decades, an underprivileged subject of research mainly because they are not considered as a specific domain of specialized knowledge, and, in fact, it consists of a highly technical profession, clerical for the majority, and with a level of specialization that occurs at the multi-domain of personal and technological skills, trained to assist most of the existing specialized professions.

In this chapter, we focus on administrative job positions, which, in its core essence of 'assisting others', has been pointed out as one of the most prone to be taken over by AI and automation, and to depreciate soon, if not already (WEF, 2018). Built on international human resources data, we begin by identifying which are the most frequent tasks conducted by these professionals at two levels: Administrative Assistants (AA), at the basic level, and Executive Assistants (EA), at the top level, and bring forward which of these tasks are prone to be deprecated, replaced or automated by current and emerging technologies. On a second stage, a diagnose of the profession within the Portuguese context is presented, based on a five-dimension framework of tasks, which also includes the hard and soft skills most valued by the professionals.

The local and international contexts are analysed, and recommendations are built upon the preliminary results of this exploratory study, concerning the (re)framing of the profession. The research results are of practical, methodological and managerial significance for researchers, professional organizations, human resources professionals and educators/educational providers.

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