Chapter 9
The Future of Emotions in the Workplace:
The Role of Artificial Intelligence in Modern Personnel Management

ABSTRACT

In this chapter, the topic of artificial intelligence in the organisation will be presented. First of all, the authors start looking at the state of art in AI, one of the hot topics of the last decades. After discussing the practical uses of artificial intelligence in the organisation, they introduce the concept of emotional artificial intelligence that is linked to the ability of a machine to interpret human behaviour and adapt their responses accordingly. Artificial intelligence also offers interesting solutions for emotion analytics to support decision making, and to predict individuals' behaviour, whether in marketing or personnel management, among others. However, all this potential has an ethical dark side, linked to privacy issues, the loss of jobs to machines, or other threats to humanity caused by improper use of technology. While exploring more about machine learning, the authors reflect on some of the modern questions we face.

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INTRODUCTION

Nowadays there is a great deal of interest around artificial intelligence and the ethical dilemmas that this field poses (note 1). We are now in the economic phase also known as Industry 4.0 (note 2), where it is all about smartness, intelligence in machines, and mobility in devices.

In this sense, we can identify several potential threats to society posed by AI and related technology. Some positions against AI worth of mentioning are those of Elon Musk, who tweeted in August 2014 "Worth reading Superintelligence by Bostrom. We need to be super careful with AI. Potentially more dangerous than nukes". Or the position of Professor Stephen Hawking, who affirmed in the same year (2014) that "the development of full artificial intelligence could spell the end of the human race […]. It would take off on its own, and re-design itself at an ever increasing rate. Humans, who are limited by slow biological evolution, couldn't compete and would be superseded".

Some of the threats are either unlikely to happen, or differ little from threats posed by "unintelligent" technologies. However, there is one threat in particular worthy of further consideration: that ultra-intelligent machines might lead to a future that is very different from the present we know and understand. Lately, the debate around whether or not artificial intelligence might steal the majority of our jobs is featured everywhere. In this perspective, a future where ultra intelligent machines exist and work well, may not be as pleasant for us humans as we may hope for, and at that point we may not have a choice.

Artificial Intelligence: The State of Art

As expected, we should start from a definition of Artificial Intelligence, to have a better understanding of what the buzz is all about. Authors and practitioners alike have proposed interesting considerations about AI and its characteristics. For example, Poole and Mackworth (2017) affirm that AI is "the synthesis and analysis of computational agents that act intelligently", while Russell and Norvig (2009) define it as "the study and design of intelligent agents, where an intelligent agent is a system that perceives its environment and takes actions that maximise its chances of success". Ideally, we can mention four general definitions of artificial intelligence, that differentiate themselves between systems that think or act rationally or like humans. In particular, AI systems that act rationally - meaning they are supposed to perceive and act