Automated business process management-in times of digital transformation using machine learning or artificial intelligence

This document was published in Romania in 2017. It deals with the impact of digital transformation on Business Process Management or BPM and their advantages and their disadvantages.

But we cannot talk about the advantages and disadvantages without understanding some concepts. First of all, we have to understand that digital transformation is not a new concept, but we started talking about it 60 years ago, especially thanks to the creation of mainframe computers. It means changes in collaboration through the adoption of digital technologies like 3D painting or connected objects, integrating them across all facets of human life and society. Another notion, very important to know is the Business Process Management which designates a certain way to manage, adjust and maximize a business process (how a company works). Its main goal is to increase business performance. Regarding artificial intelligence or AI we can say that in the case of this document it, there are two types of AI, the first one called "the strong artificial intelligence" which means that some tasks are done by the AI as if it's a human or even better that if a human would have done this task because as jus human being we don't have the abilities to do it.We can illustrate it for example with IBM Deep Blue Super Computer which is a computer that beat the chess champion a few years ago. The second one called "weak artificial intelligence" in contrast to the first one refers to a lower form of artificial intelligence applied in a particular field. We can illustrate it for exemple with the application "Waze " which is a navigation system.

As part of the research carried out by the author of this document, a survey was created. The targets were 25 digital German companies. We can say about the advantages that for example all the people interrogated say that they are concerned by digitalization and that 94% of them feel they are affected or very much so.

Regarding the disadvantages, almost one in ten people think that data are "cost drivers". People also still confuse "deep learning", "machine learning" and "AI" which are different concepts. We can also say that only a quarter of the people interrogated have ever heard of deep learning, and only 2% actually use it which is not enough. It also means that there is plenty of room to get better and that the respondents want to increase their knowledge about BPM and that not everything has been done yet.