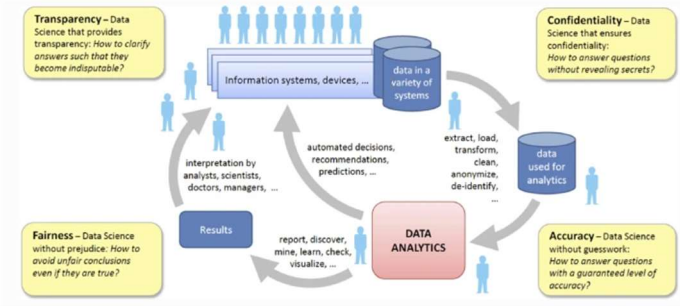
TRUSTWORTHY ARTIFICIAL INTELLIGENCE AND PROCESS MINING: CHALLENGES AND OPPORTUNITIES

In recent years, artificial intelligence has become ubiquitous in the daily life of companies because it saves time and provides significant help in terms of productivity and performance. However, some companies are unaware of the rules that govern artificial intelligence, exposing them to significant risks (bad reputations, legal sanctions, unfair bias, lack of transparency, lack of consumer trust, ethical risks, etc.).

Process mining is a tool to help users of artificial intelligence in companies understand the rules and avoid any possible risks. It then sets a framework with rules that make it easier to follow the steps without incurring any possible problems.

The impact of artificial intelligence has become global, affecting all spheres of our society. The European Union is taking a serious look at the subject of artificial intelligence and is proposing to put in place strict rules that reduce possible risks for both consumers and businesses. Today, these rules are simply discussed but will in the coming years be common and applied to all users. The European Union encourages all countries to take the lead in creating laws governing the impact of artificial intelligence at the national level. Indeed, it is a theme that has become major and consequential for companies.

Figure 1 : The Importance of Responsible Data Science (RDS)



This diagram shows the importance of Responsible Data Science, also known as RDS, in regulating the use of artificial intelligence. These regulations have become a key concern from a national, European, and international point of view. The RDS sets out four essential principles for the use of artificial intelligence: fairness, accuracy, confidentiality, and transparency. These principles significantly diminish the negative consequences of artificial intelligence for businesses and consumers if applied strictly.

Source: Andrew Pery, Majid Rafiei, Michael Simon, Will M. P. van der Aalst, SPRINGER LINK, published 24 March 2022.