

Artificial intelligence in the pharmaceutical industry

Pharmaceutical companies have been using statistical methods to analyze medical data, studies and experiments for many years. However, the application of Data Science, Machine Learning and AI has only increased in recent years. Today, new AI technologies are opening up incredible potential for pharmaceutical and healthcare companies. The potential applications range from the research and development of new drugs to the analysis and optimization of process and production workflows to the personalized marketing of products.

Possible applications of Al



Active ingredient development



Active ingredient production



KPI & sales forecasts



Clinical studies



Quality control



Annomaly detection



Supply Chain Management



Predictive Maintenance

Opportunities & challenges from the use of AI



Opportunities

More efficient research by selecting the most appropriate research approaches using Al.

Automation of processes allows experts time to concentrate on the essential concentrate

Determination of success prognoses with a certainty of 85%

Shortening the development time of new drugs

Reduction of multi-billion dollar failures and investment costs



Risks

Data sets that are too small or too homogeneous lead to inconclusive or false findings

Lack of data standards poses the risk of invalid results that compromise research compromise.

Highly regulated industries need to ensure a high level of transparency of each process phase, which leads to higher costs

Complex data labeling requires highly specialized input

Data bias from machine learning models due to misrepresentation or non-existence of medical datasets of multiple populations.

Are you looking for highly qualified experts? We are happy to help with selection and activation.

