The

PAITool

Course

Available on our website at **https://paitool.eu/**

How can you deploy artificial intelligence in your company?

Check out these eight practical scenarios.

https://paitool.eu

On our website you will find interactive presentations with artificial intelligence applications in enterprises.

You will see **8 scenarios** of practical AI deployment. These solutions are available on the market today and have already been deployed in industrial companies.

We will introduce you to the possibilities of using artificial intelligence in specific business conditions. You will also learn more about the technical and organisational environment you will need to deploy AI solutions successfully.

1

Artificial intelligence in industrial production

See the different types of use of AI in the manufacturing process. The list is already extensive and will grow over time. Artificial intelligence can be deployed for various tasks or optimization measures in specific machines and equipment, stand-alone production cells, and integrated assembly lines. The video also demonstrates the principles of building a machine-learning model in industrial manufacturing.

Quality control in industrial production

2

One of the most widely used artificial intelligence applications is image recognition using machine vision. Applications of this type are now commonly used in mobile phones, while sensor and control systems in autonomous vehicles are slightly more complex and reliable. This type of artificial intelligence can be deployed immediately in your business and just as quickly transform into tangible economic benefits.

3

Predictive maintenance

The application of artificial intelligence in maintenance is one of the most deployed solutions today. It is gradually becoming part of the standard software packages available as a commodity. It is often linked to asset management, i.e., the management of a company's production and operational capacities and facilities.

The essential prerequisite for its successful deployment is data collection from facilities and objects. Predictive maintenance is linked to the Internet of Things and intelligent processing of the collected data. The return on investment in this scenario is strongly related to potential losses from downtime and production outages.

Energy management

4

The importance of energy management has changed fundamentally over the last two years. Energy prices have become a factor that can determine the economic sustainability of your operation. Add to this environmental requirements, new regulations, and the drive to reduce your carbon footprint.

The more complex the approach to energy efficiency solutions, the greater the demands on energy management systems. In this scenario, artificial intelligence primarily concentrates on predictions that allow the company to plan its consumption, purchases, and even sales of surplus own RES energy production with high accuracy.

5

Marketing and sales support

Marketing has shifted from the mass promotion of a brand or product to an industry that focuses more on the individual customer and their needs. The customer is now at the centre of attention, and companies are not only looking for the most appropriate channels to reach her/him but are also personalising the content of their messages in their communications.

The goal is a situation where the recipient of the advertising message feels that the other party understands them and their needs. In this case, the technology works with different sources of information, of which unstructured data plays an important role. Natural language processing systems work with this data. The deployment of technology, in this case, must be balanced with measures to protect the rights and privacy of the client.

Online sales

6

Business activities of companies are moving massively into the online world. This shift is pronounced when serving end users. Customers' ability to shop anywhere has increased dramatically, and their loyalty to a retailer or brand is decreasing proportionately.

Artificial intelligence provides tools to identify customer preferences and buying habits based on their actions and processes on a sales website. While maintaining all privacy rules, it is possible to provide the customers with an offer that will accelerate their ability to find suitable products, increase their shopping satisfaction and bring them repeatedly to the retailer's website.

User and customer support

7

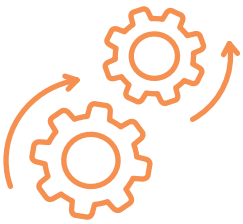
Companies are dealing with more than just product sales or marketing. They must pay attention to taking care of customers, who turn to sales with various problems with using products, complaints, or malfunctions. Salespeople also need to respond promptly to client requests and provide technical support for staff. Call centres are becoming increasingly costly to operate, and maintaining a stable performance of the team providing customer support is also a challenge.

That is why chatbots with varying degrees of intelligence are becoming common on the front line of this communication. In this scenario, you'll learn how to build an automated contact centre that can understand natural language and communicate directly with the end customer.

Automation of non-manufacturing processes

8

For this scenario, technologies commonly referred to as Robotic Process Automation (RPA) are used. Since we are not talking about a physical robotic device but software, we have used a label to describe the scenario that indicates the purpose for which RPA is most used. These are various administrative tasks such as processing invoices, purchase orders, travel orders, etc.



In our example, it is the processing of service intervention records and the subsequent support of service technicians. The interactive presentation explains in more detail how the AI model gradually builds up "knowledge" of the environment and recommendations for actions in the physical world from the generated records.