



Significant technology trends

Digitization, Industry 4.0, Artificial Intelligence, comprehensive information technology and the like are terms that you can read and hear about all the time. Below are some megatrends that will certainly change our future significantly.



Artificial Intelligence (AI): This technology is increasingly being used. In medicine, for example, the AI used in the computer and display system can be x times more accurate and extremely rapid than doctors to determine whether an incipient cancer is present. In an American research laboratory, it has also now been possible to detect the onset of Parkinson's disease at the very earliest stage. People who will soon be subject to this disease have an irregular progression, which also moves the hips up and down slightly differently than a healthy person.

Confidential algorithms: The increasing spread of fake news and data has led to the development of specially crafted algorithms for the computer programs, which determine much more quickly whether it is fake data or not.

Blockchain monitoring: This allows the manufacturer, the transport company and the customer to determine at any time where a specific delivery is actually located. For example, if a fake object is added to the blockchain as a so-called real version, the blockchain program checks and compares only the previous original data. These, in turn, can never be changed or deleted unilaterally in this procedure. This applies not only to deliveries, but to all other aspects (money transfers, etc.) that must be "bomb-proof".

Moore's law states that the number of transistors in a highly integrated circuit doubles every two years. Now, however, the researchers are coming to the physical limits of silicon. For example, DNA and biochemistry are already used in DNA calculation and storage instead of silicon and quantum architectures to perform even faster calculations or store corresponding data.

Home office is popular in Corona times. But beware: malicious cyber attacks on companies are on the rise every day. Especially among home workers, the laptops are often not properly protected and thus offer the clever hackers wide open entrance portals. This can cause the entire company to suffer huge damage. The data is then gone and there are high demands for money from the attackers. Companies must now pay close attention to this evil fact and seek advice from the appropriate experts. **Digitalization and Industry 4.0** do not only have advantages.

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