



Artificial intelligence (AI) is changing the financial sector

AI technology already plays a major role in the financial and insurance sector

AI as the core technology of the 21st century

As a key technology, artificial intelligence (AI) is increasingly driving the global digital revolution. AI generally refers to computer programs that can automatically identify correlations, make decisions and learn from them.

In the financial sector, self-learning computer systems (machine learning) can optimise the processes of banks and insurance companies in partner countries, promote innovation and support businesses in tailoring their products to the needs of their customers while saving costs. AI applications offer the opportunity to use alternative data. Algorithms are used, for example, to analyse text data, satellite images, credit card transactions and social media information and create an alternative database. This allows for intelligent, non-traditional evaluations, for instance to make credit checks possible or use satellite data to determine the risk of flooding and increase the insurability of crop losses and harvest failures. In the insurance industry, AI can also be used automatically to review small claims using algorithms without the need for separate scrutiny by the insurance company. AI can thus reduce barriers to market entry and promote product development in the insurance sector.

Ethics in the financial sector: society as a whole must benefit from AI

If AI applications are developed for the financial sector, they need to be trained with large quantities of personalised data in order to be able to work independently. However, there should not be a conflict between innovation and the responsible use of data for AI. Regulatory framework conditions, data protection provisions, capacity building, AI knowledge and sensitivity to fundamental ethical issues and risks are needed to ensure partner countries are not left behind by technological change in the financial sector.

As part of BMZ's FAIR Forward – Artificial Intelligence for All initiative, guiding principles have been developed to assess AI applications in terms of their benefit for society as a whole. Major tech giants such as Amazon, Google and Microsoft offer AI services in developing countries and emerging economies via their server centres. The target group includes public administrations wishing to optimise their decision-making processes. Critical here is the data on the basis of which automated decisions are made. In the private sector, for instance, discrimination in credit decisions must be prevented and the benefits of AI for society as a whole must be ensured (low potential for abuse). In both cases, there is the risk that, through defective algorithms or insufficient data, AI amplifies social marginalisation and hampers access to financial services (creating equal opportunities and embedding capacity locally). Experts call such decisions 'statistical

prejudices', and in the worst cases, they can discriminate against entire population groups.

Engaging German development cooperation

The [German government's AI strategy](#) (in German) stipulates that the potential of AI should be exploited for sustainable development and contribute to achieving the sustainability goals of the 2030 Agenda. Since as early as 2018, BMZ and the UN Global Pulse initiative have been supporting Ghana and Uganda in a pilot project to develop guidelines, ethical standards and strategies for responsible use of AI. Since autumn 2019, these activities have been expanded through BMZ's FAIR Forward - Artificial Intelligence for All initiative. In addition to continuing activities to create political frameworks for AI, local capacity building for AI and improved access to training data and technology for the development of AI solutions are being promoted in Ghana India, Rwanda, South Africa and Uganda. A focal point of the project is the development of open language data in African and Asian languages to develop digital voice assistants for local languages, which can facilitate access to

financial and insurance products.

Recommendations for stakeholders in the international development cooperation

- Supporting financial regulators in developing suitable framework conditions such as data protection guidelines for AI and the ethical and legal embedding of AI research
- Strengthening the monitoring of ethical principle compliance by national and international financial and insurance supervisory authorities
- Promoting and raising awareness of local scientific and technical AI expertise in the public and private financial sector (including start-ups)
- Supporting the public and private sector in correcting incorrect databases to prevent mistakes in AI decision-making
- Supporting the further development of freely available open-source and open-data approaches for lower barriers to market entry for SMEs

Responsible use of AI for credit checks

On behalf of BMZ, GIZ has published recommendations for the use of data and artificial intelligence in the financial sector. These include leadership, cooperation, data awareness, consumer empowerment, corporate accountability and data security. The recommendations apply to regulatory work as well as to the self-regulation of financial product providers.

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