

Social entrepreneurship: How start-ups use artificial intelligence for social good

Berlin, 24.02.2022

Researchers at the Alexander von Humboldt Institute for Internet and Society (HIIG) have studied how entrepreneurs use artificial intelligence (AI) to help tackle social problems. In a new study, they point to the organisational uniqueness of start-ups and how they act as a bridge between different communities of interest in areas such as inclusion, healthcare or climate protection. In addition, they show the benefits of social entrepreneurship but also the potential risks.

Can AI startups have a positive impact on society? This question is being investigated by the research group "Innovation, Entrepreneurship & Society", led by Dr. Ali Aslan Gümüşay at HIIG. In a new case study, he and his colleagues Dr. Nicole Siebold and Dr. Georg von Richthofen examined 15 European companies from different sectors, ranging from education to banking to environmental services. Their results show that, due to their structural flexibility, start-ups can adapt AI technologies very quickly to meet the individual needs of different stakeholders.

"Socially oriented AI companies have the unique advantage in the world of work, of being able to work simultaneously with for-profit and non-profit organisations", explains Dr Nicole Siebold. She points to an entrepreneurial project in the UK that is developing intelligent image recognition for identifying, categorising and mapping to reduce plastic pollution in the oceans. "Plastic waste pollution affects everyone in our society, which is why the AI company was able to engage many different stakeholders and, with their expertise and financial support, develop an AI-based technology across sectors", she further comments. In the other case studies, the start-ups also played a bridging role between different stakeholders. These ranged from NGOs to government agencies to competing companies, some of which were seen as partly culpable for the societal problems being tackled.

The study also points to the risks associated with developing artificial intelligence. This was evident in the case of a startup that uses AI to evaluate refugees' skills in order to help them integrate into the labour market. "The company founder discovered that the labour market data available for training AI models is often systematically biased in terms of age, ethnicity and religion. That is why the general use of such data sets must always be questioned", says Dr Nicole Siebold. Otherwise, according to Siebold, there is a danger that new AI models will further exacerbate problems such as inequality and exclusion instead of combating them.

"But there is also a lot of need for action at the political level and for decision-makers", says HIIG Research Director Prof. Dr. Dr. Thomas Schildhauer. In addition to stronger regulation of new technologies, entrepreneurs in the social sector often lack the necessary resources to retain the best qualified staff. Dr Ali Aslan Gümüşay adds that social entrepreneurship requires targeted political support: "Only in this way can it develop solutions to the major social challenges, such as climate

change and digital transformation. A wide range of support is needed here, from financing incentives to strengthening the social entrepreneurial ecosystem", he concludes.

Further information

[Research Group](#) | [Study](#) | [Blog article](#)

Contact for press and questions on the research group

Frederik Efferenn | Tel. +49 30 200 760 82 | presse@hiig.de

About HIIG

The [Alexander von Humboldt Institute for Internet and Society \(HIIG\)](#) researches the development of the internet from a societal perspective. The aim is to better understand the digitalisation of all spheres of life. As the first research institute in Germany to focus on internet and society, HIIG has established an understanding that emphasises the embeddedness of digital innovations in societal processes. As a node in the [Global Network of Interdisciplinary Internet & Society Research Centers](#), an initiative of scientific institutions worldwide in the field of interdisciplinary research on internet and society, the institute is trying to develop a European perspective on digital transformation.

HIIG was founded in 2011 by the Humboldt-Universität zu Berlin, the University of the Arts Berlin and the WZB Berlin Social Science Center, in alliance with the Hans-Bredow Institute for Media Research in Hamburg as an integrated co-operation partner. The research directors of the institute are Prof. Dr. Jeanette Hofmann, Prof. Dr. Björn Scheuermann, Prof. Dr. Dr. Thomas Schildhauer and Prof. Dr. Wolfgang Schulz.