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## Machine Learning - Values and Ethical Risks

**Format** 90 Minutes, Brownbag

**Ort** Winterthur, Technopark

**Output**

- Identifying turicode's value base
- Mapping ethical challenges in turicode's fields of action

**Follow-up**

- Workshop series: In-depth workshops for values, risks, and responsibility
- Creation of a values charta
- Development of an «ethix label» for data ethics

«The ethix workshop was a good starting point for a company discussion about our internal and external values. The workshop marks only the beginning of this discussion, which we will continue. We now have a solid foundation on which we can build.» Martin Keller, Co-Founder

The four founders of turicode set the goal of creating added value from unstructured documents. By using machine learning to select and structure information, document processing time can be reduced, more time can be spent on customer service, and new business opportunities can be created. turicode's software not only contributes to increasing quality and efficiency of their customer's processes, but by replacing manual, error-prone and repetitive tasks, it can also increase the satisfaction of employees and customers. As a B2B company, turicode has already worked with a wide variety of organizations in the public and private sector.

The ethix workshop, which was attended by all co-founders and seven team members, took place at the Technopark Winterthur with the following objectives:

- Identification of the company's values that guide the team and product development processes
- Identifying ethical risks associated with turicode's activities that could cause conflicts

The discussion was structured using the ethix «Ethical Product Canvas», which facilitated the identification of values and ethical risks.

## Values Mapping

The discussion revealed multiple values, the most important of which will be mentioned in three clusters below.

### 1. Within the Company

Inter-team honesty, reliability, and teamwork are decisive for turicode. Based on team discussions on how things ought to be done and the desire to support each other, turicode strives for a cooperative environment that not only focuses on the development of high-quality products, but also on team satisfaction. For a productive and satisfying cooperation, trust is important to turicode. Trust must exist between the individual team members, but the team members also need to have trust in the company.

### 2. Technology

turicode strives to let openness towards the "New" and creativity guide their innovation processes, with which they get the most out of technological possibilities. Products should be sustainable and individualized, which requires a balance between careful analysis of their clients' problems and long-term thinking. As part of their sustainability goal, turicode wants to create re-usable codes. Finally, they hope to offer new perspectives in information processing, because fresh ideas are followed by productivity.

## 3. Clients

turicode strives to create added value for their customers: Their products should tackle real problems, help solve them, present individualized solutions, and provide satisfaction through the services. turicode wants to be reliable and provide high-quality services to their customers. The company wants to develop products of the highest quality and deliver on their promises. These values demand transparency, integrity, and honesty towards turicode's clients in regards to what can be achieved - and what cannot.

## Mapping Ethical Risks

As part of the discussion, the following key risks were identified, which can be grouped into two main clusters.

### 1. Questions of Justice

Generally, questions of justice describe risks stemming from the actual use of turicode's technology. These risks are not directly related to turicode, but this does not mean that turicode cannot exert any influence over them. The main risk is that the analysis technology developed by turicode could lead to job cuts in companies as it replaces repetitive manual work. If companies that use turicode's technology approached the issue from a sustainability perspective, training could be offered at an early stage for those employees whose job will become obsolete through the use of turicode's software. turicode can support an active focus on consequences during technological transitions: if in the end, there are more positive than negative consequences for those concerned and society as a whole, the incorporation of the technology can be pursued further. In addition, turicode has the option and responsibility to be careful in selecting their customers as a means of influencing the use of the technology.

### 2. Ethics of Technology

turicode bears responsibility for risks arising within the context of the company and during the innovation process. A critical risk is the data distortion caused by the documents selected for algorithm training, which can lead to discrimination. A second fundamental risk relates to data security. Respect of privacy must be ensured. Data must be stored securely, data leaks must be avoided and, when the analysis technology is being sold, attention must be paid to who the buyer is to prevent misuse of turicode's products. A third problem is information leaks that can be traced back to data pooling due to procedural or miscommunication errors with customers. This danger must be taken into account within the framework of data security measures.

ethix – Lab for Innovation Ethics is made possible by Engagement Migros, the development fund of the Migros Group.

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EIN FÖRDERFONDS DER MIGROS-GRUPPE

### About Engagement Migros

Engagement Migros supports pioneering projects in the midst of social change that break new ground and test future-oriented solutions. The impact-oriented funding approach combines financial support with coaching-like services in the pioneer lab. The development fund was founded in 2012 as a voluntary commitment by the companies of the Migros Group. With its independent approach, Engagement Migros supplements the funding activities of the Migros Culture Percentage.

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