In brief: Bosch code of ethics for Al



On the basis of our strategic imperative "Invented for life," we aim to act responsibly and in accordance with the Bosch values of quality and reliability when developing and using AI products.

Our objective is to create AI products our customers can trust. To achieve this, we combine values-based action and methodological and technological excellence. There are "red lines" we will not cross. For example, we will not allow any AI to subject the lives of individuals or of groups of people to some kind of trade-off.

We are guided by the following principles:

- All Bosch AI products should reflect our "Invented for life" ethos, which combines a quest for innovation with a sense of social responsibility.
- Al decisions that affect people should not be made without a human arbiter. Instead, Al should be a tool for people.
- We want to develop safe, robust, and explainable AI products.
- Trust is one of our company's fundamental values. We want to develop trustworthy AI products.
- When developing AI products, we observe legal requirements and orient to ethical principles.

Concerning the use of AI, we observe the following criteria:

- An AI product, and/or the use to which it is put, should not violate the articles of the Universal Declaration of Human Rights.
- Its use must comply with the laws of the countries for which the AI product was made.
- Our use of the AI product should conform with the Bosch values formulated in "We are Bosch."
- Al products should be guided by our "Invented for life" ethos: they must kindle people's enthusiasm, improve quality of life, and conserve natural resources.

Three approaches to the role of AI in decision making:

Corporate Department Communications & Governmental Affairs Executive Vice President: Prof. Christof Ehrhart www.bosch-press.com February 19, 2020 PI 11094 RB Cwi/BT **"Human-in-command"** (**HIC**): In this approach, the AI product is used purely as a tool. At all times, people decide when and how to use the results presented by the tool. An example is when a machine helps people with classification tasks.

"Human-in-the-loop" (HITL): In this approach, people can directly influence or change decisions made by an AI product.

"Human-on-the-loop" (**HOTL**): This approach concerns those cases in which the parameters relevant for decisions are defined by people during the design process, but the decisions themselves are delegated to the AI product. The application allows those affected by the decision to appeal for review. This ensures that people not only define the parameters for decision making beforehand, but also check retrospectively whether the decision was carried out in the intended sense.