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ARTIFICIAL INTELLIGENCE END-TO-END ERROR ANALYSIS

Verena Blunder
Bertrandt Ingenieurbüro GmbH

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Technical task:
Subsequent invention enables fully automated end-to-end (E2E) fault analysis using Machine Learning (ML) and Artificial Intelligence (AI)

Initial situation:
Today, there is no fully automated E2E fault analysis using ML and AI algorithms. This E2E fault analysis using ML and AI saves a company time and employees in the long run. It also makes the company more competitive and increases its reputation with customers by providing fast and efficient problem solutions. However, implementing the algorithms and learning the algorithm is time consuming.

Solution:
A fully automated E2E error analysis using ML and AI algorithms should help to work faster and more efficiently in the future. The algorithm should be able to independently evaluate and understand e-mails, tickets and logs, etc. and provide feedback. A system is to be developed in which several ML and AI algorithms can be combined to become future-proof. Among other things, this system should also answer directly to the incoming tickets and mails or (if necessary) forward them to the appropriate contact person internally. This saves the company and its employees enormous resources and costs.

Advantages:
The advantage of the idea is the satisfaction of customers and employees, as this system serves as a relief. It can quickly respond to customer complaints and helps employees to find and correct errors. Because the system is always learning on its own, it can react faster and faster to emerging situations. It also saves enormous amounts of time and resources (employees, electricity, travel, etc.).

Possible application:
First, the ML and AI algorithms should be able to

1. read, understand, evaluate and sort texts like e-mails, tickets (KPM, Jira, etc.)
2. read, understand, evaluate and sort logs
3. read, understand, evaluate and sort source codes (Java and max. Python)
4. to prepare texts, such as short rough reports, error analyses, possible solutions
5. to log into different tools or systems independently and find the texts
6. to make independent decisions, which tool or which log from which
machine should be read out
7. to send the error analysis via e-mail (to the system managers, FOs, management, etc.)

If a problem occurs in E2E protection, the system could be used to allow AI to analyze the problem in real time without human interaction. The system should automatically locate the problem and offer possible actions.