

A close-up, low-angle shot of a white industrial robotic arm with a glowing orange light emanating from its gripper. A person's hand is visible on the left, interacting with the machine. The background is a bright, clean industrial setting.

## Prototyping for AI-based product optimization

„Thanks to our work with infoteam, we can use machine data as an additional basis for decisions about development and maintenance measures, further improving the quality and service of our products. Rapid prototyping of data analysis applications is important for us; it's how we are able to test the usefulness of analyses with target groups in an agile way and to derive new versions based on what we learn. This approach to work can be implemented very powerfully with infoteam.“

*Regine Meunier, Siemens Healthineers*

For our client:

The Siemens Healthineers logo, with 'SIEMENS' in teal and 'Healthineers' in orange, followed by a cluster of orange dots of varying sizes.

SIEMENS  
Healthineers

## Initial situation

- Siemens Healthineers tests X-ray machines under laboratory conditions to ensure and optimize quality
- X-ray machines worldwide transmit sensor data
- An integrated cable pull for adjusting the X-ray unit is subject to different loads in real use than in the laboratory
- Objective: To increase product quality through realistic laboratory tests
- Objective: To create a realistic global usage pattern for laboratory tests based on the operating data collected
- Objective: To create an AI-based prototype as a contribution to an internal Siemens working group for innovations

## Solution

- Identification of the objective as an optimization problem (determination of the best possible solution within a given set of parameters)
- Advice on various software solutions
- Development and training of an artificial intelligence prototyping system based on infoteam's own "Deep Planner Framework"
- Result: Representative and functional AI-based usage pattern for use in the "Innovation Think Tank" and as a foundation for possible development and scaling to an operational software product in the live system
- Very precise project volume estimate for rapid prototyping (retrospectively confirmed)



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