



# AI AGENT FOR BACK-OFFICE REQUEST MICRO-ROUTING



## BUSINESS CHALLENGE

The client aimed to develop an AI Agent to optimize the performance of its 1,000-person back-office workforce by routing each inbound request to the most expert agent for the specific topic. The human agent's expertise was automatically assessed based on past performance in handling similar tasks, analyzing total handling time and the number of interactions required for successful resolution.

In a previous approach, the client had used routing based on competence centers and manually updated skill-based routing within each center.

## COGNITIVE SOLUTION

The AI agent, developed by a Loop Certified Partner on the Loop Cognitive Platform, was trained to identify the most suitable human agent for each specific back-office request based on the cases handled and the success rates of each agent in the past.

### Dark data used for training:

Historical tickets, questions, answers, manuals, and success scores.

### Dark data used for inference:

New incoming back-office tickets.

Industry: Insurance

## LEADING EUROPEAN INSURANCE

A leading insurance company with over 10 million customers and 10,000 branch offices, offering a full range of insurance and financial products. It is particularly active in the supplementary social security and health sectors.

## RESULTS

**40%** IMPROVEMENT  
in first contact resolution

**60%** REDUCTION  
in internal task transfers between competence centers and team members

**16%** IMPROVEMENT  
in agent utilization

**100%** LEGACY SYSTEM INVESTMENT PROTECTION  
the AI agent acts on current legacy systems