Designing a multichannel assistance service integrated with AI solutions for respondents

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Abstract

The Italian National Institute of Statistics provides services related to surveys and data collection systems on various topics. These services include information requests, support in data collection platforms navigation, legal assistance. An external supplier provides multichannel contact center services through toll-free numbers and dedicated email channels.

Currently, the assistance service operates on two levels based on the complexity of the request. External contact center operators solve the most common problems using FAQs (first level). Istat experts support cases with higher complexity (second level). In 2023, Istat processed around 260,000 assistance requests from households and enterprises.

In 2024, Istat plans to introduce a new integrated assistance service to optimize resources by integrating data flows and simplifying communication between sub-systems. The new service will provide automatic multi-channel interaction processes with respondents using entry-level Artificial Intelligence (AI) solutions. The use of AI could process a significant percentage of tickets, thereby reducing waiting times for respondents and lowering costs for Istat.

This paper introduces the new three-level integrated assistance system and describes the automated request classification procedure which uses natural language processing techniques and supervised classification algorithms. The paper also discusses the privacy concerns that may limit the application of AI solutions.