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CPS Poster

Improving Statistical Quality through Speech Analytics

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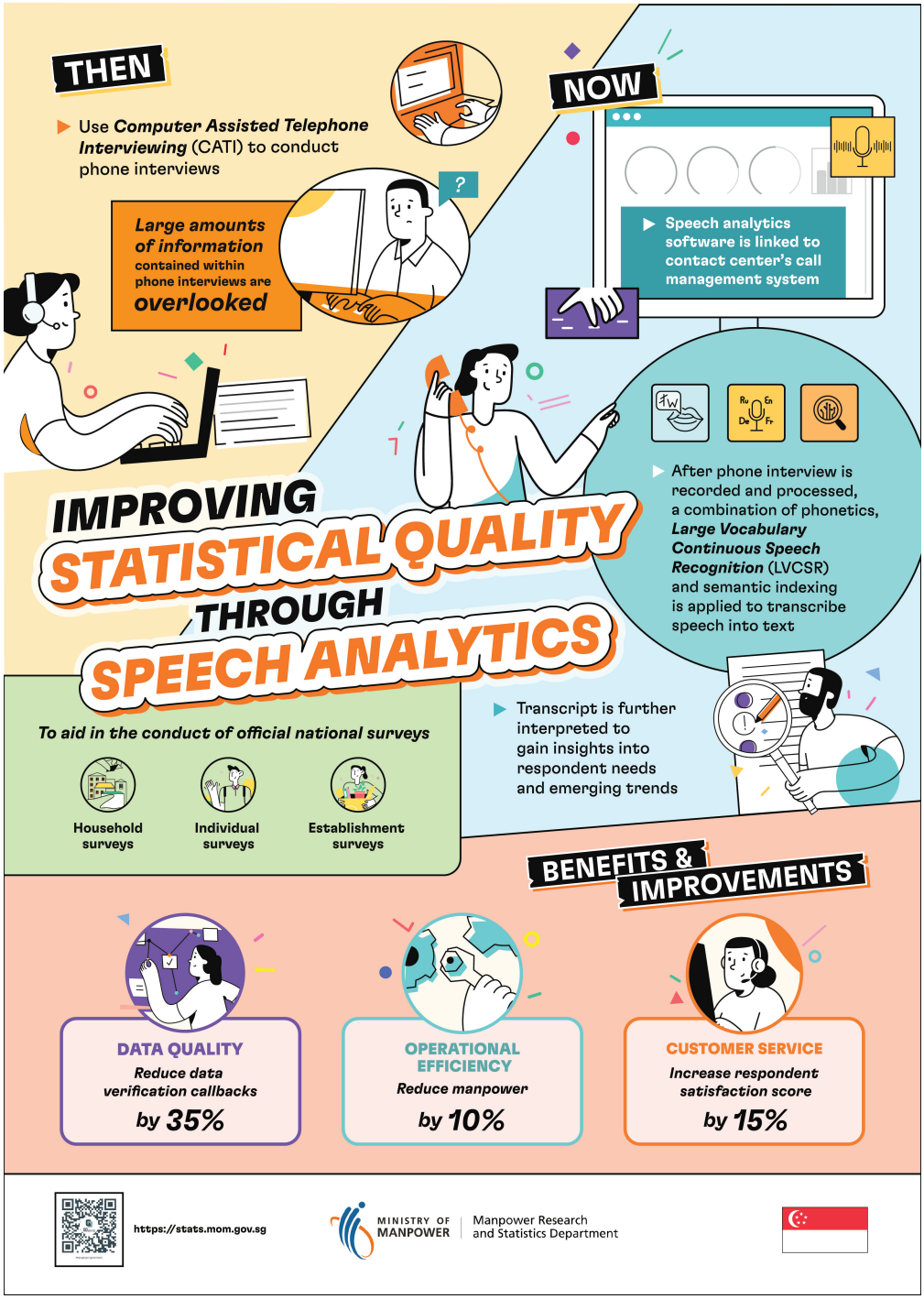
Presentation Image



Brief Description

The Singapore Ministry of Manpower has incorporated speech analytics into the conduct of official surveys.

By linking the speech analytics software to the contact center's call management system, it has improved the quality of phone interviews to gain insights on respondent needs and emerging trends.

Abstract

The demands for data have increased over the years as governments around the world are involved in evidence-based policy development. In order to formulate effective policies, policymakers require timely, granular data on a regular basis. As such, data collection methods must evolve in order to meet the demands. One of the tools used by the Singapore Ministry of Manpower is the implementation of speech analytics in its conduct of official surveys.

Previously, the Ministry of Manpower uses Computer Assisted Telephone Interviewing (CATI) to facilitate phone interviews and reduce the burden of data entry and coding. However, there are large amounts of information contained within the phone interviews that could be overlooked if not analyzed further. This is where speech analytics would come in handy.

The speech analytics software is linked to the contact center's call management system. After the phone interview is recorded and processed, a combination of phonetics, Large Vocabulary Continuous Speech Recognition (LVCSR) and semantic indexing is applied to transcribe speech into text. The transcript is further interpreted to gain insights on respondent needs and emerging trends. With this knowledge, the Ministry of Manpower is able to take actionable steps to improve data quality, process efficiency and customer service.

Here, we look into greater detail on the methodology of the speech analytics tool, how it has benefited the organization and the public, and how it can be further refined to improve the quality of official statistics.