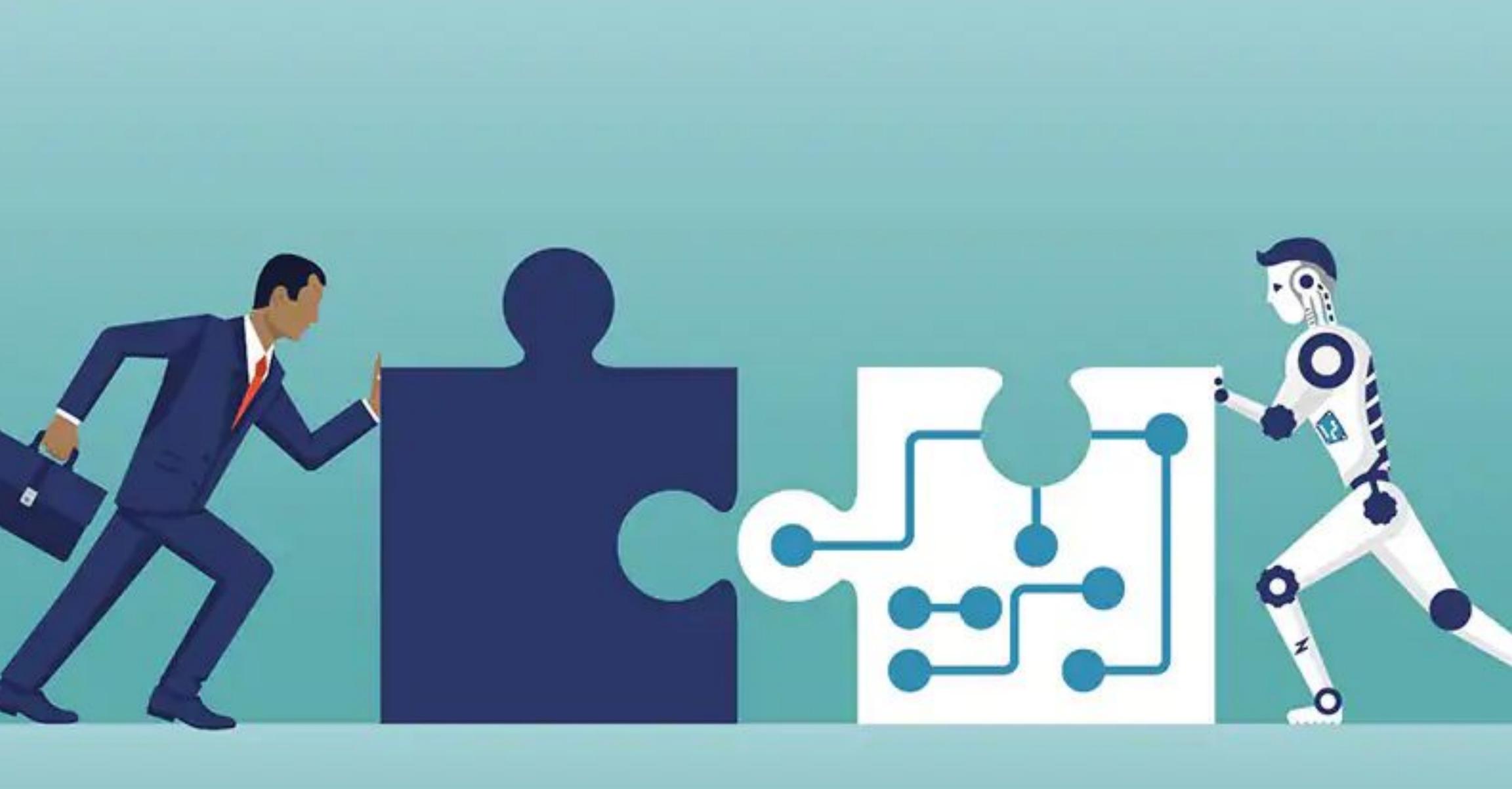


## Organizing Teamwork: Understanding Operator and Multiple-Robot Team Performance



## Research Objective





The purpose of this project is to *analyze the ratio* of *human operators* per agent, *propose models* for organizing teams, and include a *hierarchy system* to optimize human supervisory control. The goal of this project is to *organize teams of human operators* to supervise more agents without experiencing fatigue.

## Research Approach

- 1. By *reviewing the literature* in multiple-agent systems and the team architectures that have been proposed previously, this study will compile variables that influence the human-robot ratio and strategies for manipulating these variables.
- 2. Through **semi-structured interviews** and **focus group discussions** with NASA scientists, this study will examine the real-world application of these strategies and test an architecture for organizing human-multiple-robot teams.
- 3. This research seeks to establish an architecture for *organizing human-robot teamwork* and identify the variables that influence the human-to-robot ratio.

## Research Team

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