



MICHIGAN STATE UNIVERSITY

# #192878 - Intelligent Social Network Interventions to Augment Human Cognition for Bolstered Interdisciplinary Interactions in Project Teams

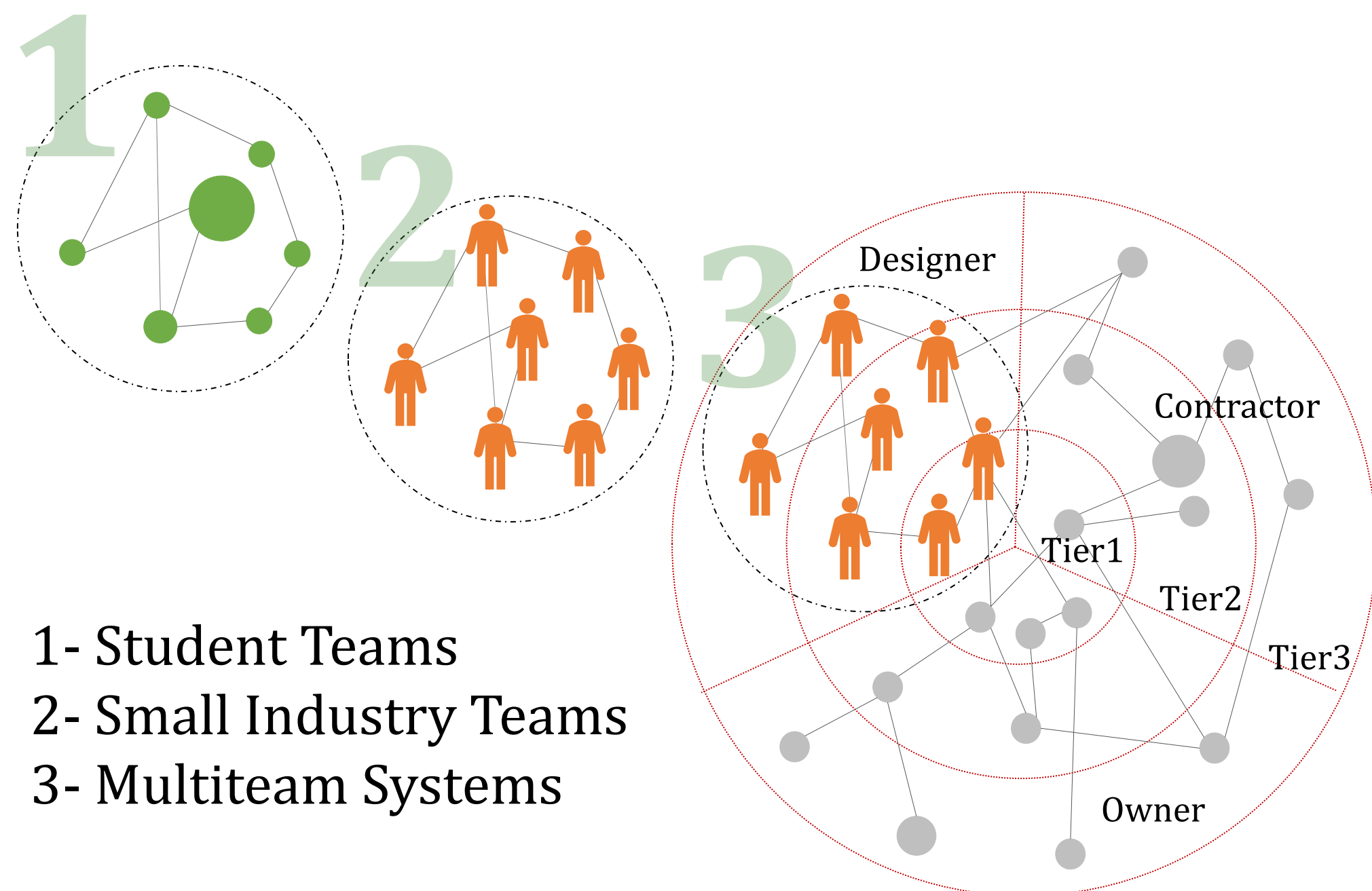


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## GOAL

To augment human cognition and the functioning of **multiteam systems** via immediate and machine/deep learning-enabled social **network interventions** to help individuals **develop the skills** needed for future of work and facilitate economic and social benefits.

## SCOPE



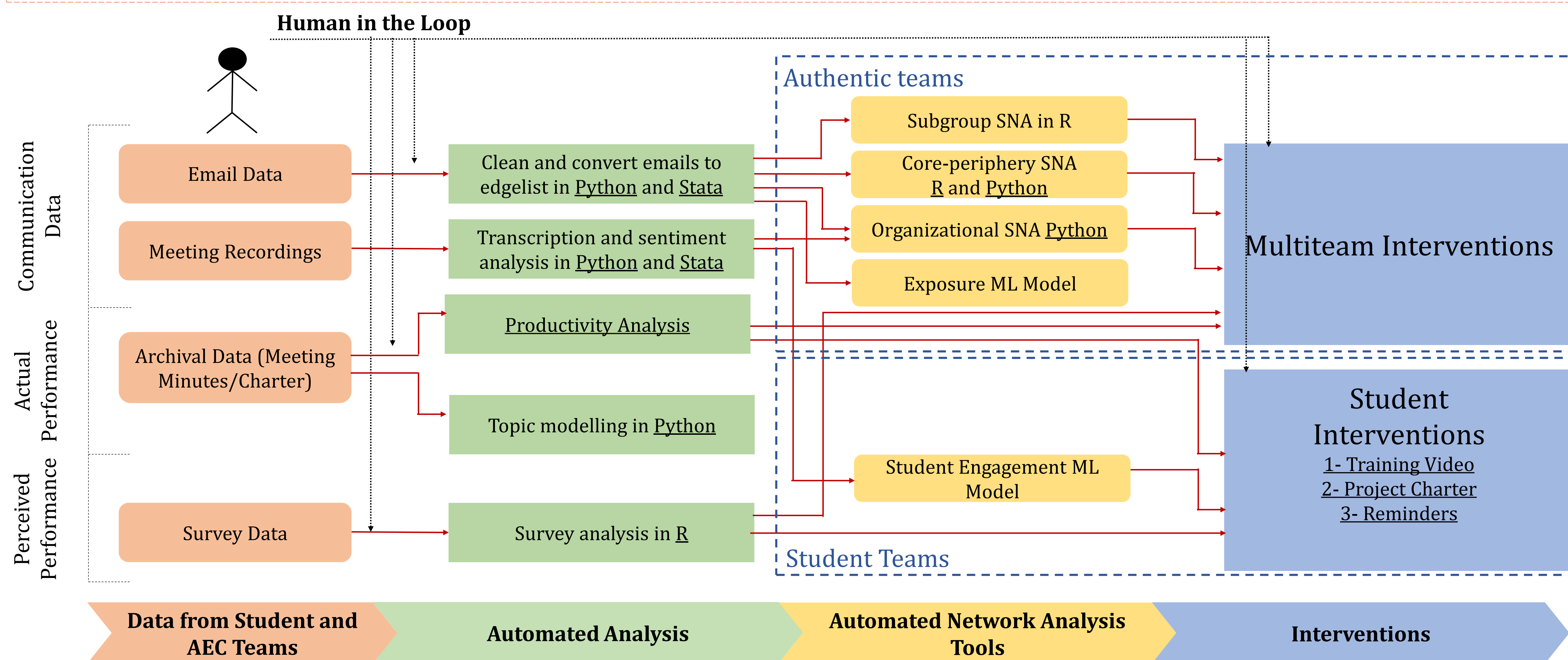
## DATA SOURCES

Survey, archival, email, and meeting data:

- 37 student teams (4-9 individuals) across domains, 186 individuals,
- Small industry teams, Industrial Assessment Center Teams at Michigan State University
- 3 infrastructure projects teams (600 – 6000 individuals/Project duration: 1-3 years)

## CURRENT STATE OF PRACTICE BASED ON OUR WORK

**Semi-automated protocol to collect, clean, code, and process data to develop and implement interventions to small and multilevel project team systems**



## OUTCOMES FOR FUTURE OF WORK IN PROJECT TEAM SETTINGS

### Student Teams Interventions

- Engagement differences based on gender and race/ethnic background.
- Personalized interventions with different duration, modality, content, timing and frequency.

### Small Industry Teams Interventions

- Intermediate step between student teams and multiteam systems.
- Involvement of Human-Computer Interaction component.

### Multiteam Systems Interventions

- Evaluation of organizational and communication structures.
- Interventions based on communication behaviors, roles, tiers of management and expertise areas.

### Development of Intervention Automation - Current State Phase 2

•Phase 1: Manual Interventions w/Human in the Loop

Phase 2: Automated Interventions w/ Human in the Loop

Phase 3: AI Interventions w/ Human in the Loop