**BACKGROUND**

- The construction industry is highly uncertain, complex, and dynamic, demanding continuous improvement in quality, productivity, and performance. However, it is often criticized for underperforming compared to other industries due to declining productivity.
- Organizational competencies are combinations of resources, sets of skills, information, and technologies that enable organizations to gain competitive advantages and achieve better performance.
- Therefore, in order to achieve better performance, construction organizations need to explore new approaches to assessing and enhancing their organizational competencies.

**OBJECTIVES**

- Develop hierarchical categories of organizational competency measures and organizational performance metrics.
- Develop advanced hybrid membership function development approaches.
- Develop a fuzzy hybrid model to analyze organizational competencies and predict performance.
- Develop techniques for adapting both membership functions and the fuzzy hybrid model to different contexts.

**FUZZY HYBRID MODEL ARCHITECTURE FOR ORGANIZATIONAL COMPETENCY AND PERFORMANCE**

**INDUSTRY APPLICATIONS AND BENEFITS**

This study will:

- Identify organizational competencies that lead to improved performance and competitiveness;
- Provide practitioners with a systematic process for measuring and enhancing competencies at organizational and project levels;
- Provide insight on how organizational leaders can improve organizational and project practices to maximize performance and gain competitive advantages; and
- Provide a fuzzy hybrid modeling approach for analyzing competencies and predicting performance.