CASE STUDY

University of Kansas Tiered

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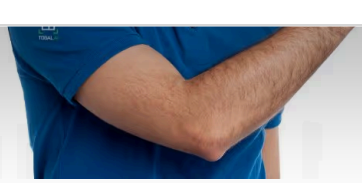

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Victoria V. Marulanda S. at The University of Kansas' Civil, Environmental & Architectural Engineering (CEAE) Department and Master of Architectural Engineering (ARCE) Program ran a blind comparative analysis between Togal.AI and On-Screen Takeoff focused on time efficiency and accuracy.

- Recorded the time required to make manual adjustments within Togal.AI.
- Compared the total time spent using each program.

Fire Station Results

- Most adjustments performed on Togal.AI in <5 min.

TOGAL AI	
AI-automated quantity takeoff	1.2 min
Manual corrections	36.2 min

On-screen Takeoff	
Manual Perfomance	**2 h 35 min**

- Goal: Account for potential time and accuracy improvements caused by the learning curve from reviewing the floor plans in one software before the other.
- Account for learning-related advantages.
- Time savings: ~23% AI was less effective due to the complexity of the floor plan and classification limitations.
- Manual features were used in both programs to perform takeoffs of the different types of ceilings, with minor time advantages in Togal.AI.

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- **Significant time savings (~76%) shown in the Fire Station case study when using Togal.AI.**
  - AI features: AI-automated area and linear tracing by spaces, item counting, automatic scale detection, merge, subtract, and search functions enable significant time savings.
  - AI-generated quantities serve as a starting point for further estimations, as shown in the Control Case of this study.

FIRE STATIONS RESULTS

TOTAL TIME		TIME SAVINGS
Togal.AI	~36 min	

RCP RESULTS

TOTAL TIME (MIN)		TIME SAVINGS
Togal.AI	16.7	