

# Using AI to develop Fire Strategies

How AI can assist all interested parties in the development, implementation and maintenance of fire strategies for residential properties

# A Speedy Intro to Tennyson Suite

Tennyson Suite is a family run Health and Safety and Fire Safety Engineering Firm.

We support various clients from Government Departments to PLC Developers to Small Right To Manage Companies.

We're striving to find technological solutions to support the Health and Safety and Fire Industries.

# What Is AI?

AI (Artificial Intelligence) is technology that helps computers think, learn, and solve problems—similar to how humans do.

**Think of AI as:**

- **Learning from examples:** Like teaching someone by showing them how.
- **Finding patterns:** Similar to noticing trends or repeating events.
- **Making predictions:** Using past experiences to guess what might happen next.

# What Is AI?



AI is the new junior member of the team



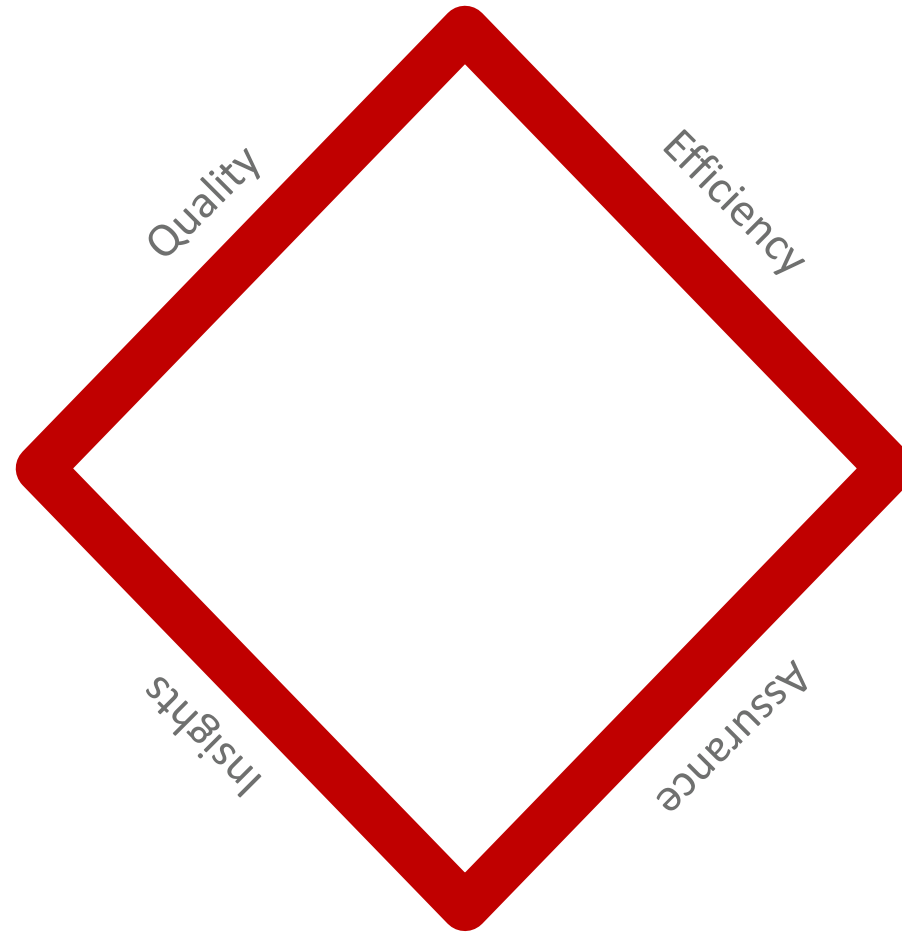
Able to undertake tasks autonomously without senior team input



However, like a junior team member, AI needs clear and specific instruction

# How can AI help?

# How can AI help?



# How can AI help?

- Reduction of Human Error
- Greater Accuracy in predicting potential scenarios
- Automatic visual checks of designs
- Enhanced documentation, higher precision, easily auditable

Quality

# How can AI help?

- Speed of production significantly increased.
- Near elimination in non-technical QA
- Technical detailing can be near automated
- Human touch points can be limited to initial input and technical review.

Efficiency

# How can AI help?

- Technical Review – Completed against all available guidance
- Automated checking of assumptions
- Verification of any calculated elements
- Verification of design detail against strategy

Assurance

# How can AI help?

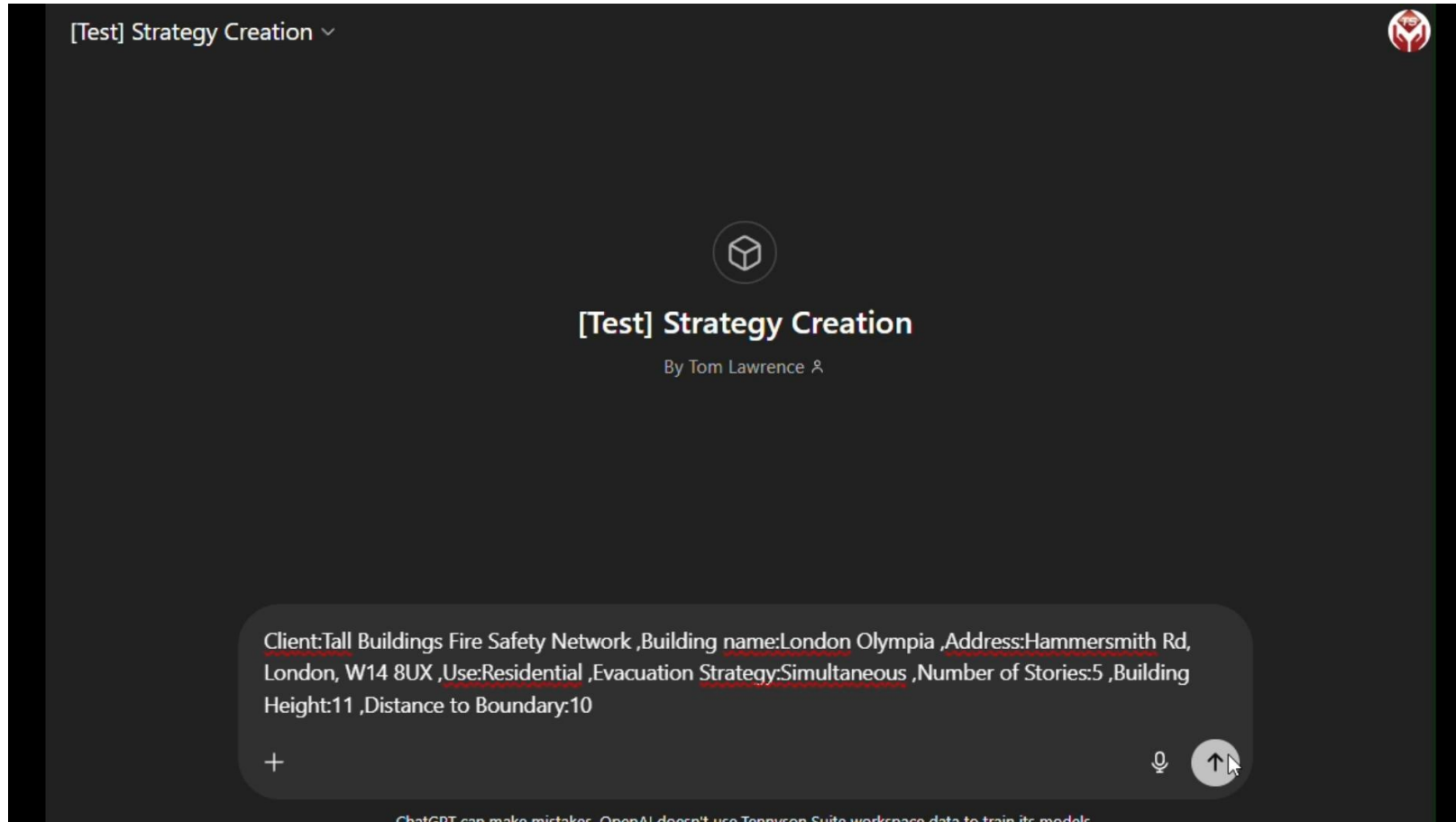
- New research findings can immediately be filtered into strategic documentation
- AI can make links between guidance and various knowledge bases

Insights

# Where are we now?

A little insight into what Tennyson Suite are doing!

# Where are we now?



# Where are we now?

## Efficiency

Humans

Days of Research, Development  
and Document Creation

AI

Near instantaneous response

# Where are we now?

## Error

### Humans

Research notes about a 20% error rate

### AI

Research has noted approximately a 12% error rate

# Where are we now?

## Error

Error is present in both AI and human work in relation to fire safety.

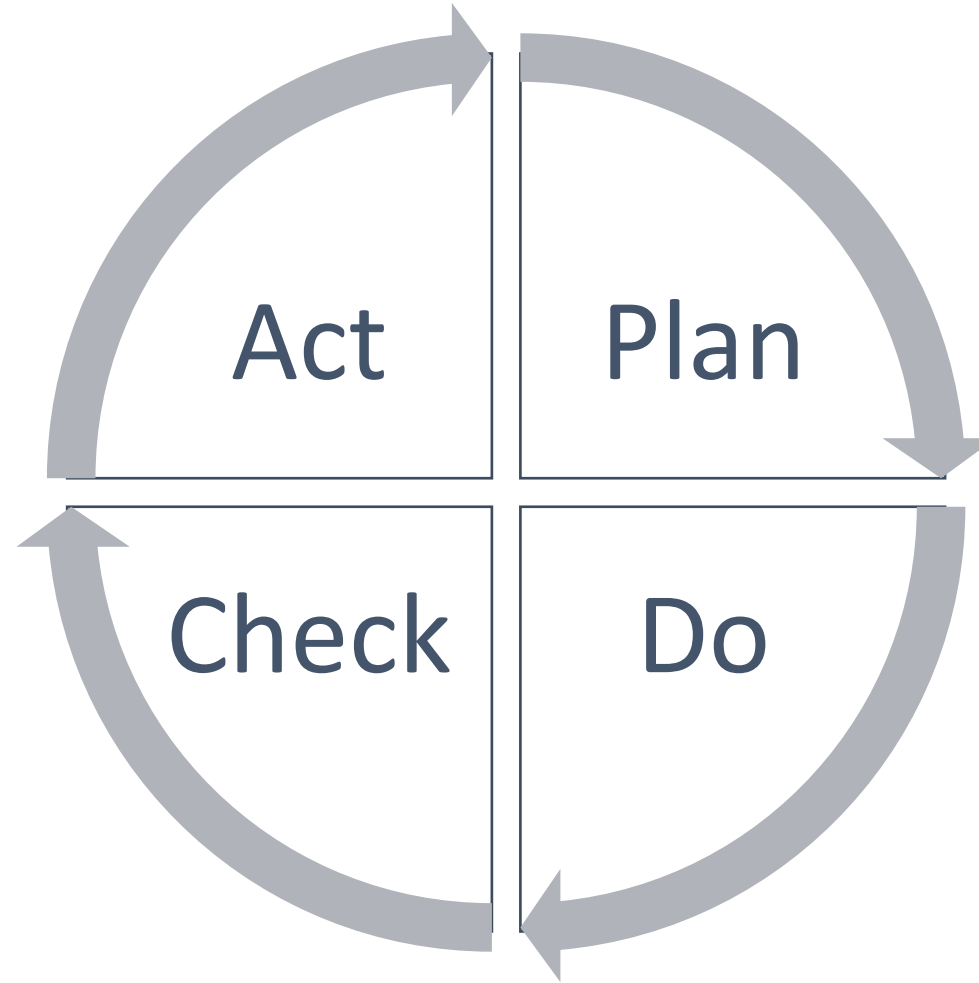
However, the errors are often of a different nature.

- Human error is often oversight or inconsistency
- AI error is often irrelevancy, 'being too clever'

# A Look Ahead

What does the Future Look Like?

# AI Across the Building Lifecycle



# A Look Ahead

## Efficiency

Efficiency in AI is consistently being improved at the base model level.

## Error

New AI models are constantly improving

# Any Questions?

Thank you for listening!