

A nighttime photograph of a stone bridge with multiple arches spanning a river. The bridge is illuminated by streetlights, and the lights create starburst effects in the water. In the background, a large, ornate church with a dome and two towers is visible, also illuminated. The sky is a deep purple and blue, and the entire scene is reflected in the calm water of the river.

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WELCOME  
TO ATHLONE  
for the 6th CitA BIM Gathering

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AI: A Panacea or Risk Minefield?

KEYNOTE SPEAKER

**May Winfield**

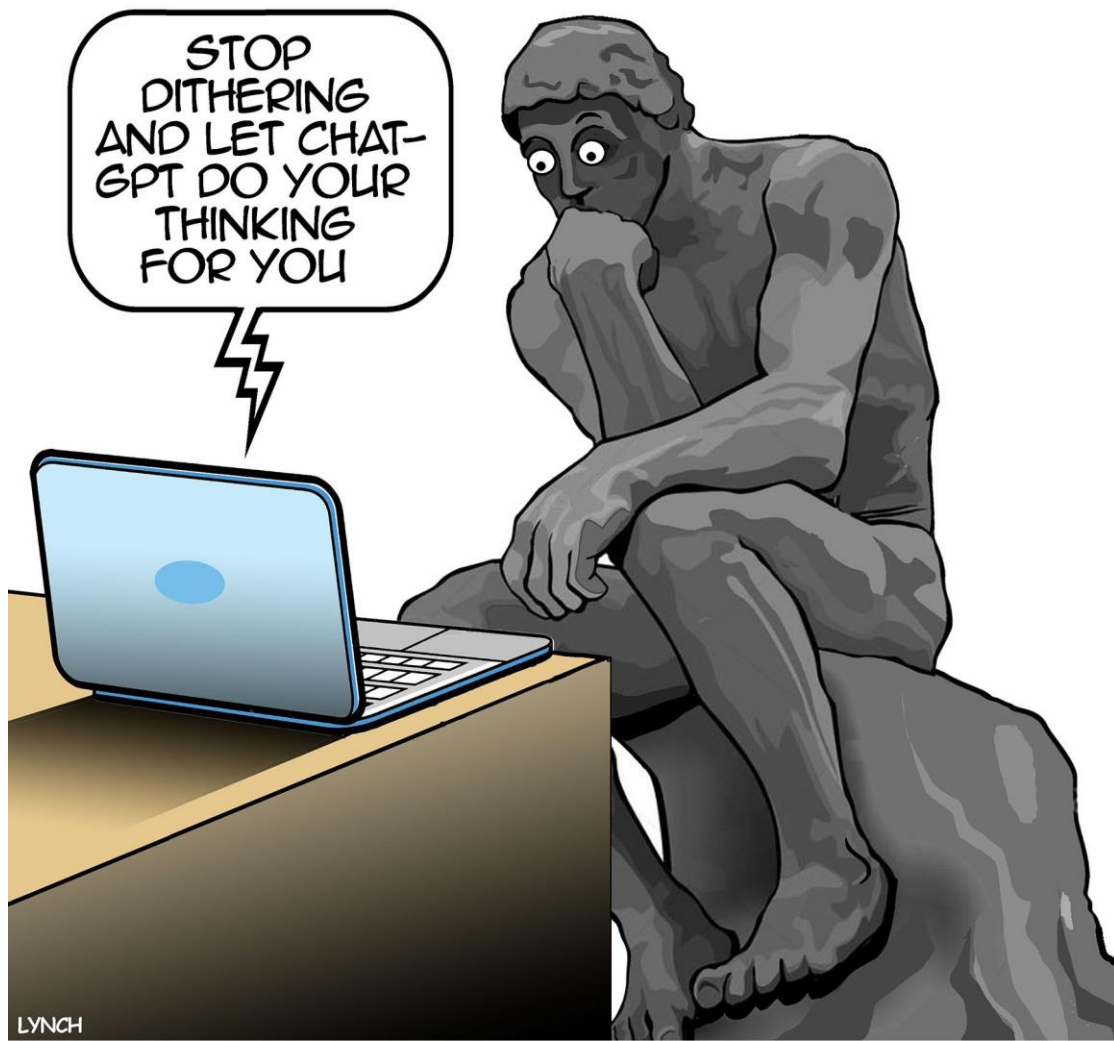
Buro Happold

## Global Director of Commercial, Legal and Digital Risks, Buro Happold

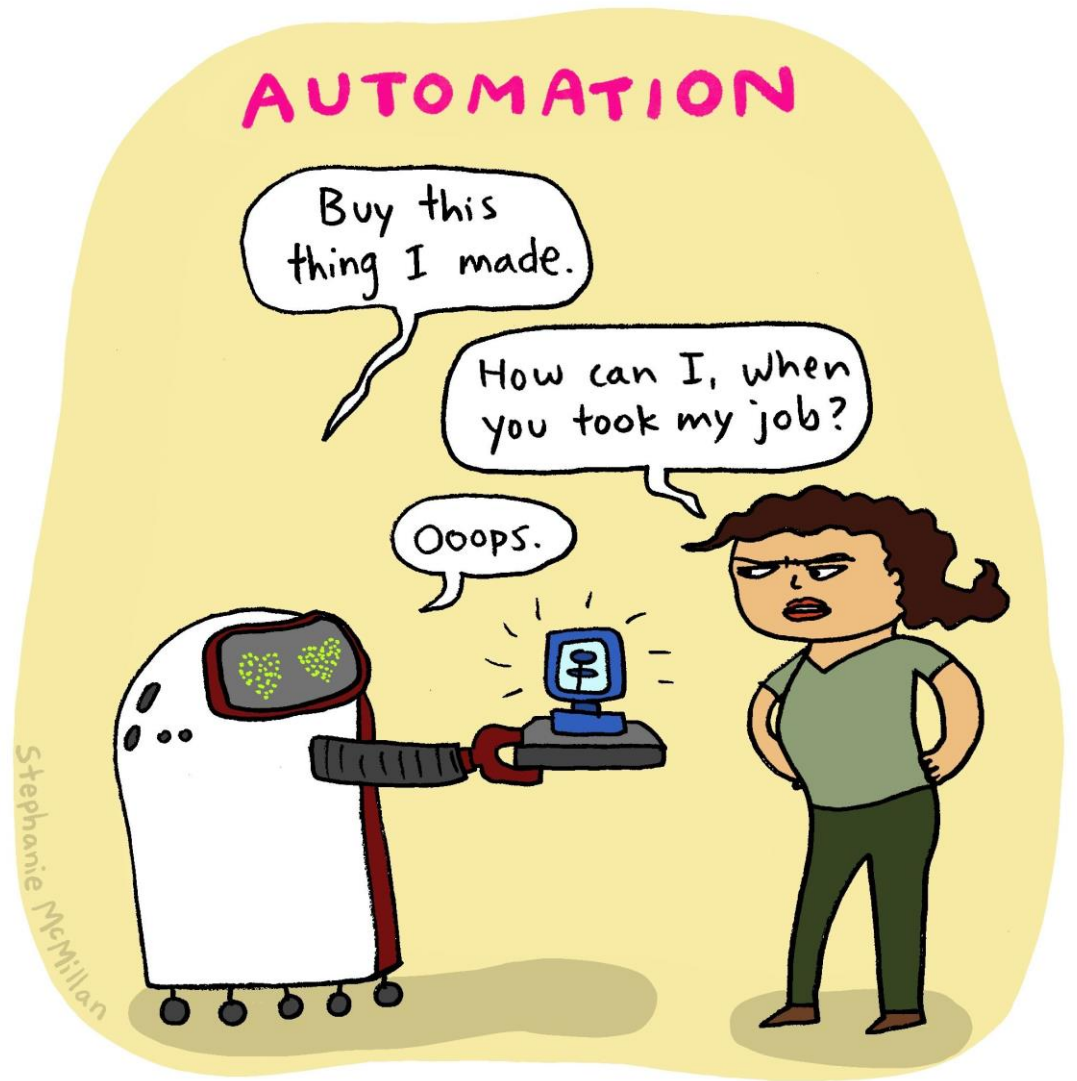
@Buildlaw\_Artea

- Co-author of:
  - Contract templates for ISO19650-compliant projects
  - UK BIM Framework Legal guidance on the ISO19650 standards
- Contributed to the UK's ISO19650 National Annex
- Member of the Centre for Digital Built Britain's Digital Twins Roadmap and Digital Twins Toolkit Working Groups
- Member of the UK Construction Playbook's Modern Methods of Construction Working Group
- Nima (formerly UK BIM Alliance) Ambassador

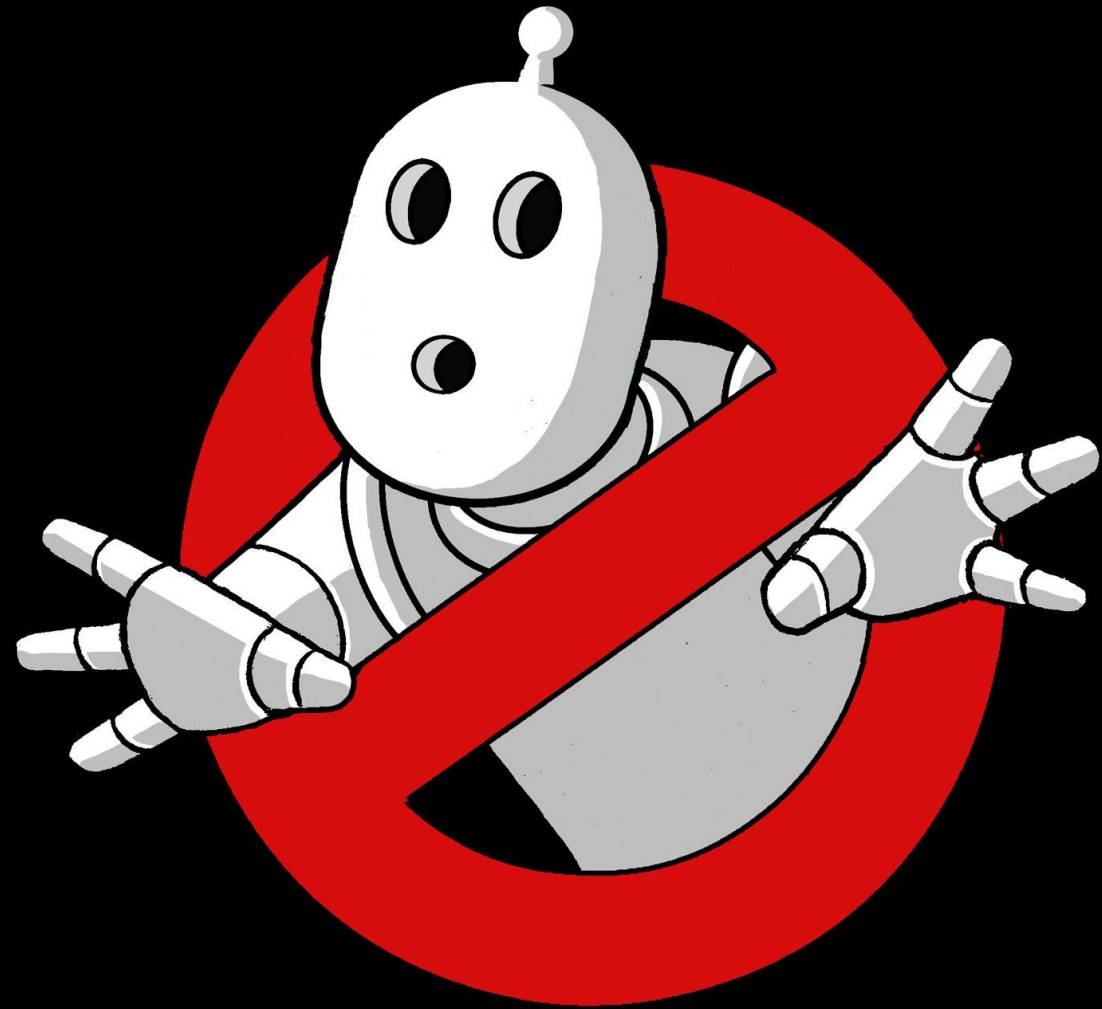




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**AI BUSTERS**

LeUE

# A Brief History of AI

## 1950



**1950** Alan Turing proposes the Turing test as a measure of machine intelligence



## 1980

**1980-2000** Continuing development of AI theories and understanding



## 2000

**2000** Interactive robotpets ("smart toys") become commercially available



**1956** Dartmouth College summer AI conference organized. John McCarthy coins the term artificial intelligence for the conference



First working AI programs were written in **1951** to run on the Ferranti Mark 1 machine of the University of Manchester

## 1960



**1960** Ray Solomonoff lays the foundations of a mathematical theory of AI, introducing universal Bayesian methods for inductive inference and prediction.



**1966** First of annual machine Intelligence workshop at Edinburgh

# A Brief History of AI

## 2000

2005 Launch of Honda's ASIMO artificially intelligent humanoid robot



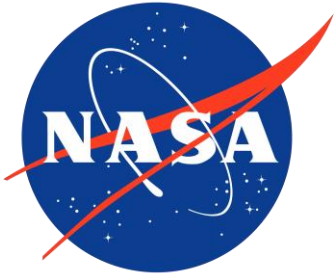
2011 BM's Watson computer defeated television game show Jeopardy! Champions

2015 Google DeepMind's AlphaGo defeated three-time European Go champion 2 dan professional

2018 Announcement of Google Duplex, a service to allow an AI assistant to book appointments over the phone

2020

March 2023 Google releases limited capacity chatbot Google Bard



2004 NASA's robotic exploration rovers Spirit and Opportunity autonomously navigate the surface of Mars



2009 Google builds autonomous car

## 2010

2017 Google researchers released paper entitled 'Attention Is All You Need' introducing notion of 'self attention'.



Research at Google



- 2018 GPT 1 released
- 2019 GPT 2 has 1.5 billion 'parameters'
- 2020 GPT 3 has 175 billion 'parameters'
- 2022 Open AI launch ChatGPT

January 2023 ChatGPT hits more than 100 million users, far and away the fastest adoption of a technology eve

March 2023 GPT-4 launched. The new version is multi-modal allowing image input as well as text, though for now this is not available via ChatGPT.





# McKinsey Global Survey on AI 2022

*“Organizations seeing the highest returns from AI are more likely to follow strategy, data, models, tools, technology, and talent best practices”*



## AI adoption:

More than doubled between 2017 (20%) and 2022 (50%)



## Top AI use case for last 4 years:

Service operations optimization



## High performers more likely to follow core practices that unlock value, e.g.

- Linking their AI strategy to business outcomes
- Industrializing AI



## Top perceived risks:

- Cyber security
- Regulatory compliance
- Privacy
- Explainability (how did the AI reach its decision)
- Organizational reputation



## No substantial increase in risk mitigation since 2019

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Automation

Augmentation

Facilitation image creation

Generative design

Surrogate models

Design assist models

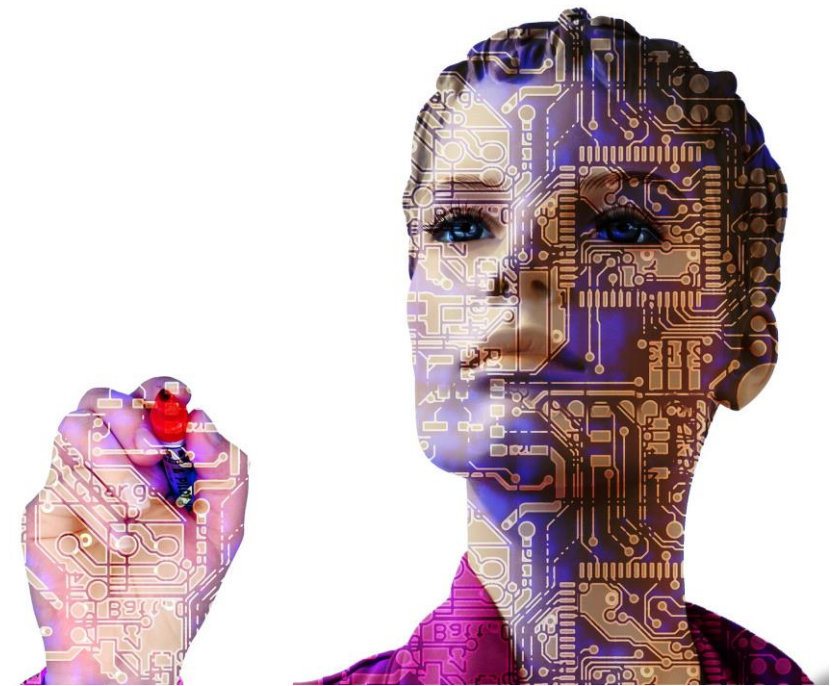
Knowledge dissemination

Business insights

What could  
AI be most  
good for....?

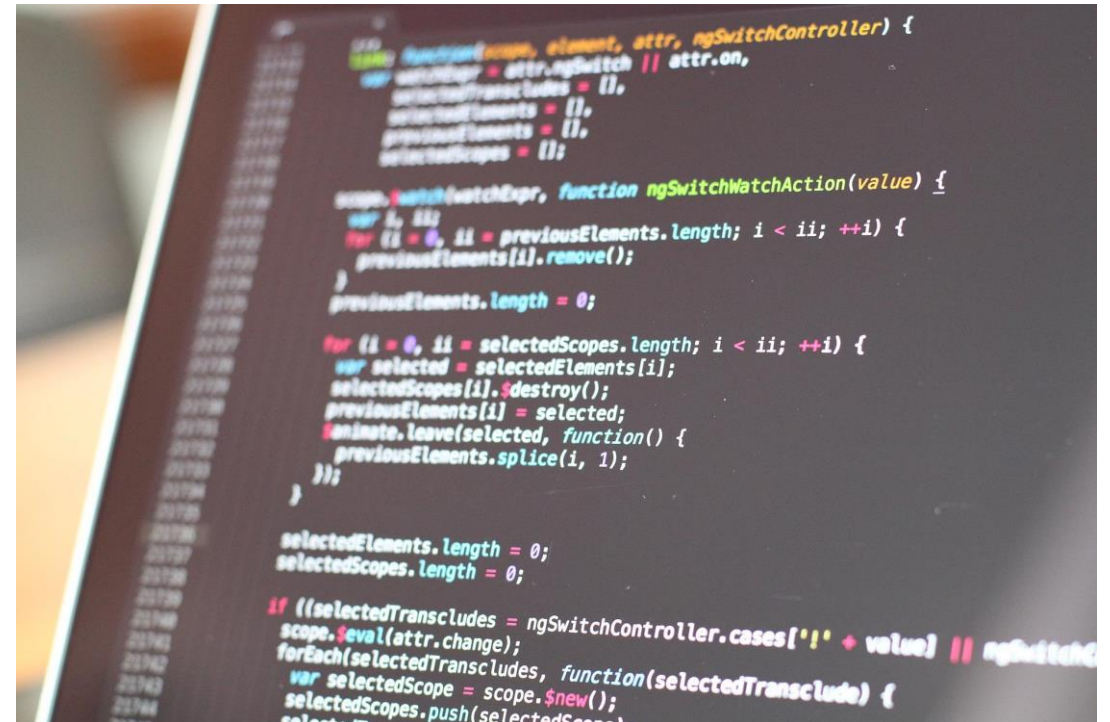
## Why Bother?

- Generate Ideas
- Improve Efficiency
- Personalise ideas
- Increase productivity
- Automating Tasks
- Reduce Costs
- Generate Content



## ...Issues?

- Process of implementation
- Fostering adoption
- Develop right roles and duties
- Implementing governance
- KPIs/Benchmarking
- Control and reporting
- Ongoing training and upskilling



```
function(element, attr, ngSwitchController) {  
  var watchExpr = attr.ngSwitch || attr.on,  
      selectedTranscludes = [],  
      previousElements = [],  
      selectedScopes = [];  
  
  scope.$watch(watchExpr, function ngSwitchWatchAction(value) {  
    var i, ii;  
    for (i = 0, ii = previousElements.length; i < ii; ++i) {  
      previousElements[i].remove();  
    }  
    previousElements.length = 0;  
  
    for (i = 0, ii = selectedScopes.length; i < ii; ++i) {  
      var selected = selectedElements[i];  
      selectedScopes[i].$destroy();  
      previousElements[i] = selected;  
      animate.leave(selected, function() {  
        previousElements.splice(i, 1);  
      });  
    }  
  
    selectedElements.length = 0;  
    selectedScopes.length = 0;  
  
    if ((selectedTranscludes = ngSwitchController.cases['!' + value] || ngSwitchC  
    scope.$eval(attr.change);  
    forEach(selectedTranscludes, function(selectedTransclude) {  
      var selectedScope = scope.$new();  
      selectedScopes.push(selectedScope);  
      selecti
```

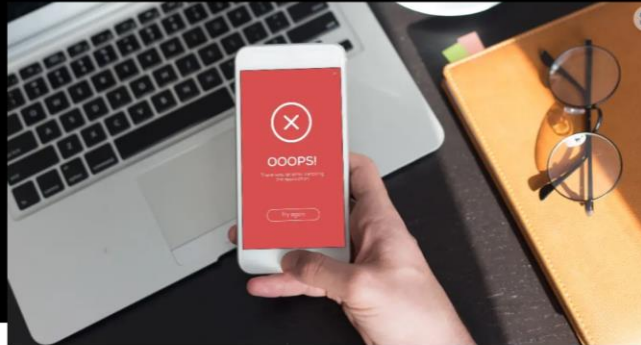


## The Liability and Legal Concerns

- Confidential Information and Client Data
- Copyright
- Responsibility for Output
- New Laws and Statutes



## ChatGPT confirms data breach, raising security concerns



Artificial Intelligence | May 2, 2023

By Sue Poremba | 4 min read

When ChatGPT and similar chatbots first became widely available, the concern in the cybersecurity world was how AI technology could be used to launch cyberattacks. In fact, it didn't take very long until threat actors figured out how to bypass the safety checks to use ChatGPT to [write malicious code](#).

FORBES > BUSINESS

BREAKING

## Samsung Bans ChatGPT Among Employees After Sensitive Code Leak

Siladitya Ray Forbes Staff

Covering breaking news and tech policy stories at Forbes.

May 2, 2023, 07:31am EDT

Updated May 2, 2023, 07:31am EDT

**TOPLINE** Samsung Electronics has banned the use of ChatGPT and other AI-powered chatbots by its employees, Bloomberg [reported](#), becoming the latest company to crack down on the workplace use of AI services amid concerns sensitive internal information being leaked on such platforms.



## Mine or Theirs?

- Unique output –v- Helping creative process
- ...Where did it come from?!
- AND: What can it be used for?

### AS ACTORS STRIKE FOR AI PROTECTIONS, NETFLIX LISTS \$900,000 AI JOB

Rob Delaney said, “My melodious voice? My broad shoulders and dancer’s undulating buttocks? I decide how those are used!”



Ken Klippenstein

July 25 2023, 12:32 p.m.

**AS HOLLYWOOD EXECUTIVES** insist it is “just not realistic” to pay actors – 87 percent of whom earn less than \$26,000 – more, they are

ARTIFICIAL INTELLIGENCE / TECH / CREATORS

### AI art tools Stable Diffusion and Midjourney targeted with copyright lawsuit



NewScientist

Sign in

Enter search keywords

Technology

### Hollywood actors strike over use of AI in films and other issues

The US actors’ union is striking over disagreement with Hollywood studios about using AI to create “digital twins” of actors, and the results could determine the viability of acting as a career

By [Jeremy Hsu](#)

📅 14 July 2023







**What Next?**

# (Non-Exhaustive) Checklist

Internal Policy:  
Do and Don't  
Best Practice

Business Specific:  
Focussed  
Funding

Beware Contract  
Terms

Training

Ongoing  
Upskilling



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THANK YOU