



# **Beyond Innovation: Operationalizing AI for Strategic Advantage**

*Intentional Implementation to Support Innovation with Impact*











## **Tactical**

**P-3 Pilot**

Support maritime patrol, anti-submarine warfare, and reconnaissance missions.

**Job:** Collect Data

**Time:** 5 years



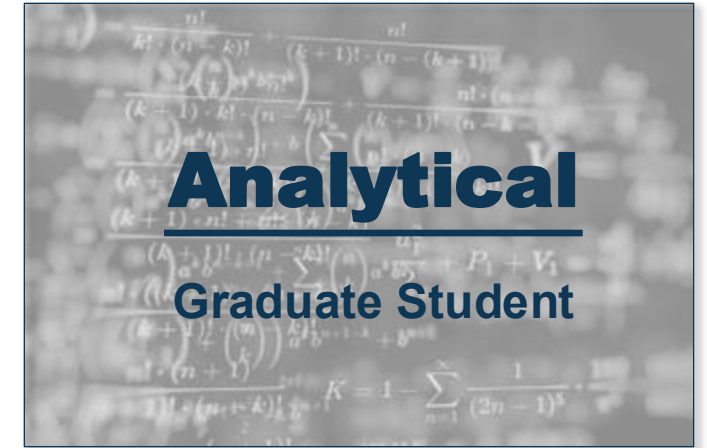
## **Strategic**

**ISR Analyst**

Conduct analysis and assessments on data collection capabilities.

**Job:** Advise Collection Investment

**Time:** 3 years



## **Analytical**

**Graduate Student**

Learn computational methods, statistics & data analysis, optimization, and simulation.

**Job:** Study Decision Science

**Time:** 2 years

**DISCLAIMER:** The assertions expressed herein are those of the author and do not reflect the official policy or position of the US DoD, its Components, or Northwestern University.

# Frameworks Overview

## 01 Appropriate & Advantageous

Assess AI suitability and the setting of realistic ROI expectations

## 02 Gap Analysis

Guides AI deployment, focusing on the relevant KPIs and metrics

## 03 Red Team

Conducts pre-deployment simulation of attacks to uncover capability gaps





# 01 Appropriate & Advantageous

## Context of AI Employment



### What AI Does

Learns  
Reasons  
Solves Problems  
Perceives  
Understand Lang

Automates  
Analyze Data  
Make Decisions  
Predicts  
Generates

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## Return on AI Investment



### Advantages

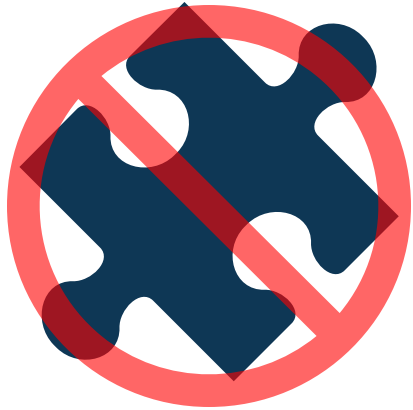
Task Accuracy  
Task Efficiency  
Innovation  
Insights  
Cost Savings

Relevancy  
Intractable Res



# 01 Appropriate & Advantageous

## Context of AI Employment



### What AI Doesn't Do

Multitask  
Explain Decisions  
Reason Ethically  
Create  
Establish Rapport

Common Sense  
Quickly Adapt  
Confirm  
*Anticipate*

## Return on AI Investment



### Disadvantages

Bias  
Security Concerns  
Privacy Concerns  
No Risk Consideration  
No Transparency

No Ambition Check  
No Accountability  
No Veracity  
Large Data Req



# Syndicated content in Sun-Times special section included AI-generated misinformation

A Chicago freelance journalist said he did not fact-check information he compiled using AI before including it in stories for media clients.

By Dan Mihalopoulos | WBEZ | Updated May 21, 2025, 3:17am GMT+1

## Chicago Sun-Times publishes made-up books and fake experts in AI debacle

### *The Chicago Sun-Times, Philadelphia Inquirer* fall victim to AI slop with error-ridden "summer guide"

A writer admitted to the use of AI for the guide, which was reportedly commissioned by Hearst.

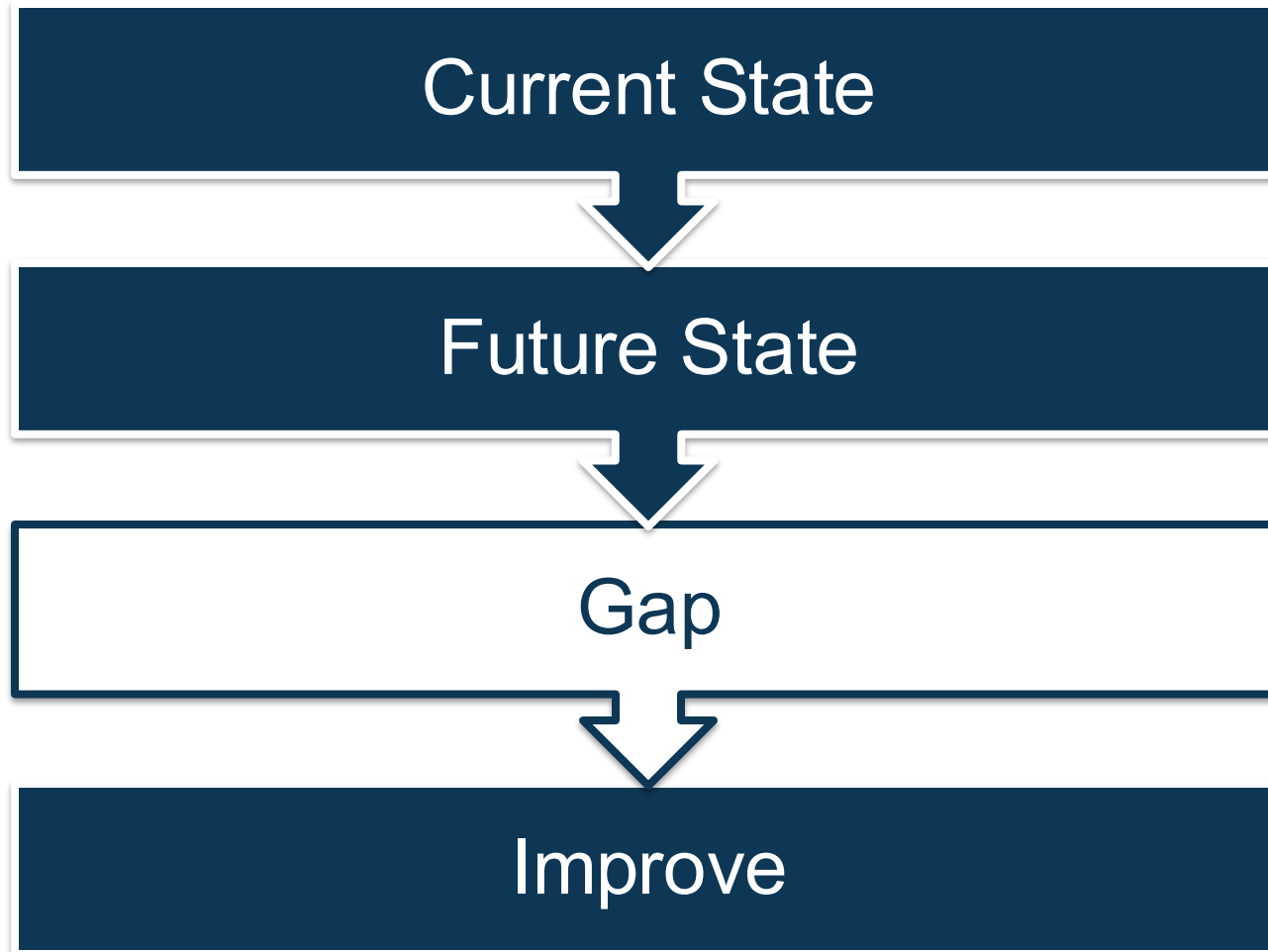
By [Mary Kate Carr](#) | May 20, 2025 | 4:57pm

## Lessons (and an apology) from the Sun-Times CEO on that AI-generated book list

The summer section was intended to be a supplemental value to our subscribers alongside our own journalism. Instead, it detracted and distracted from our work.

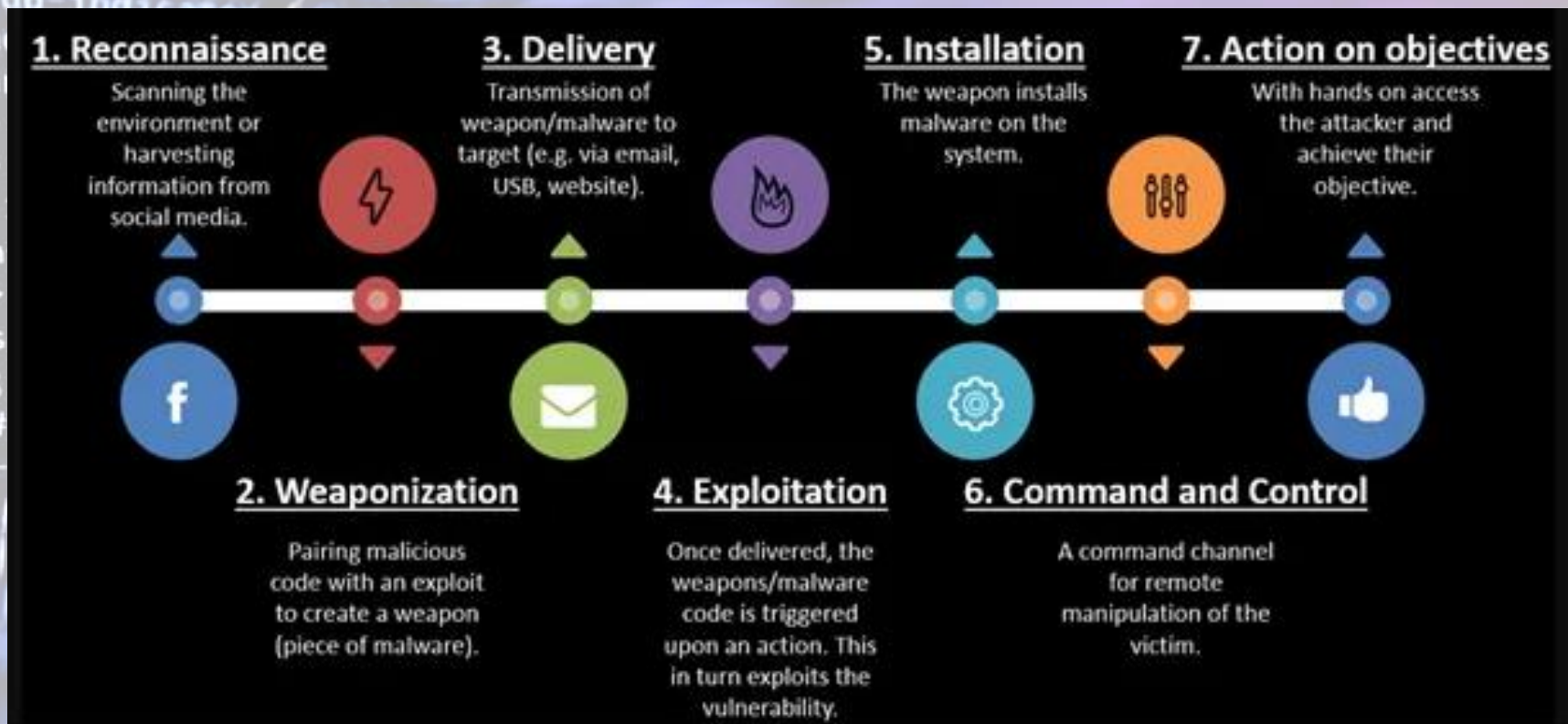
By [Melissa Bell](#) | May 29, 2025, 11:34pm GMT+1

## 02 Gap Analysis



## 02 Gap Analysis – Cyber Security

### Kill Chain





# 02 Gap Analysis – B2B, B2C

## Customer Journey Mapping



## **02** Gap Analysis – Identifies ...

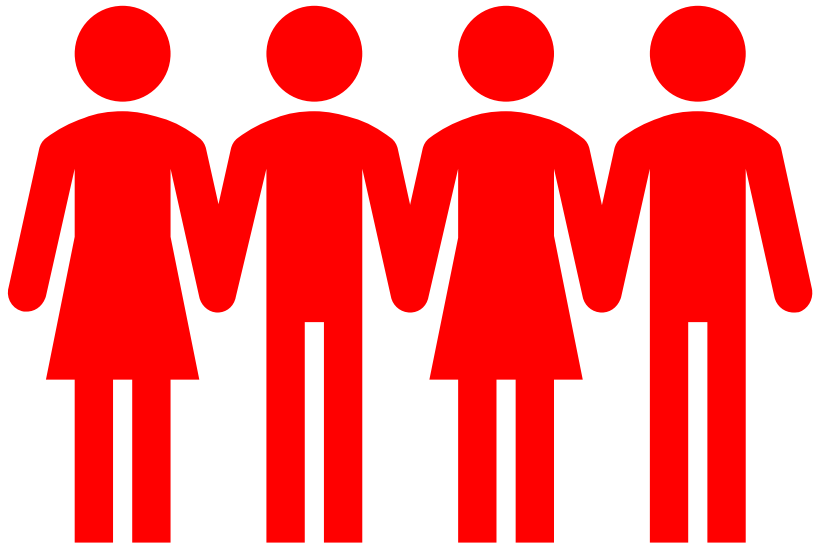


**Key Performance Indicators**



**Metrics**

## 03 Red Team



# Test your resilience and response

### **Deny**

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Hinder the use of equipment,  
infrastructure, or people

### **Degrade**

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Reduce the effectiveness of efficiencies

### **Disrupt**

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Upset tempo, interrupt timetable, or  
cause premature or delayed  
commitment



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