



# Welcome to the NAG - AI SIG

3<sup>RD</sup> MEETING, 2024-11-26

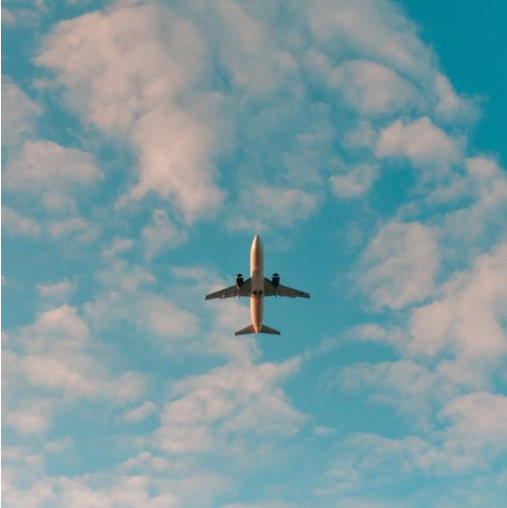
# AI SIG - Agenda

- 13.20 Welcome by **Edwin Poldermans**, Site Director Fokker Services Group Woensdrecht
- 13:30 Introduction by **Stephen Hands**, Chairman AI-SIG and Senior Associate at Unified International
- 13.40 **Luca Casciola**, aviation consultant and BI analyst “update on the insights shared in the previous events
- 14:05 **Frits Hoeve**, Brainport Industries: “AI in Manufacturing & AI in Maintenance”
- 14:55 Break
- 15.15 **Henk Akkermans**, World Class Maintenance “The roles of AI in the smart maintenance cycle”
- 15:40 **Paolo Monti**, KLM E&M “Analytics in Operations: Line Maintenance Scheduling Optimization at Schiphol”
- 16:05 Q&A after all the presentations & Voting topics for a follow up meeting
- 16:30 Network drink
- 17:00 End of program

**Stephen Hands, Chair AI-SIG and Senior Associate at Unified International**

**UNIFIED INTERNATIONAL**

End to end  
Aviation & Defence  
experts



# AI

Artificial intelligence (AI) is a fascinating and transformative technology that has the potential to significantly enhance many aspects of life, work, and society.

## Positive Aspects

1. Efficiency and Automation
2. Personalization
3. Problem Solving
4. Accessibility

## Challenges and Considerations

1. Ethics:
2. Job Displacement:
3. Dependence:
4. Control & Governance:

Ultimately, AI is a tool. How society chooses to develop and deploy it will determine its impact. With thoughtful, ethical, and inclusive design.

AI has the potential to address significant global challenges and improve lives.



# “AI – Quote”

**Me:**

- What do you think would be a one line message over AI that in the future people will quote?

**ChatGPT said:**

- "Artificial intelligence is not about replacing humanity; it's about amplifying its potential."



# AI SIG

- This workshop aims to showcase practical AI applications in aviation, fostering knowledge exchange and collaboration opportunities among industry experts.
- This group can be the intersection where Dutch aviation companies will align on best practices on AI, express their need to issue new standards and meet providers of aviation compliant AI tools.
- Create the opportunity to learn from cross sectorial experiences

# LAST MEETINGS OUTCOME

## Common topics

AI knowledge sharing.  
Getting inspired, having a network.  
Economy of scale growing as Dutch industry.

## Focus Areas

Keep this group in aviation focus.  
Look at growth funds for AI initiatives.  
Create an environment in which providers can sell and aviation businesses can buy.

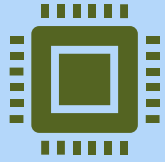
## Actions

3 AI SIGs for year 2024. Present 3 use cases each meeting.  
Coordinate with other events, startups/scaleups, partners and other SIG groups.

# RECAP – TECHNOLOGY

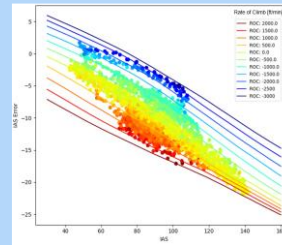
## History

- Innovations that lead to recent AI capabilities



## Classic NN applications

- Regressors and Classifiers



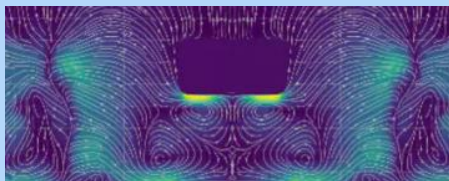
## AI in computer vision

- Feature recognition and classification



## Digital Twins & Simulation

- Simulation capabilities



## Multimodal Gen. Models

- Images, Text, Voice



## RAG & AGENTS

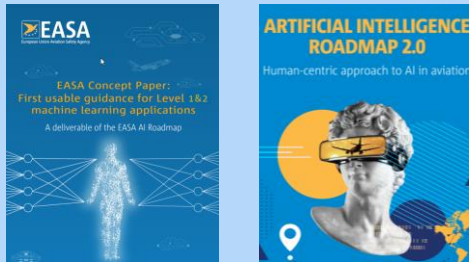
- Company security





# RECAP – BUSINESS

## Regulations (ADSE)



## Impact on Organizations

- Value / Creativity chart
- Impact on repetitive routines
- Marketing

## Ethics in AI

- Fairness | Bias free
- Transparency

## Sustainable AI

- Environmental impact
- Energy grids under stress

## Risks

- AI as a threat
- AI under threat

## Costs

- OPEX
- CAPEX



# AI BUSINESS NEWS

## On the horizon

- OpenAI
- Nvidia
- Palantir
- Meta
- **Anthropic (AI agents)**



## Trends

25% of the Software Code is generated by an AI. Software development time reduced by 30%.

OpenAI became fully for profit. ChatGPT is now for enterprises.

## Actions

Invest in IT infrastructure and Cybersecurity.

Software devs. and data analysts in flexible teams.

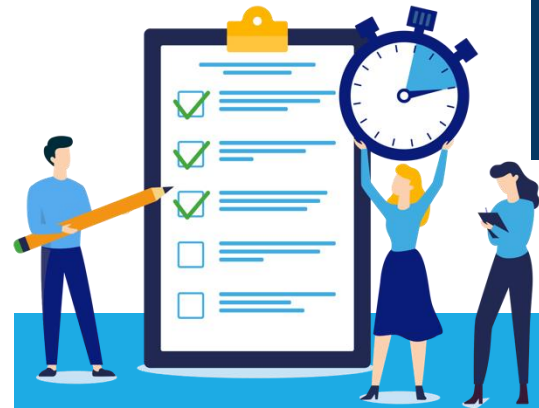
Plan the enterprise AI strategy.

# KEY TAKEAWAYS



**AI and ML are for 90% a Marketing term**

People tend to replace effective methods with black box approach



**5 years for the technology to be stable**

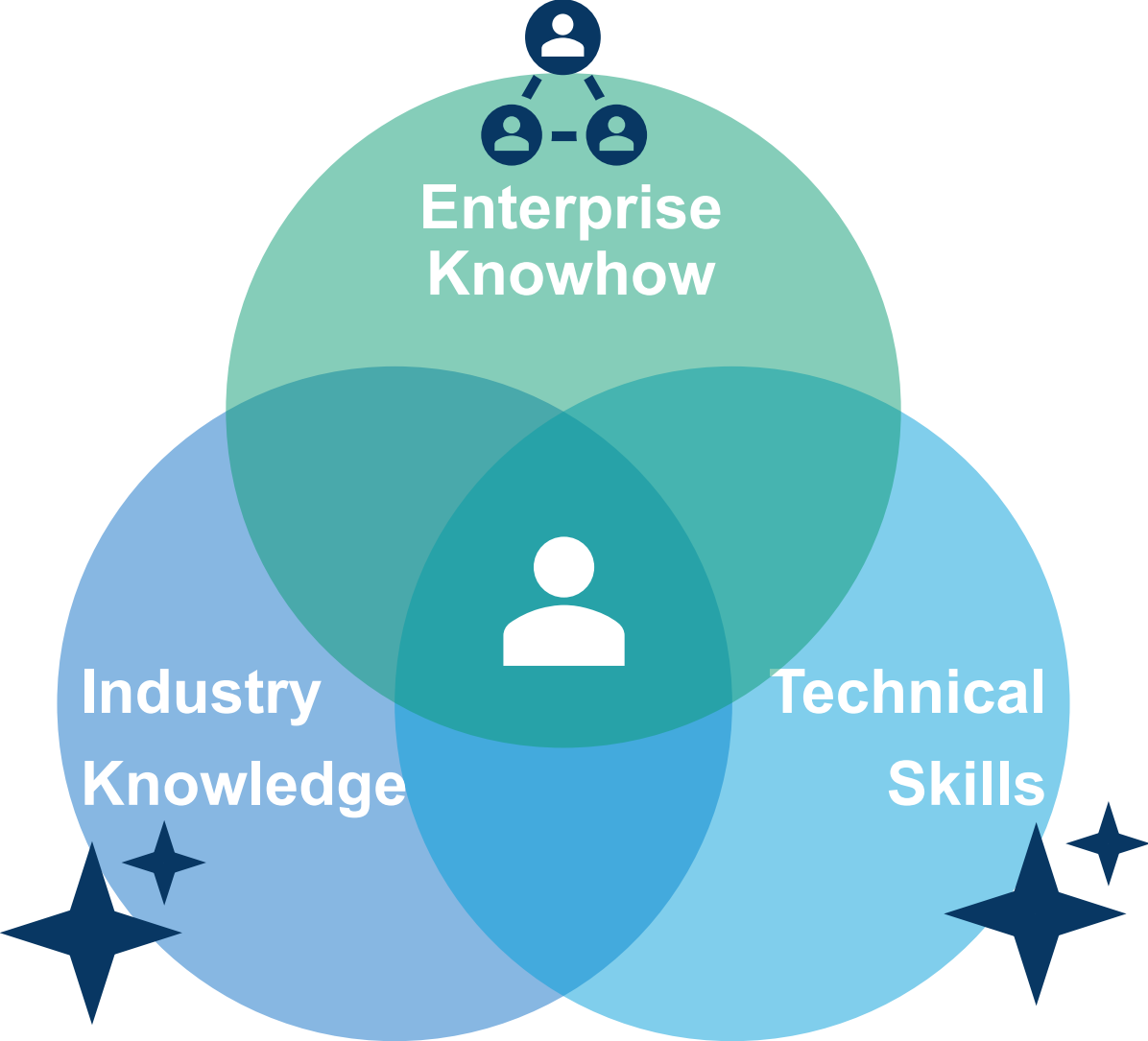
## Transformational process

Companies to revise their processes and IT infrastructure



**New business opportunities**

# AI IN EMPLOYEE EMPOWERMENT





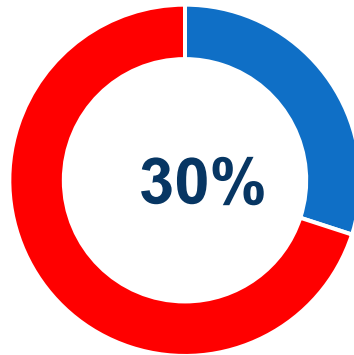
# REMEMBER TEMPERATURE (CREATIVITY)

## High Creativity Chatbot

	Change \$
Cost A	+12
Cost B	-54
Cost C	+25

Increases of +\$12 in Cost A, +\$25 in Cost C and a decrease of -\$54 lead to a overall increase/decrease of

?

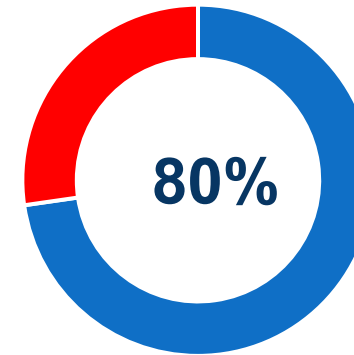


## Low Creativity Chatbot

	Change \$
Cost A	+12
Cost B	-54
Cost C	+25

Increases of +\$12 in Cost A, +\$25 in Cost C and a decrease of -\$54 lead to a overall increase/decrease of

?



# AI IN CIVIL AVIATION

