

# Discovery: Strategic Foresight

Helping Aviation Find Problems Worth Solving

*Exploring the connections between societal needs & trends to maximize the benefits of NASA capabilities*

## Philosophical perspective – Convergence, Complexity & Foresight

CAS Discovery – or the very front-end element of CAS exploration & discovery – supports robust strategic foresight within the following considerations:

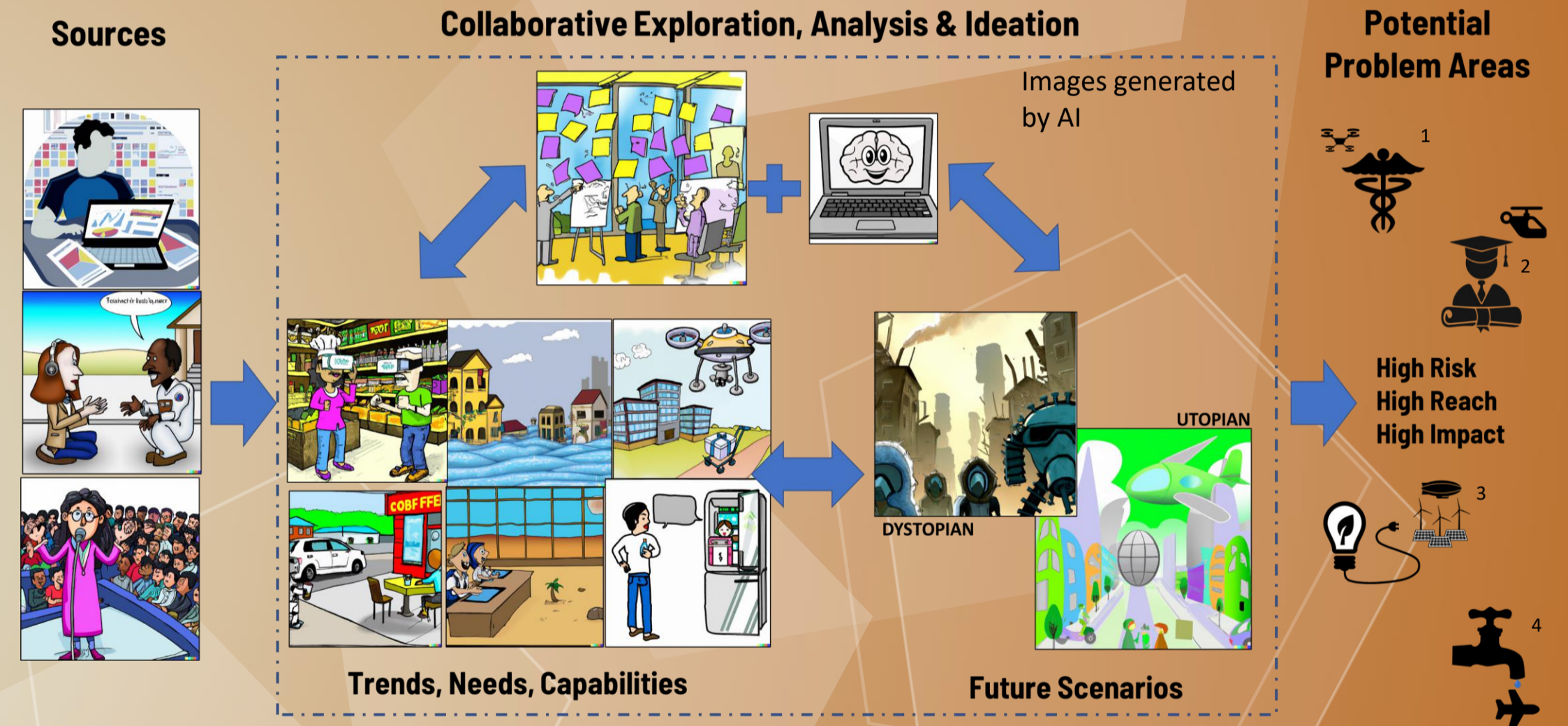
1. *Convergence for productivity* – convergence accelerates learning by bringing in diverse (other industries, ideas, users) perspectives as early as possible. For organizations this can reduce development times. For stakeholders this can lead to more innovative and personalized products.
2. *Complexity for greatest wellbeing* – complex analysis enhances an organization’s awareness of the environment and gives stakeholders the ability to see ripple effects (positive and negative) on society.
3. *Foresight for resilience* – foresight provides an organization with resilience or anti-fragility by being attuned to potential threats, opportunities, and cross-cutting trends within the near and distant future. It can reveal unintended consequences or futures that we can drive.

## Expected Impacts

- Develop a forward-looking strategy for aviation (technology, workforce, resources) to enable far reaching positive social impact.

## Approach

- Scoping problem landscapes by integrating human and digital sources (analytics, interviews, ideation sessions)
- Scenario planning and foresight – looking at a range of futures to inform aviation threats & opportunities
- Incorporating AI, systems thinking, and modelling
- Embracing psychological safety while exploring policy, economics, social science, technology, ethics, law and the environment



*The mapping process discovers trends, needs, and capabilities from interviews with diverse groups of people, data analytics tools, and from publications. These are analyzed in the context of future scenarios to uncover problem areas that have the highest possible impact on the broadest number of people while ensuring that we are prepared for the future.*

### References

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