



IAIA21

VIRTUAL EVENT

#iaia21

Developing Capacity for Argument in Support of IA Goals and Decisions

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Today's Topics

Challenge: Arguments are everywhere in IAs but are often presented poorly.

Response: Create an approach for building better arguments, and

Develop capacity with those tools

What is an Argument?

- An argument involves:
 - A set of reasons
 - Leading to a conclusion
 - Intended for a particular audience

Offering **Reasons** leading to a **Conclusion** for an **Audience**

The argument

**must be
presented to**

Simple Arguments

- All developments in this area have had difficulties avoiding wetland damage so this mine will have wetland issues too.
- Careful advance design is the most effective response. It is inexpensive and popular with stakeholders.
- Frog populations need to be protected so wetland preservation should be required.

Argument is Pervasive in Technical Work including IA

- Argument is reasoning that leads to conclusions
 - Fact arguments support factual conclusions.
 - Baseline studies and impact predictions are fact arguments.
 - Evaluation arguments support conclusions of ‘worth.’
 - Significance arguments are evaluation arguments.
 - Recommendation arguments are conclusions about what to do.
 - The results of screening, scoping, mitigation and restoration phases are usually recommendation arguments.

Technical Argument is about Careful Persuasion

- Arguments are only offered in situations that are not certain, in which something is unsettled or in some way contested.
- Therefore the author must show the evidence and the reasoning to convince the audience that the conclusion offered is worthy for them to accept.

Arguments and Decisions

- Arguments result in decisions.
- Decisions result from reasoning which, when organized, is an argument.
- The end point, the decision, usually gets more attention.
- Without sound argument, sound decisions are not likely.

But Argument is Often Weak

- The arguments in professional documents are often unclear. Long assessment documents are particularly complex and demanding.
- Many steps of the arguments from data to evidence and reasoning to conclusion are missing.
- Definitions, and the criteria of 'values,' are often missing: not stated and often not even thought of.
- Even when present, key ideas can be buried in text and not understood by readers.

Therefore: Organized Reasoning™

Tools for Stronger Argument & Clearer Writing

- There are guidelines for building arguments from Aristotle in ancient Greece to modern cognitive psychology.
- Many good ideas are in different fields, not known to each other, and not available in one place.
- Therefore, I created a package of the most useful parts. Thus → Organized Reasoning™.

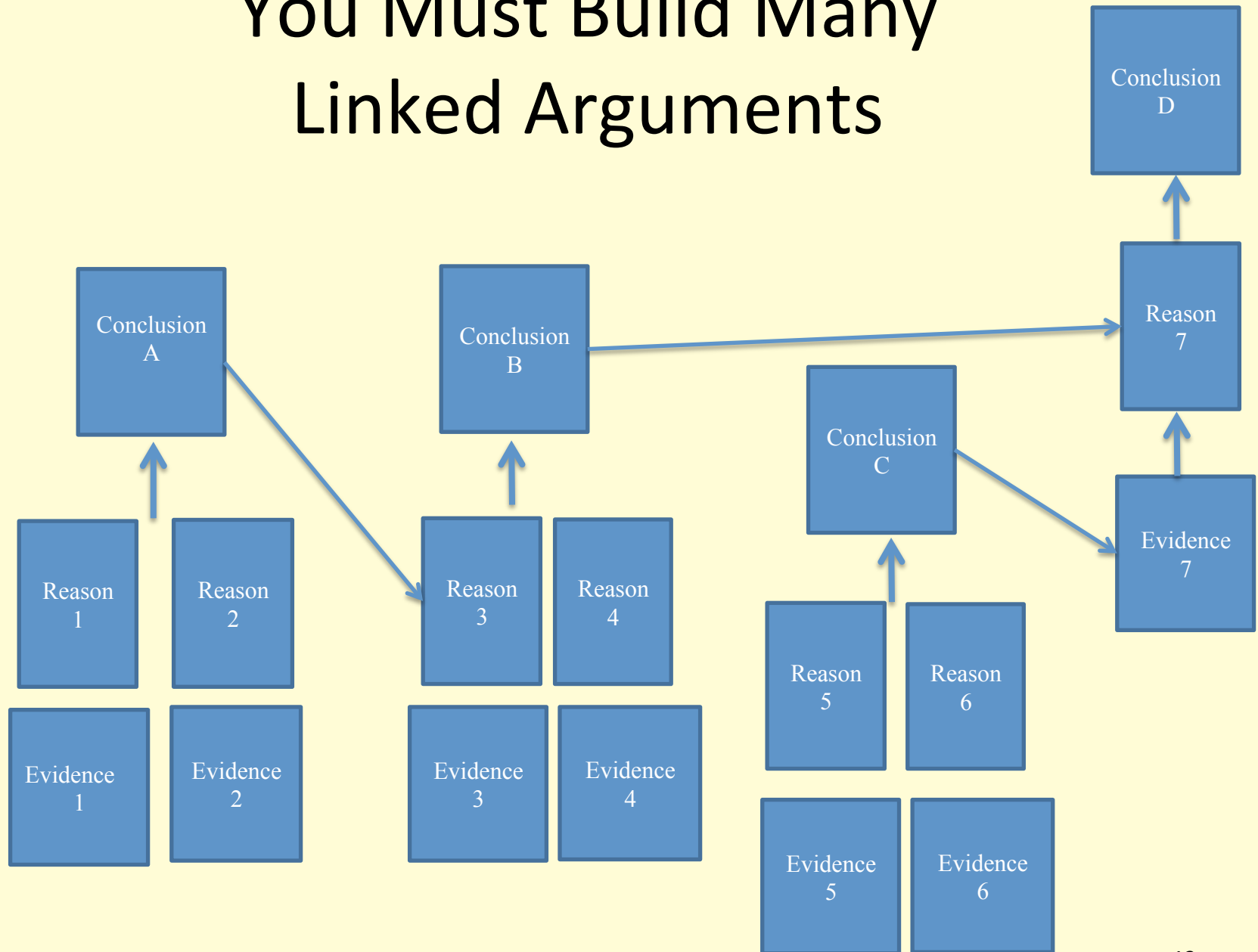
Therefore: Organized Reasoning™ for IA Practitioners

- Our goal is to present data and conclusions as transparent and clear argument,
- convincing our audiences why the information and analysis are reliable and the conclusions reasonable.

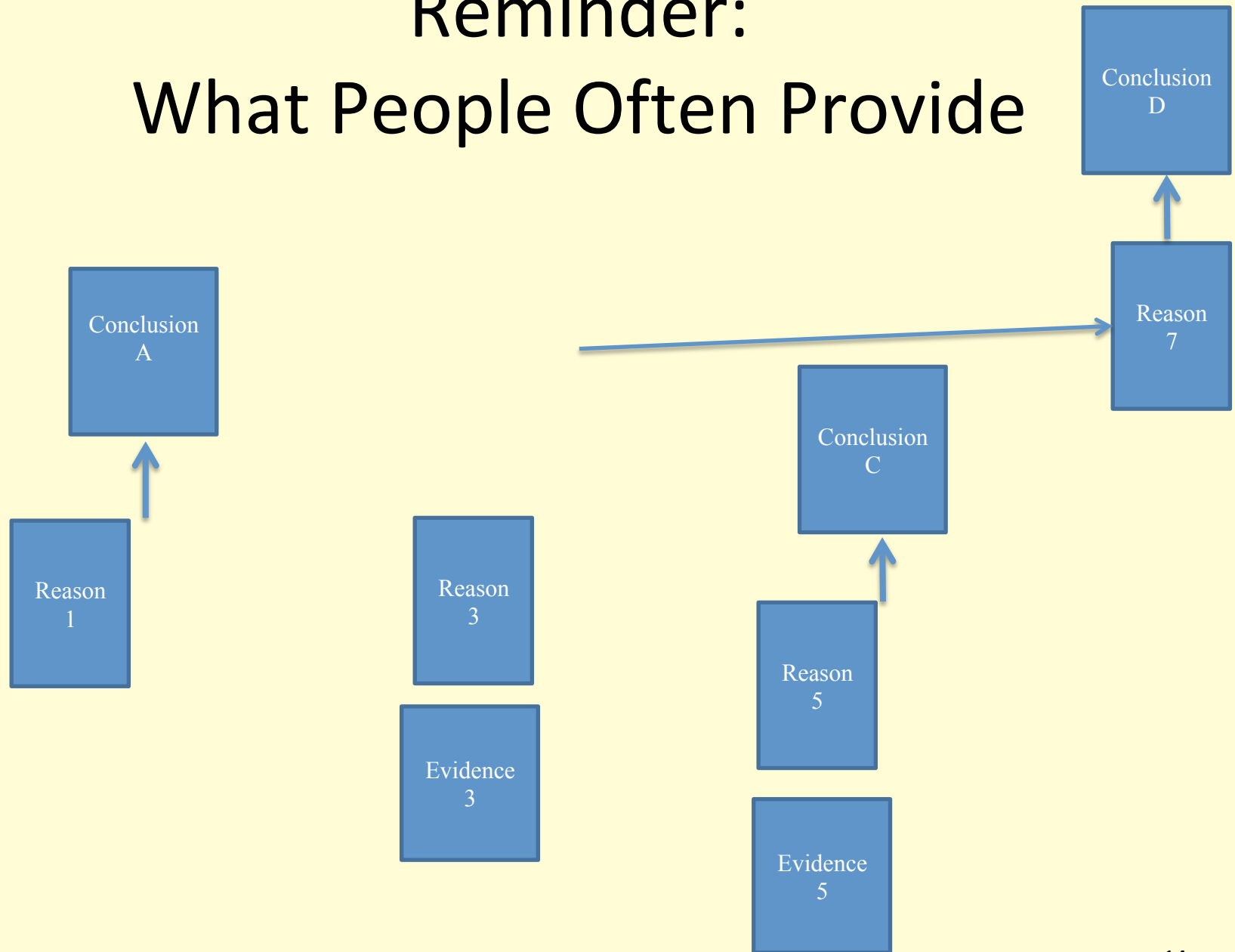
So, Workshops Happen



You Must Build Many Linked Arguments



Reminder: What People Often Provide



A Key Point

- Much of the ‘content’ of argument (the evidence and justification) is from a ‘field’. It is biology, hydrology, health, economics, rights, culture, etc.
- There are ‘field-dependent’ standards for how the evidence is used, judged, etc. That is your profession. Use those ideas and approaches.
- Our discussion about argument deals with tools that apply to every argument. They don’t depend on the field.

Therefore

Packaging Professional Tools

Logical
Structure

Create your
Argument



Structured
Presentation

Revise &
Package it for
your Audience

Logical Structure

Five major elements:

- Definition and Features of Argument
- Words and Meaning
- Hierarchy and Extended Arguments
- Strong Arguments
- Three Types of Argument
 - Fact, Evaluation and Recommendation

Structured Presentation

Three major elements:

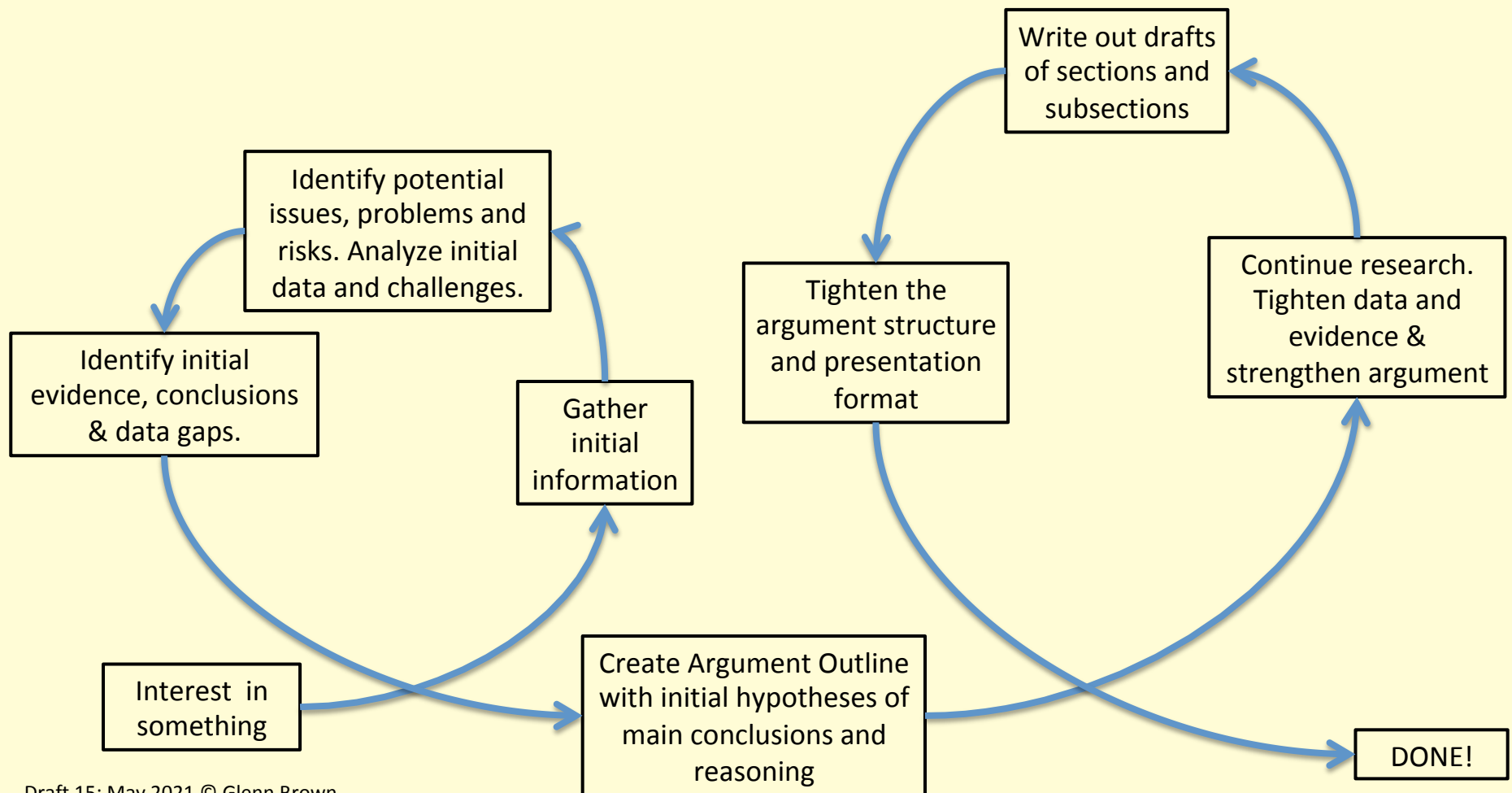
- Strategies and Tactics for Clarity and Coherence
- Microstructure
 - Integrate paragraphs within sections.
- Macrostructure
 - Link ideas across large documents.

ORGANIZED REASONING™

A Process to Create & Share Complex Technical Arguments

Build Initial Logical Structure

Revise Arguments & Structure the Presentation



To Summarize The Big Picture

- **Approach:** Organized Reasoning™ assembles thinking and writing tools, derived from many sources, within a process to apply them.
- **Result:** Support for stronger arguments and clearer writing.
- **Benefits:** Increased efficiency, greater effectiveness and reduced risk.

How Support Capacity Development?

- Goal: make learning Organized Reasoning simple and flexible so people with different approaches can master skills and improve without GB.
- Context
 - Professional development for working practitioners.
 - Live workshops shifted to online workshops.
 - Individuals start alone at sponsored workshops (IAIA+).
 - Groups of staff start together in organizations.
 - Everything is a work in progress.

What to Offer to Develop Capacity for Organized Reasoning?

- Three Complementary Approaches
 - For different contexts.
 - To support steps from introduction through continuing implementation.
 - A more or less sequential approach.
- The goal is to support expanding individual capacity with tools and skills as applied to impact assessment.

First: Provide Useful Tools & Skills

- Provide an introduction giving usable skills.
 - Via live workshops, which are now online.
 - Knowledge and skills which stand alone.
 - Ideas which can be used immediately on the job.
- (Note: Participation is voluntary. If this step was not seen to be working, the project would end.)
- However, it is often a challenge to add new skills comfortably to one's practice, especially for busy professionals. Therefore, more options...

Second: Support Ongoing Individual Improvement

- Any progress is good.
- Three steps permit a simple and effective start.
 - Three more steps build skills.
 - Then apply the whole double loop when practical.
- Build and monitor planned, self-directed mastery with tools from the Learning Portfolio (provided).
 - Advanced workshops and refreshers are available.
 - Join a Community of Practice.

Third: Provide Steps for Institutional Progress

- Overlaps with developing personal mastery.
- Options and tools for peer-group support.
- Steps to expand beyond a core start-up group.
- Individual and group coaching.
- Support during implementation of current projects.

What Methods for Delivery?

- Workshops for basic and follow up topics.
- Written materials for self-direction.
 - Support materials come with the workshop.
 - Learning Portfolio, checklists, etc.
 - Book (next year?).
- Personal Support: individual, peer group and whole staff coaching options.
- Group mutual support: Community of Practice.
- Online: website, etc.

Resources for Follow up

- GB website www.glennbrown.ca
 - Download past IAIA conference materials.
 - Current and upcoming events, status updates.
- EIANZ (Environment Institute of Australia and New Zealand) Community of Practice at www.eianz.org/about/organised-reasoning

If You're Interested...

- Contact me!
- I'd like to share ideas with anyone who wants to.
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END

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Let's continue the conversation!

Post questions and comments via chat in the IAIA21 platform.



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