Comparison of tracking progress frameworks: What's the difference and why should I use the AULs.

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Why use a framework to track progress?

It can help us build a bridge and navigate the valley of death

A tracking framework can ensure *clear communication* between developers/researchers and users *about the use* and *current development stage* of a product.

Which frameworks are out there? What were they designed to track?

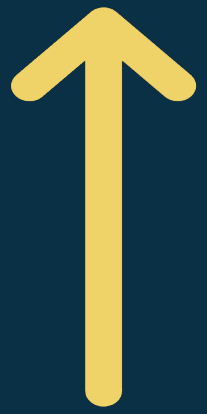
Multiple Frameworks used within the field

Technology Readiness Levels:
(Mankins 1995
https://ecss.nl/home/ecss-e-hb-11a-technology-readiness-level-trl-guidelines-1-march-2017/)

- Will this tool, be it software or hardware, work in the space environment?

Readiness Levels:
(NOAA Administrative Order (NAO) 216-105B)

- What is the maturity of a product and where is it in the transition process to addressing a NOAA mission need

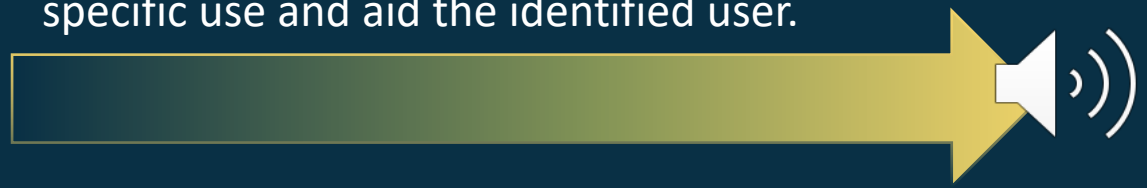


Application Readiness Levels:
(https://www.nasa.gov/sites/default/files/files/ExpandedARLDefinitions4813.pdf)

- Will this product work in the user specified environment and aid in a decision-making context.

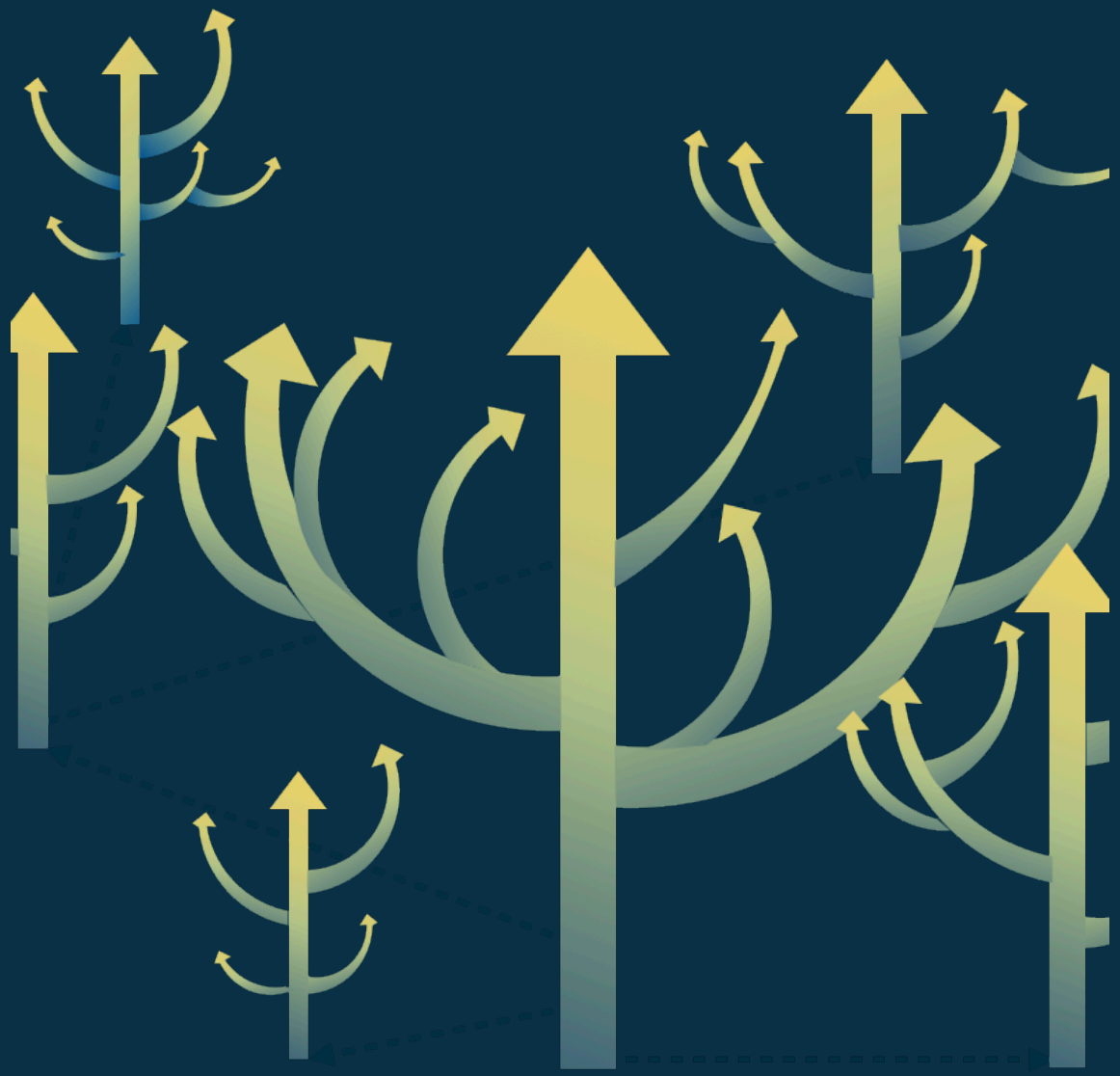
Application Usability Levels:
(https://www.swsc-journal.org/articles/swsc/abs/2019/01/swsc190028/swsc190028.html)

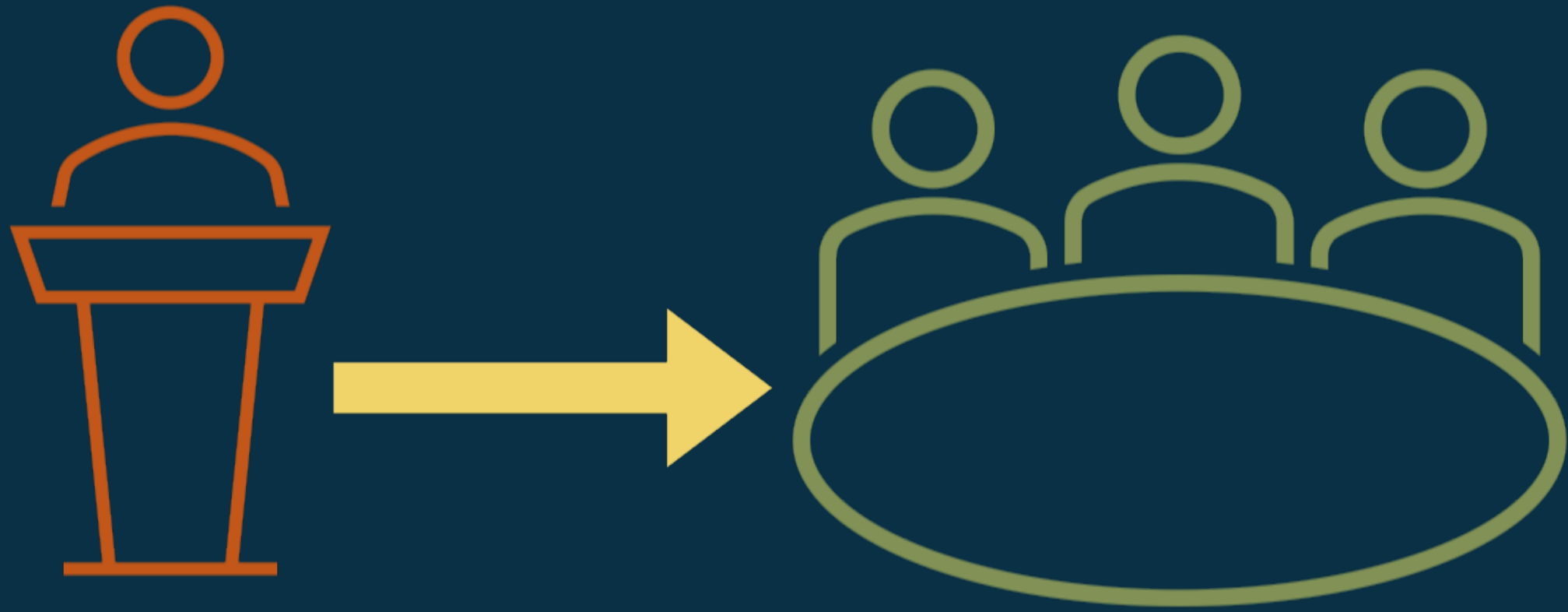
- Will the output of this project, be it software, hardware, data, or something else be able to provide a specific use and aid the identified user.



Application Usability Levels

- Each level has clear milestones
- Both the user and researcher must agree that the level has been attained.
- If the user requirements change, then a new branch is generated.





Thank you for listening

Join our ISWAT Working Group at https://www.iswat-cospar.org/O1-01

You can find more from our group including AUL resources at https://github.com/AJHalford/AUL

Bit of fun on Twitter mapping AULs and TRLs together https://tinyurl.com/AUL2TRL