



2024 NSF RESEARCH INFRASTRUCTURE
WORKSHOP

MARCH 26 - 29, 2024 • TUCSON, ARIZONA

Story and Science: Building teams
through the power of purpose

Image Credit: Vera C. Rubin Observatory, CTIO/NOIRLab/DOE/NSF/AURA T.A. R. Richard F. Caris Mirror Lab/Gabrielle Perez

PROJECT MANAGEMENT. FACILITIES AND OPERATIONS. AWARD MANAGEMENT. EHS. EDUCATION AND PUBLIC OUTREACH. CYBER (CI & CS).



What's the difference?

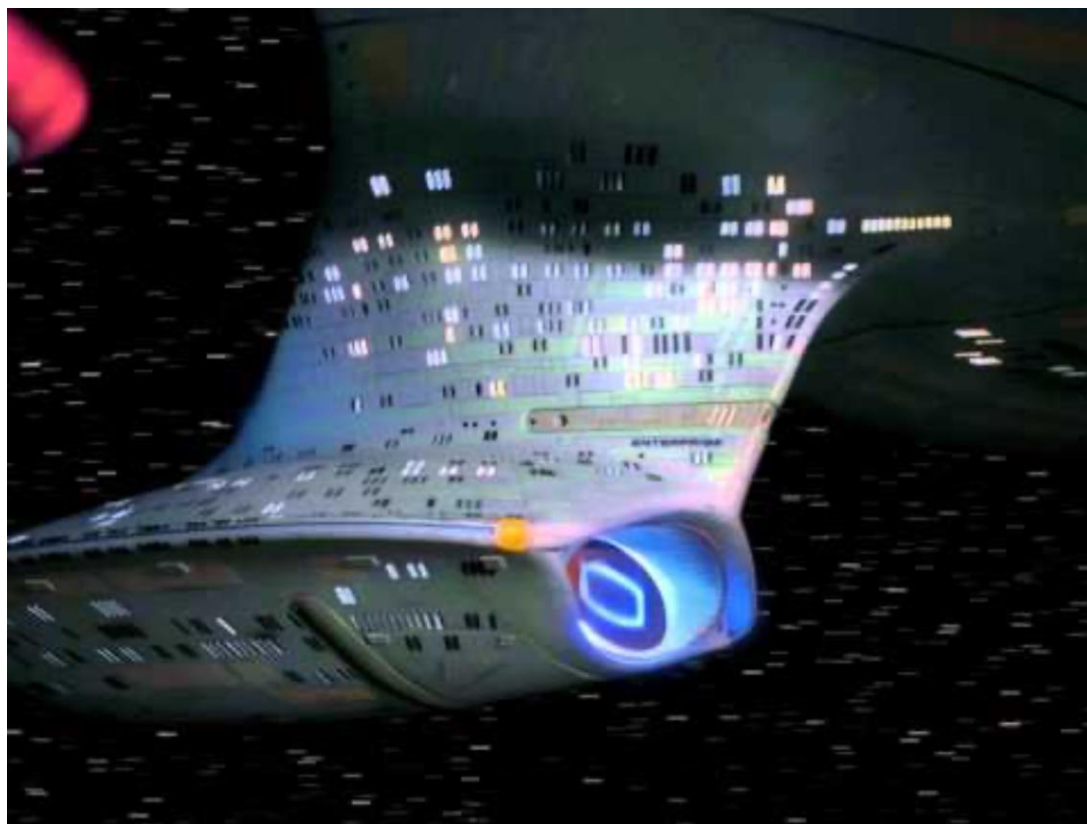


The need for story



Why is story essential?

- Goals and objectives are good, but don't drive action
- Which drives you to want more?
- Within 5 years we will survey 20% more star systems than the previous years. We will meet at least 10 civilizations and establish contact.
- Or is it more motivational to be part of a larger story?





The case for story

- Story creates motivation and enthusiasm for learning
- Stories create involvement and a sense of community
- Story structure enhances memory
- *Story Proof*, Haven

- “Neither revolution nor reformation can ultimately change a society, rather you must tell a new powerful tale, one so persuasive that it sweeps away the old myths and becomes the preferred story, one so inclusive that it gathers all the bits of our past and our present into a coherent whole, one that even shines some light into the future so that we can take the next step... If you want to change a society, then you have to tell an alternative story.” –Ivan Illich





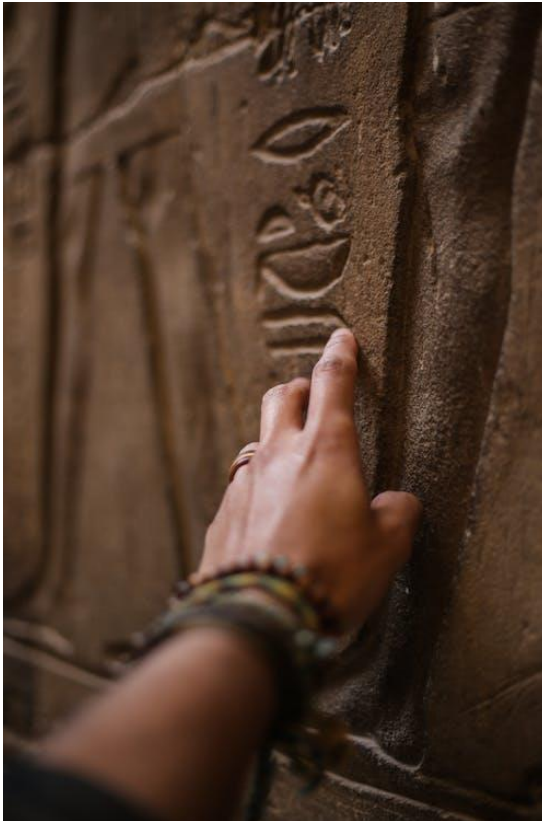
Setting the Stage

- Start with pain or a problem
 - What is its effect?
 - How does it impact you?





How did we get here?



- History adds context



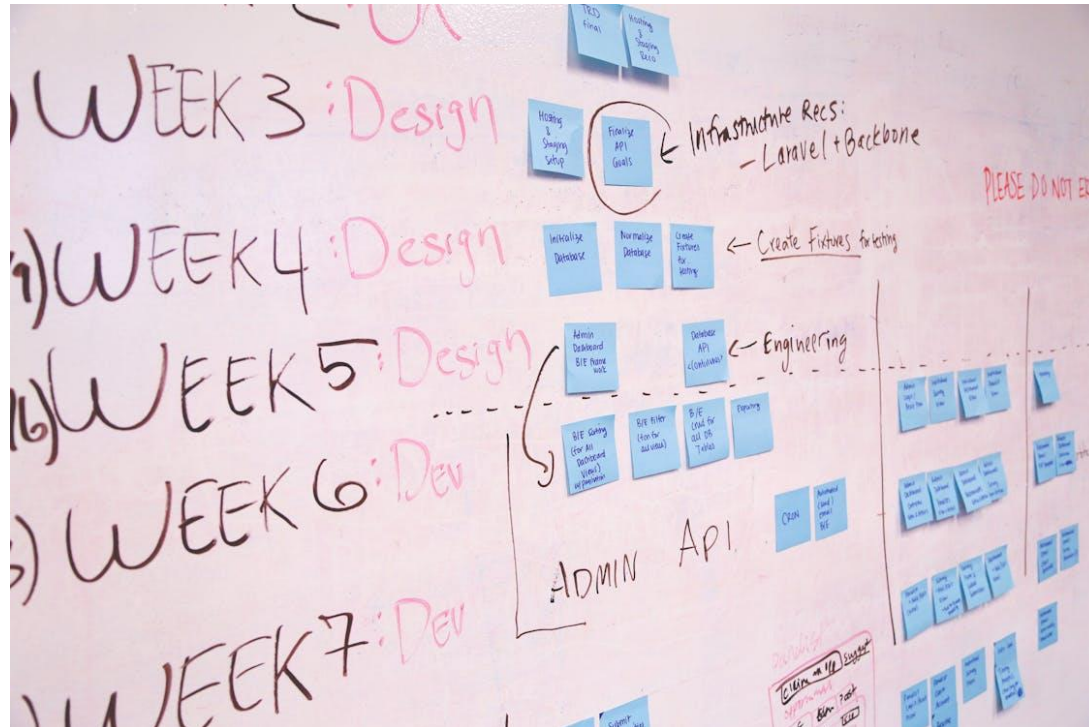
Dramatis Personae

- Who's on the 'cast'?
- What do they bring to the table?
 - Capabilities
 - Capacity
- Leading the landing party:
 - What do we need?
 - What do we have?
 - What do we need to be aware of?



Timeline

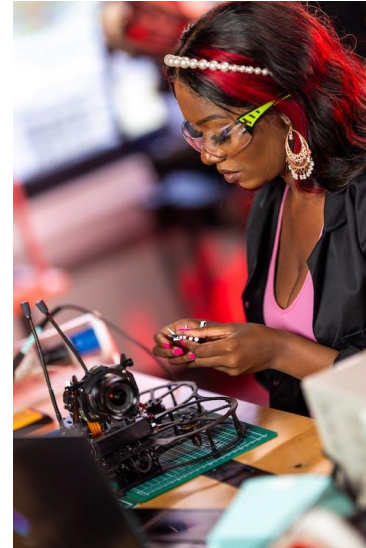
- How urgent is this?
- How much time do we have to plan?





Obligation is central

- Think bigger!
- Brain rewiring - problems got through our brain and limit our resources to problem solve
- Restating the problem to an obligation shifts from powerless to a CHOICE - automatically more powerful and able to access different areas of the brain.
- Short, succinct, clear, overarching
- Might solve even more problems





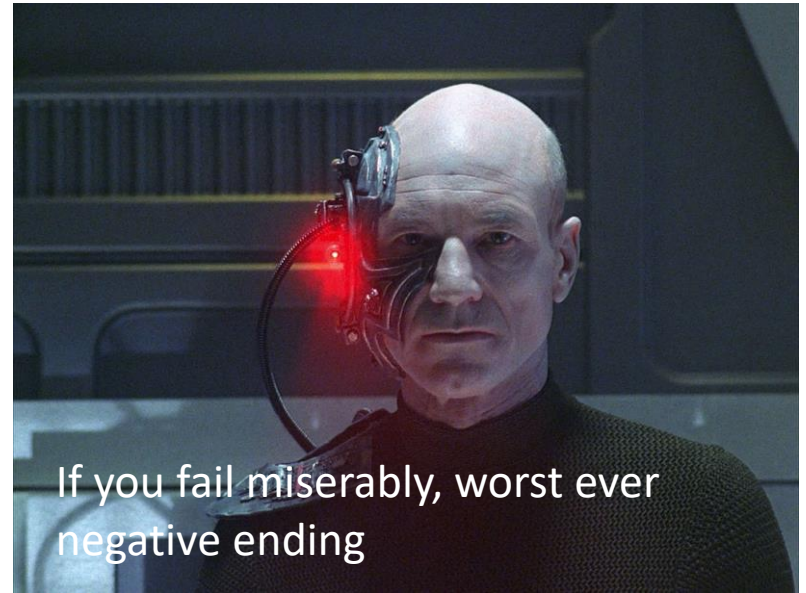
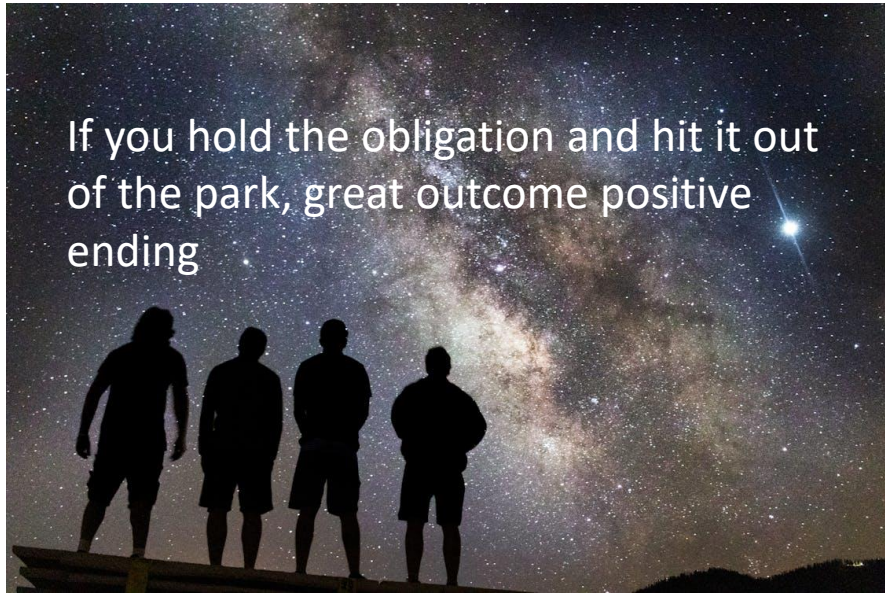
Perspective

- What's the starting point?
- Whose view are you taking?
- Who needs to get into action?



Craft the optimal ending

Positive and negative





The formula

An environment where {PERSON OR GROUP}
feel {POSITIVE FEELING} to {SPECIFIC
ACTION}, because there is {OPPORTUNITY}
enabling {EFFECT OR MEASURABLE
OUTCOME}.



NEGATIVE DES

POSITIVE DES

1. State Obligation - Restate problem in form of an obligation
2. Perspective - Whose perspective are we doing this from?

3. Threat -
4. Measurable Effect -
5. Feeling -
6. Ineffective Action -

7. Opportunity -
8. Measurable Effect -
9. Feeling -
10. Effective Action -



The end?



Want help crafting your own story?

Get in touch:
zehner2@purdue.edu