

# Pitfalls of Large Complex Projects

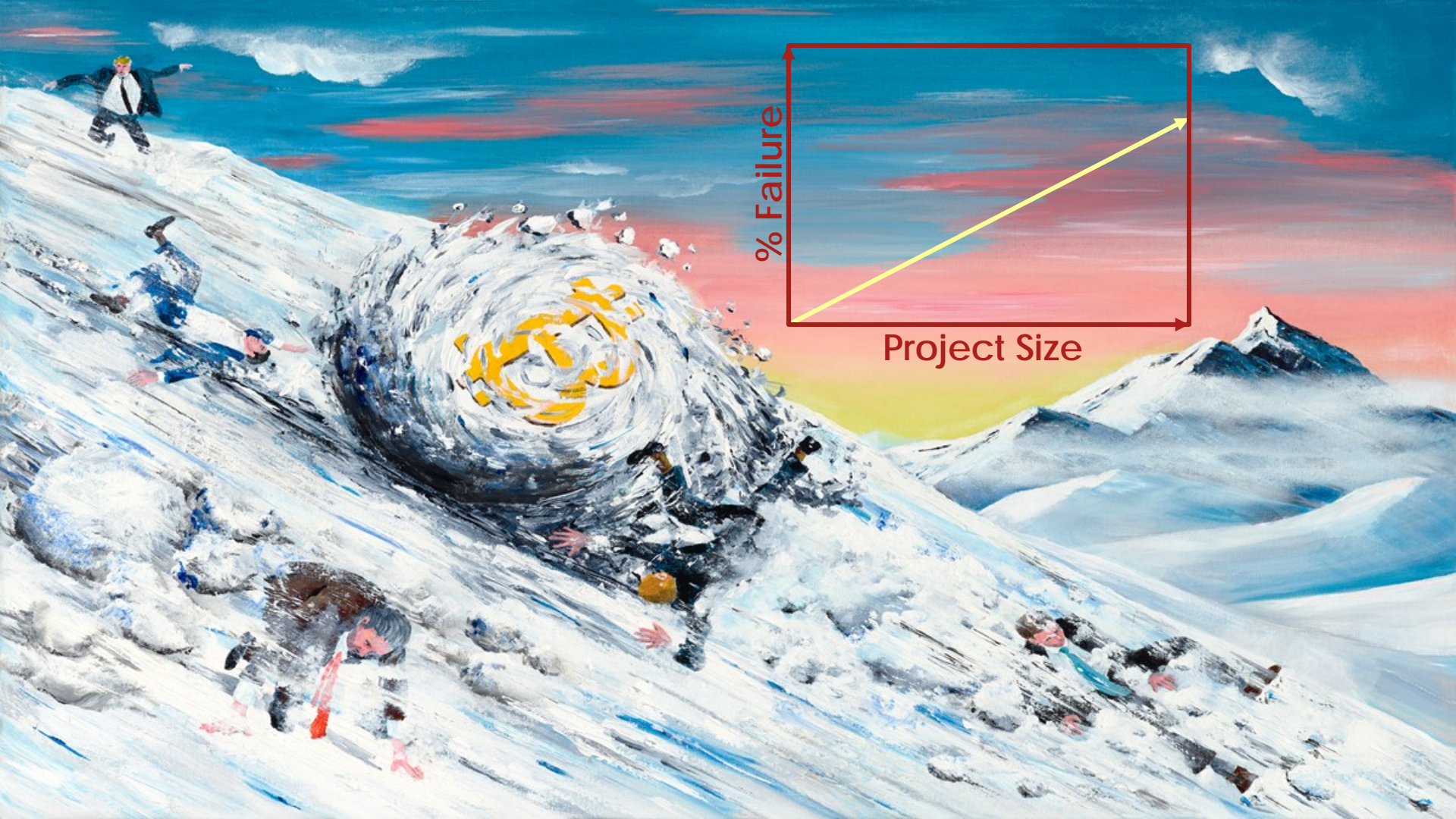
Presented to: The Board on Energy & Environmental Systems – 06Apr2021

**Joseph C. Brewer, Jr.**

Dow Chemical VP (retired) &  
(past) Sadara Program - Chief Implementation Officer



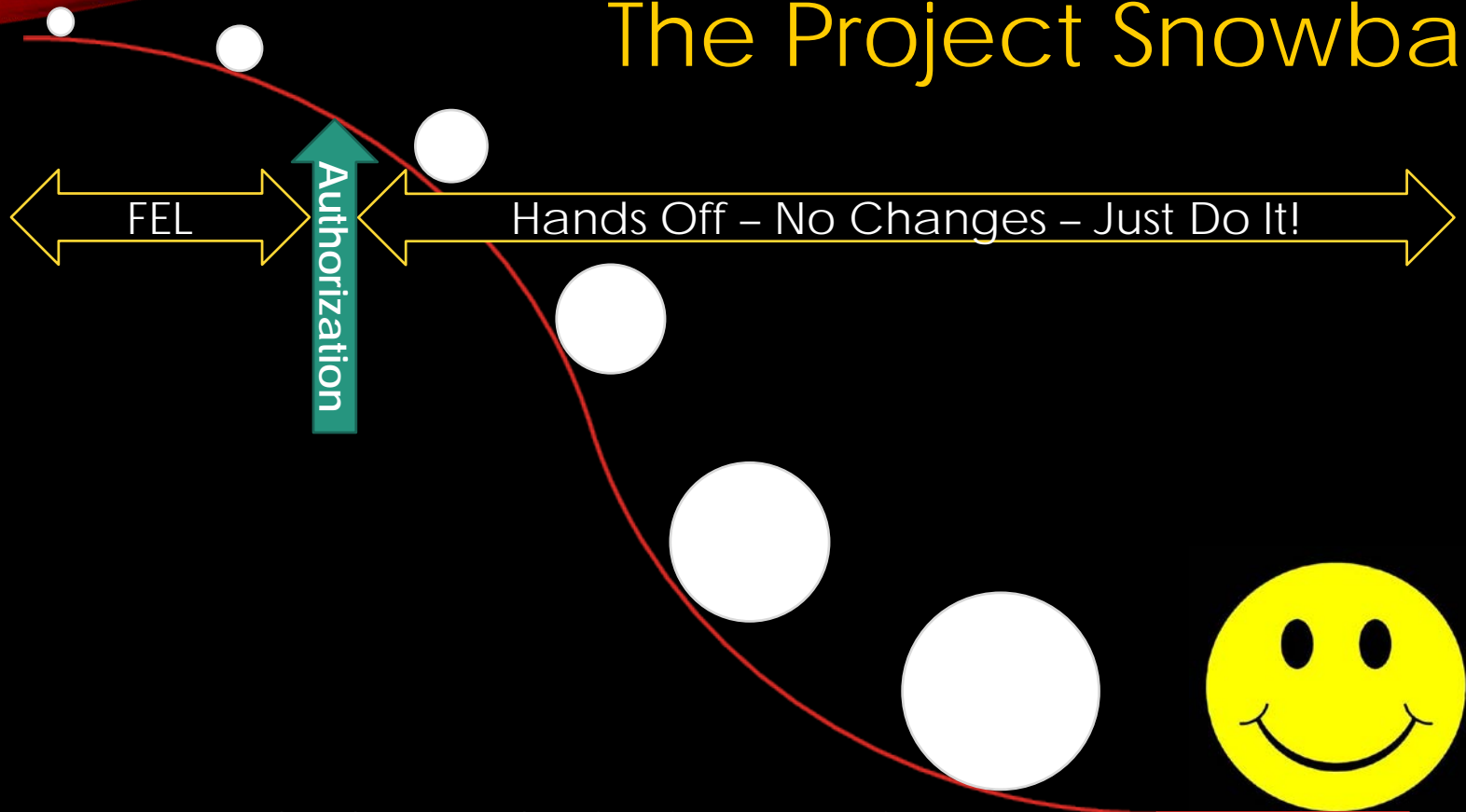




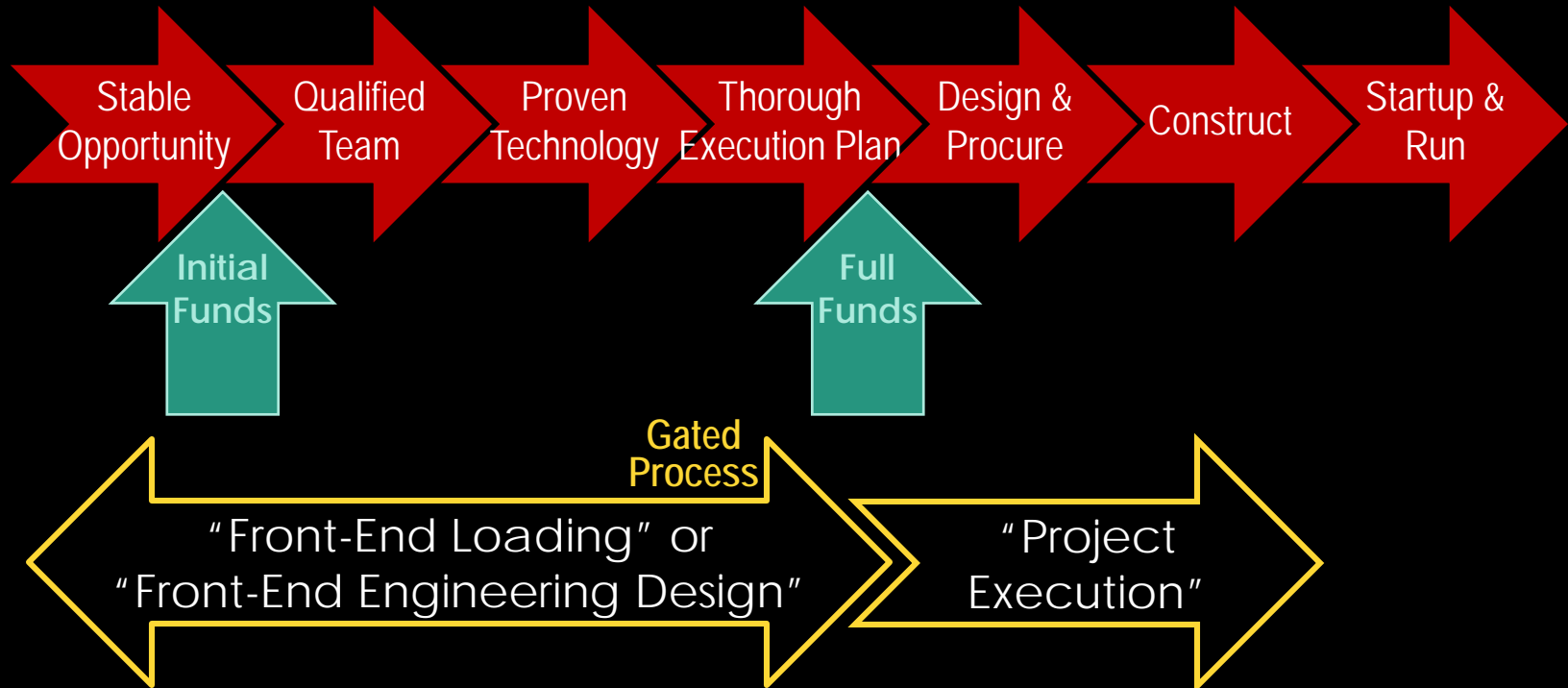
% Failure

Project Size

# The Project Snowball



# What Goodness Looks Like



# PITFALLS: Failing to Do the Basics

- *[un]Stable Opportunity*
- *[un]Qualified Team Members*
- *[un]Proven Technology*
- *[in]Complete Front-End Loading*
- *Gate Reviews that Can't Close Gates*
- ~~*Unconstrained Funding*~~
- *Execute Without Changes*



# OTHER PITFALLS: My Top Ten

1. *A Project Ahead of the "Deal"*
2. *Expecting Precision Predictability: Cost & Schedule*
3. *Becoming Schedule Driven*
4. *Ignoring Known Risks*
5. *Arms-Length Sponsors, Proponents, & Stakeholders*
6. *Constrained Resources*
7. *Late Staffing of the Startup/Operations Team*
8. *Prioritization*
9. *Contracting that Doesn't Fit the Market*
10. *Ignoring the 'Soft Stuff'*

# MORE PITFALLS: The Next Ten

11. *Team Member Turnover*
12. *Under-Sizing Contingency*
13. *Timid Interventions*
14. *Ignoring Interface Management*
15. *Ignoring 'Black Swan' Inevitabilities*
16. *Ignoring the "Supply of Everything" Problem*
17. *Failure to Communicate, Communicate, Communicate*
18. *Failure to Learn & Leverage*
19. *Failure to Provide Targeted Transition Leadership*
20. *Failure to Add New Capabilities for E2E*



Hint:

Alignment is Your  
Most Powerful Tool

# Q&A