IMMERSIVE ENGINEERING

- **What is IE?**
  - We didn't invent the commercial practices that compose IE. We invented how to make them work together to deliver greater value and impact.
    - The practices are:
      - SAFe/Agile
      - Design Thinking
      - Graphic Facilitation
      - INCOSE/Systems Thinking
    - An IE engagement doesn't have to use all the practices
    - We chose these practices because we believe that, blended together, they deliver the business and mission impact our IC and DoD clients need
  - It's immersive because we immerse the client in the journey from ambiguity to clarity
  - The elevator speech is:
    - IE is an immersive experience which occurs along the problem solving journey for clients, contractor team members, and IE practitioners
    - IE is a blending of commercial leading practices.
    - IE is about adopting and integrating commercially available solutions, not developing from scratch
- **What ISN'T IE?**
  - It's not linear
    - There's no prescriptive order to the four facets
    - You don't even have to use all four facets
  - It isn't waterfall engineering
  - It's not a process to follow
  - It's not telling a client the way things should be
  - It's not selling a client on why they should do things a certain way
  - It's not an OGSystems invention
- **How is IE done?**
  - It has four facets:
    - **DISCOVER** Gaining clarity and context of the situation
    - **EXPLORE** Gaining insights from the marketplace
    - **MODEL** Gaining insights from experimentation
    - **DELIVER** The "Destination," which can be at any scale and any execution model
  - Each of the four facets has a collection of tools and techniques that draws from the commercial practices that IE is made up of
- **WHY do IE?**
  - As a new hire, why should I care about IE? What about the job I was hired to do?
    - IE is a foundational cultural element of who we are at OGSystems
    - IE informs how we show up every day, energized about working and solving our clients' hardest problems
  - IE creates value for our clients. IE:
    - Increases mission relevancy by delivering mission capabilities clients want
    - Reduces cost and schedule by rapidly delivering only mission-useful features
    - Delivers highly reliable and resilient systems
    - Keeps pace with commercial business, tradecraft, design, and technology innovations
    - Increases customer satisfaction by delivering capabilities with optimal user experience and usability
    - Promotes a common problem solving mindset
  - It's important to OGSystems
    - It builds high performing teams
    - It's part of OGSystems' culture to...
      - **Immerse**
      - **Disrupt**
      - **Innovate**
    - It's part of the unique value we bring to our clients
    - It's part of the founders' vision
- **WHO does IE?**
  - Integrated teams of clients, users, and IE practitioners
  - IE practitioners design the activities performed along the journey
  - IE practitioners are responsible for guiding the team to the Destination
- **HOW can I use IE?**
  - By implementing the IE techniques and tools that...
    - ...bring clarity to ambiguous problem situations
    - ...identify and deploy commercial solutions, and...
    - ...deliver business and mission impact
  - If uncertain how to take the first, reach out to one of OGSystems' IE Practitioners
  - We are developing a set of competency charts that will define various level of IE Practitioners
    - Foundational skills can be obtained through self-learning and education opportunities as part of personal development
    - Specific practitioner skills can be obtained through a series of OGS sponsored training and experiential opportunities
    - Levels of IE are mapped to career levels and professional development in the company
  - Here's some recommended reading to get you started
    - The Lean Startup - Eric Ries
    - Value Proposition Design - Bernarda, Osterwalder, Pigneur, and Smith
    - Hacking for Defense – Solving National Security Issues with the Lean LaunchPad
    - The Startup Owner's Manual - Bland and Dorf
    - Innovating for People: Handbook of Human-Centered Design Methods - LUMA Institute
    - Business Model Generation - Osterwalder and Pigneur
    - Design a Better Business - van der Pijl, Lokitz, and Solomon
  - Watch for information about an IE Fundamentals training
- **What do I do if I have a potential IE customer or opportunity?**
  - Talk to your OGS manager or OGS Task Lead
  - Reach to one of the following:
    - Ben Tinker
    - Mark Tappan
    - Vic Simonis
    - Jonathan McColgan
    - Mike Becker