



SOLVING THE RIGHT PROBLEMS

WHY USER RESEARCH MATTERS



Chief Digital & Artificial
Intelligence Office

DDS VISION + MISSION

VISION

A DoD where people are enabled by technology,
not limited by it.

MISSION

Deliver better services to the warfighter through
design & technology.

DDS VALUES

SHOW, DON'T TELL

We rapidly demonstrate and deliver capabilities.

GO WHERE THE WORK IS

We show up and experience the problem first hand to understand the users' challenges.

MAKE A DIFFERENCE

We leverage our technical expertise to improve the lives of service members and civilians.

BE BRAVE AND SPEAK THE TRUTH

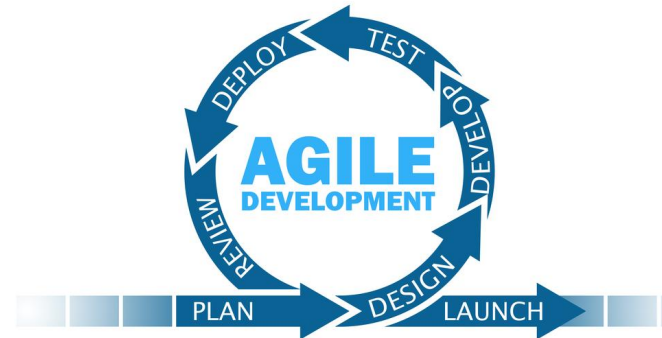
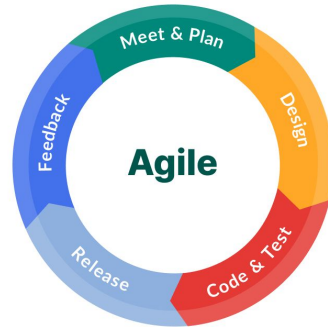
We tell the truth about systems, capabilities, and processes — even if it's hard to hear.

DESIGN WITH USERS

We elevate unheard voices and align our work to user needs.

OUR APPROACH

"CLASSIC" AGILE

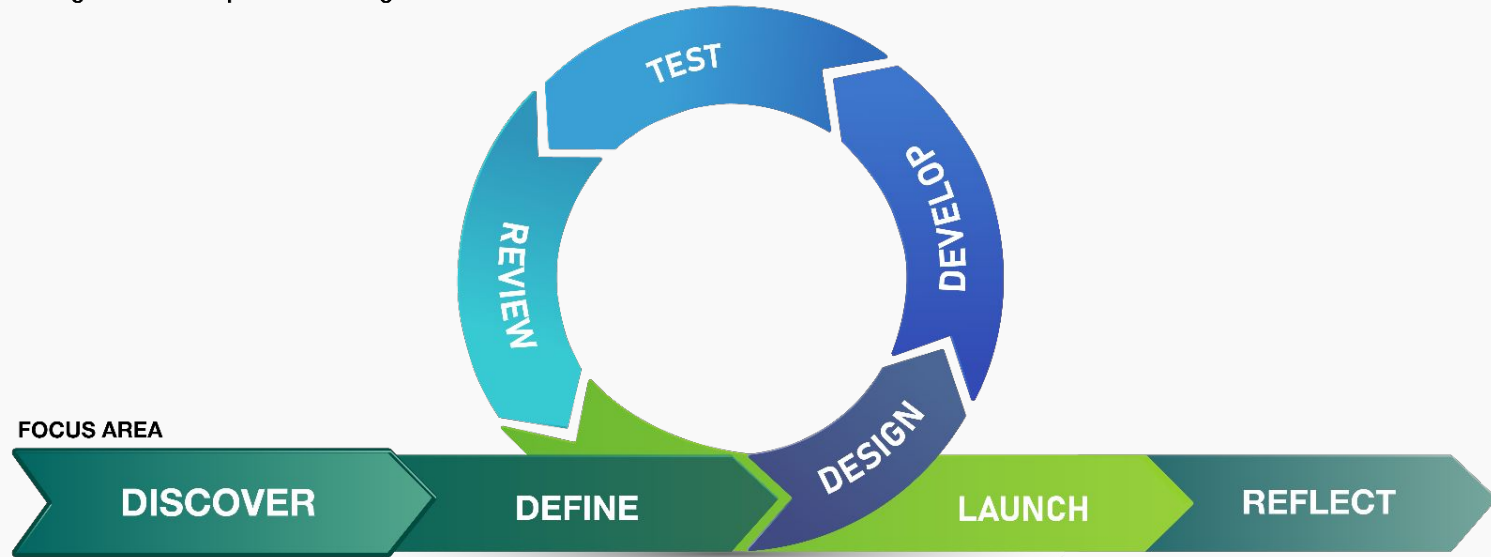




DDS AGILE METHODOLOGY FOR THE DOD

INTEGRATING HUMAN CENTERED DESIGN

While Agile is an approach to problem solving,
Human Centered Design focuses on problem finding.

**DISCOVER****DEFINE****DESIGN****DEVELOP****TEST****REVIEW****LAUNCH****REFLECT**









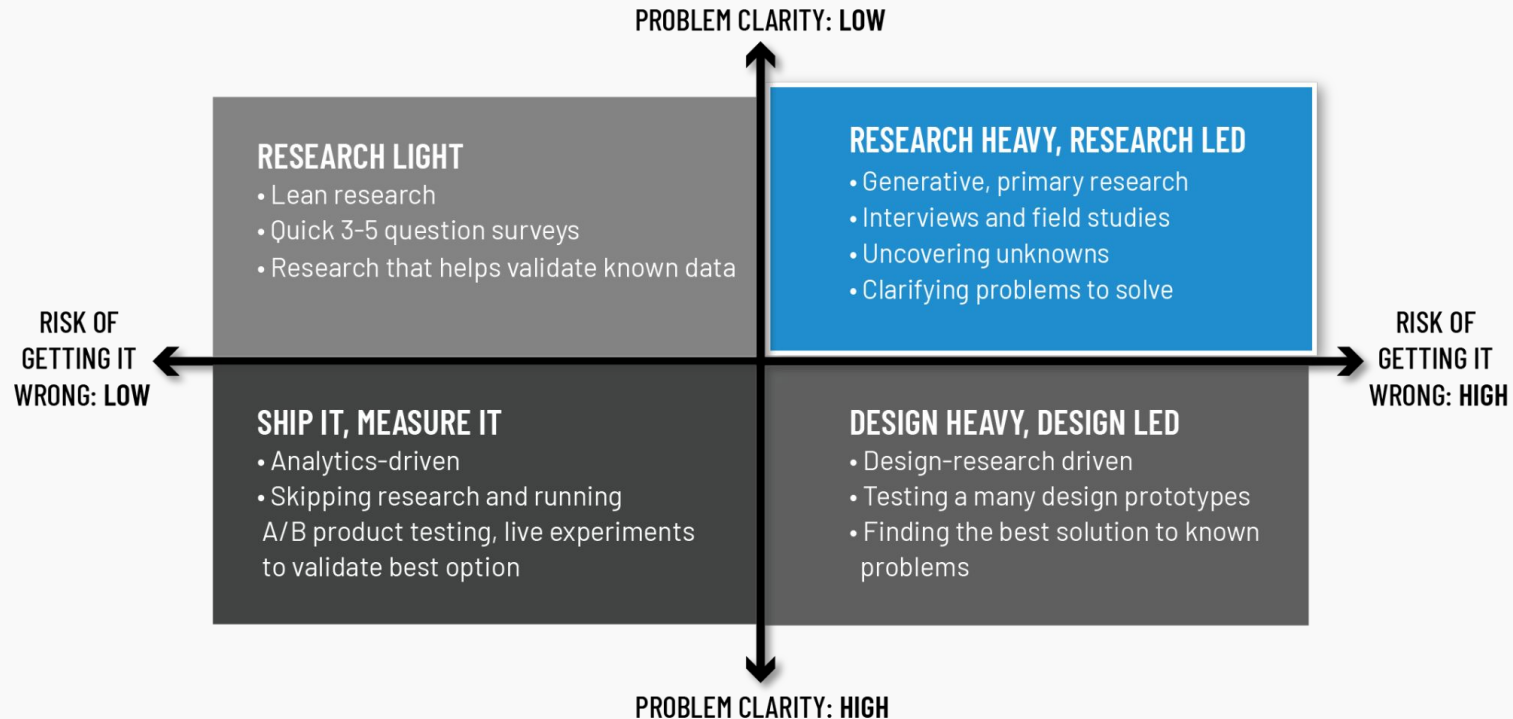
DISCOVERY & RESEARCH AT DDS

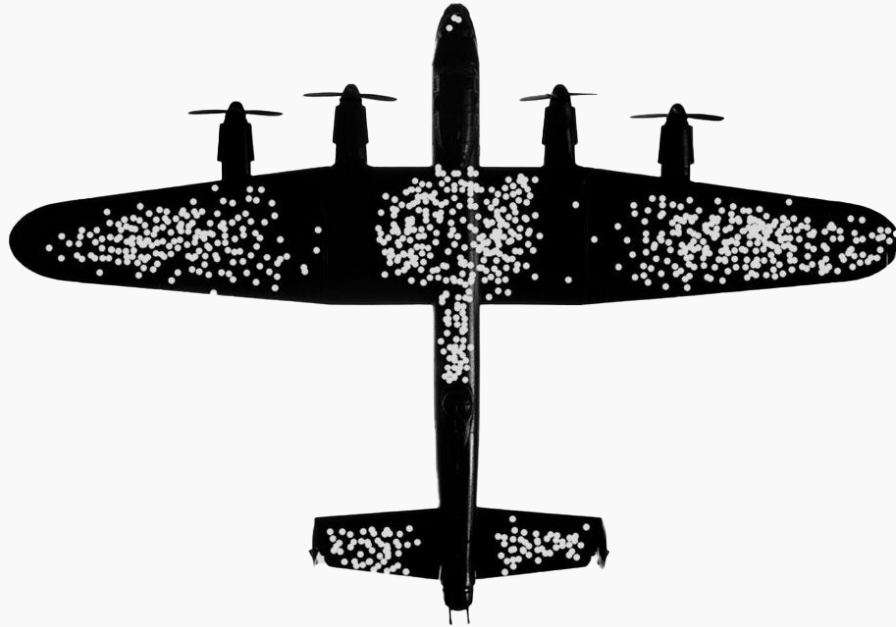
WHAT IS DISCOVERY?



- Research heavy - foundational and generative
- Uncovering the unknowns; problem finding
- Clarifying user problems to solve
- Asking well thought out questions
- Capturing interviews, written or recorded, evidence to support findings, alignment on findings
- At DDS it's an expedition: teamwork

UX FRAMEWORK FOR PRODUCT RESEARCH & DISCOVERY





***“The clarity is murky at best
and the stakes are high.
Solutioning too quickly runs the
risk of solving the wrong
problem—or no problem at all.”***

— Jeannette Fuccelle, Sr. UX Researcher

WHY IS DISCOVERY IMPORTANT FOR PRODUCT PLANNING?

Product discovery & research is crucial because it lays the groundwork for successful product development

- Understanding user needs
- Gathering evidence
- Understanding the data; what form it's in
- Minimizing risk
- Aligning stakeholders
- Enhancing user experience, engagement, acceptance
- Iterative improvement

HOW? DISCOVERY IS NOT DONE ONE WAY: IT'S AGILE

- Go on site to interview and understand users in their work
- Have a plan, work the plan, adjust the plan often and be flexible
- Have an interview rubric — work questions
- Always try for 1:1 interviews; notes and quotes are key
- Diligently watch for interviewer bias, user bias
- Be a “product therapist” — listen carefully and ask WHY a LOT!
- Validate what you heard with your product team

DDS PROJECT EXAMPLES

DDS PROJECT EXAMPLES

- How Discovery informed delivery of some projects we did with a **Combatant Command, NGA, and the US Army's 82nd Airborne.**
 - Is it the right problem?
 - Do we understand the problem?

DDS PROJECT: AIR REFUELING



image: dma.mil

DDS PROJECT: AIR REFUELING

*"You can't kick ass
without tanker gas."*

- AOC Mission Planner

- Discovery sprint at Combatant Command
- How we discovered the problem?
 - Project sourcing — being on site for a data *integration* problem tasked by Pentagon; not the right problem.
 - We heard something else; it was accurate fuel data *capture* and display that was a top concern for warfighters and leadership.
- Fuel data capture for tankers and crews: a sticky problem for teams at the Air Ops Centers that we're beginning to understand more about today.

DDS PROJECT: NGA



DDS PROJECT: NGA

- Low tech — creative use of post-its
- Flexibility of approach
- Working in classified spaces, even for unclass work
- Really understanding user journeys
- Ruthless prioritization

DDS PROJECT: ARMY 82nd AIRBORNE

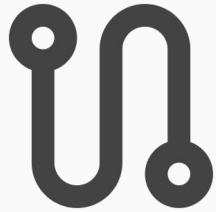


Photo By: Staff Sgt. Sandra Welch

DDS PROJECT: ARMY 82nd AIRBORNE

- *MAGIC — Manifest Auto-Generated In Code*
- Traveled to customer with team
- Rapid discovery
- Hackathon setting
- Left future abilities to incorporate AI due to future cleaner data

WHO: PRODUCT TRIO



UX DESIGNERS & RESEARCHERS

Research & understand user needs, and design human-centered product experiences and services



PRODUCT MANAGERS

Set the strategy, roadmap, and feature definition for a product or service



SOFTWARE, CLOUD, CYBER SECURITY & DATA ENGINEERS

Build functional, secure products that real people want to use and provide technical expertise on existing products, services, policies and strategies

UNCLASSIFIED



UNCLASSIFIED



THANK YOU

Contact us: feedback@dds.mil

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MANAGEMENT FROM BOTH
WORKING AT THE SERVICE
CAPABLE AND PRONE TO
RAPIDLY RESPOND, ABLE
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CLOSING THOUGHTS

DDS DISCOVERY ROUNDUP – TIPS & TRICKS

Please come visit us at
our **DDS Demo space!**

GO WHERE THE WORK IS and also:

- A multi-disciplinary team is key; kick-off projects with designer-researchers, product managers, and engineers
- Review the UX Research framework to size research effort based on problem clarity and risk
- Prepare: give yourself enough time
- Interview questions: Work on a rubric, print it out
- Stay open minded and nimble: Ask WHY a LOT!
- Be a Product “Therapist”
- Always try to set 1-1 interviews with users
- Notes & Quotes: support findings with evidence
- Validate top findings with teammates