





**TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.**

A Systems Engineering Model for Roadmap Alignment

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Prepared by:

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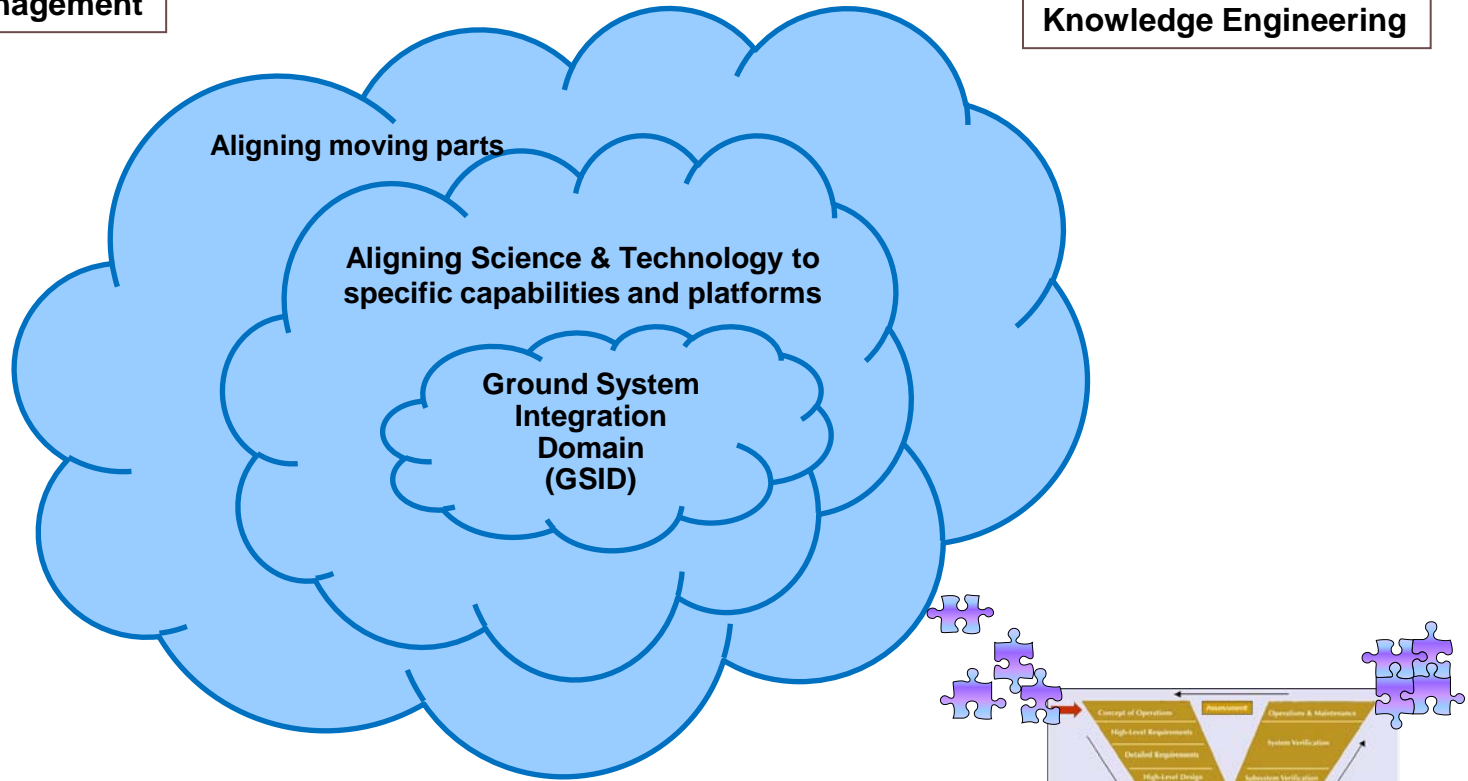
October 2009

1. Discuss problem space
2. Discuss condition of problem space
3. Discuss affinity process
4. Discuss architectural function
5. Roadmap alignment

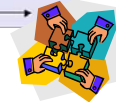
**Things evolve at their own rate!**

Information Management

Knowledge Engineering

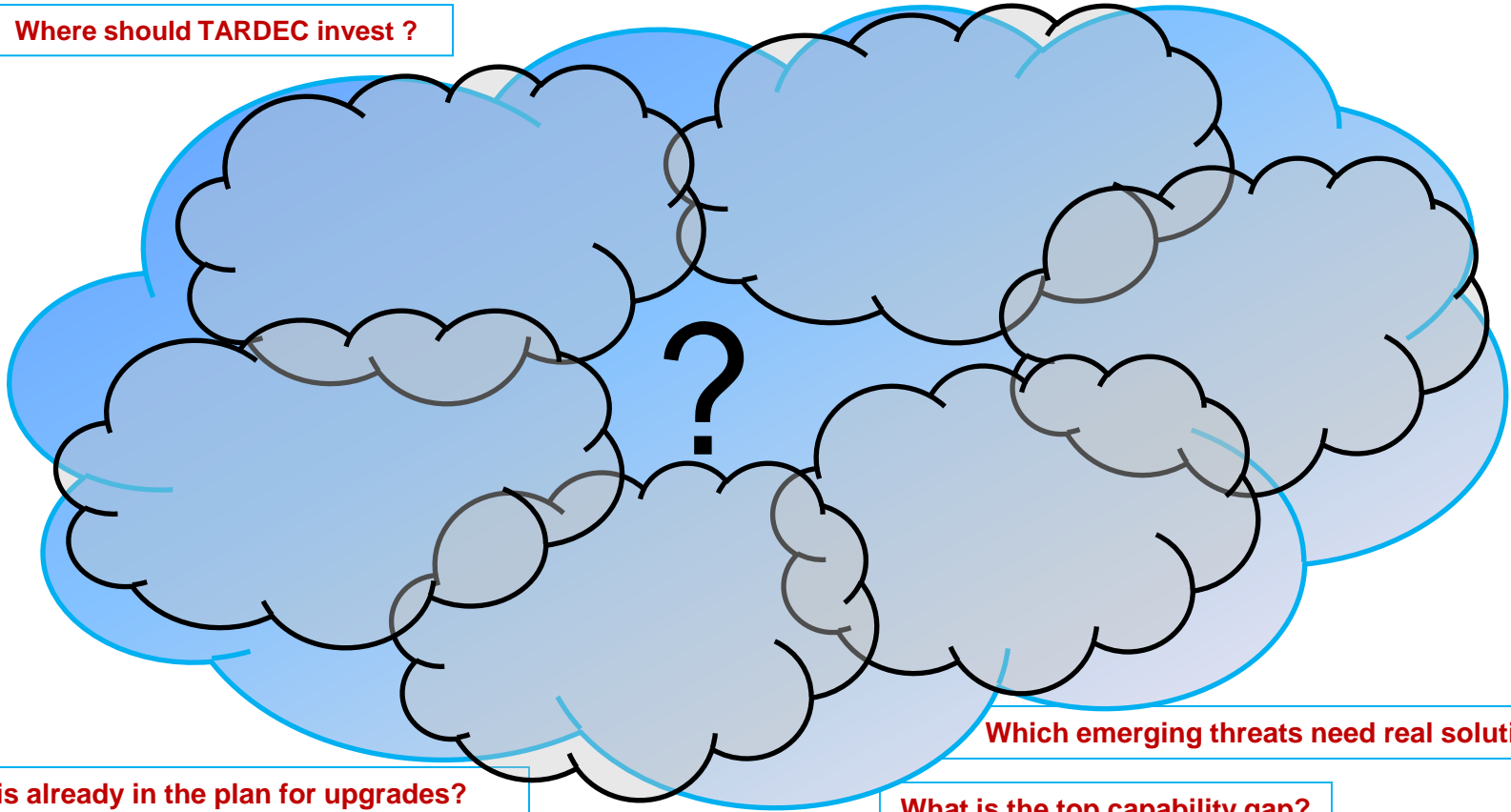


“We Systems Engineered Our Own Problem Solution”



What does the customer say they want for now?

Where should TARDEC invest ?

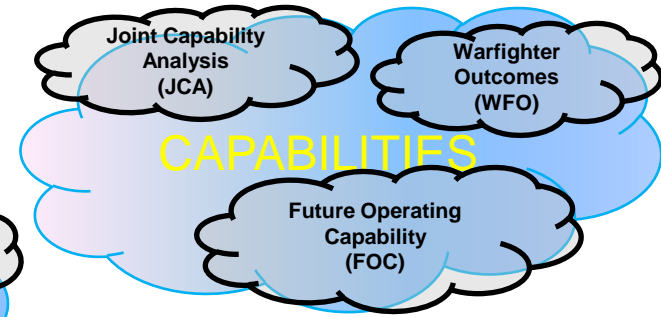
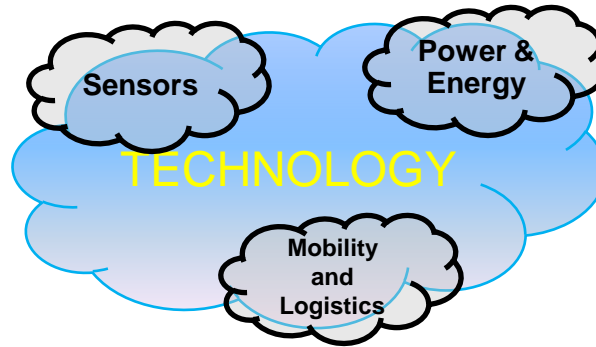
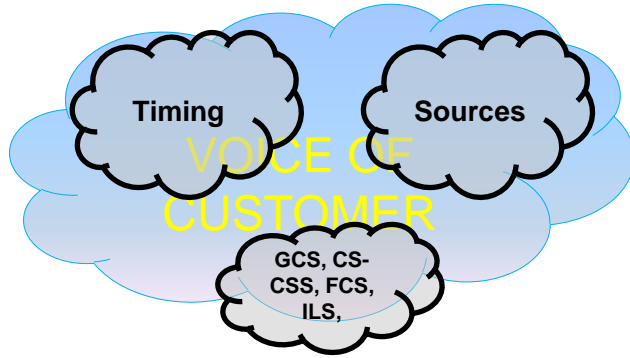


Which emerging threats need real solutions?

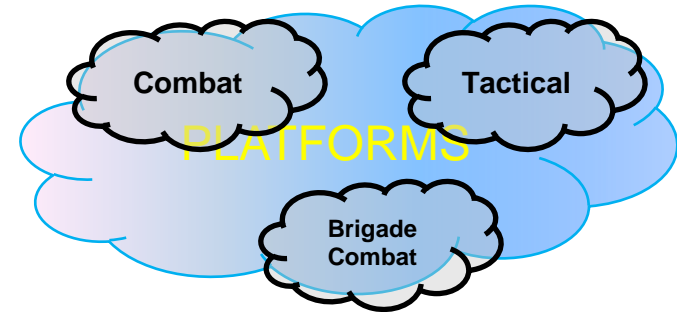
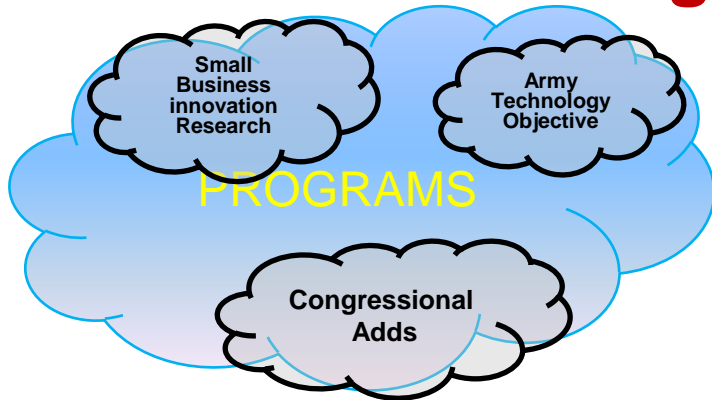
What is already in the plan for upgrades?

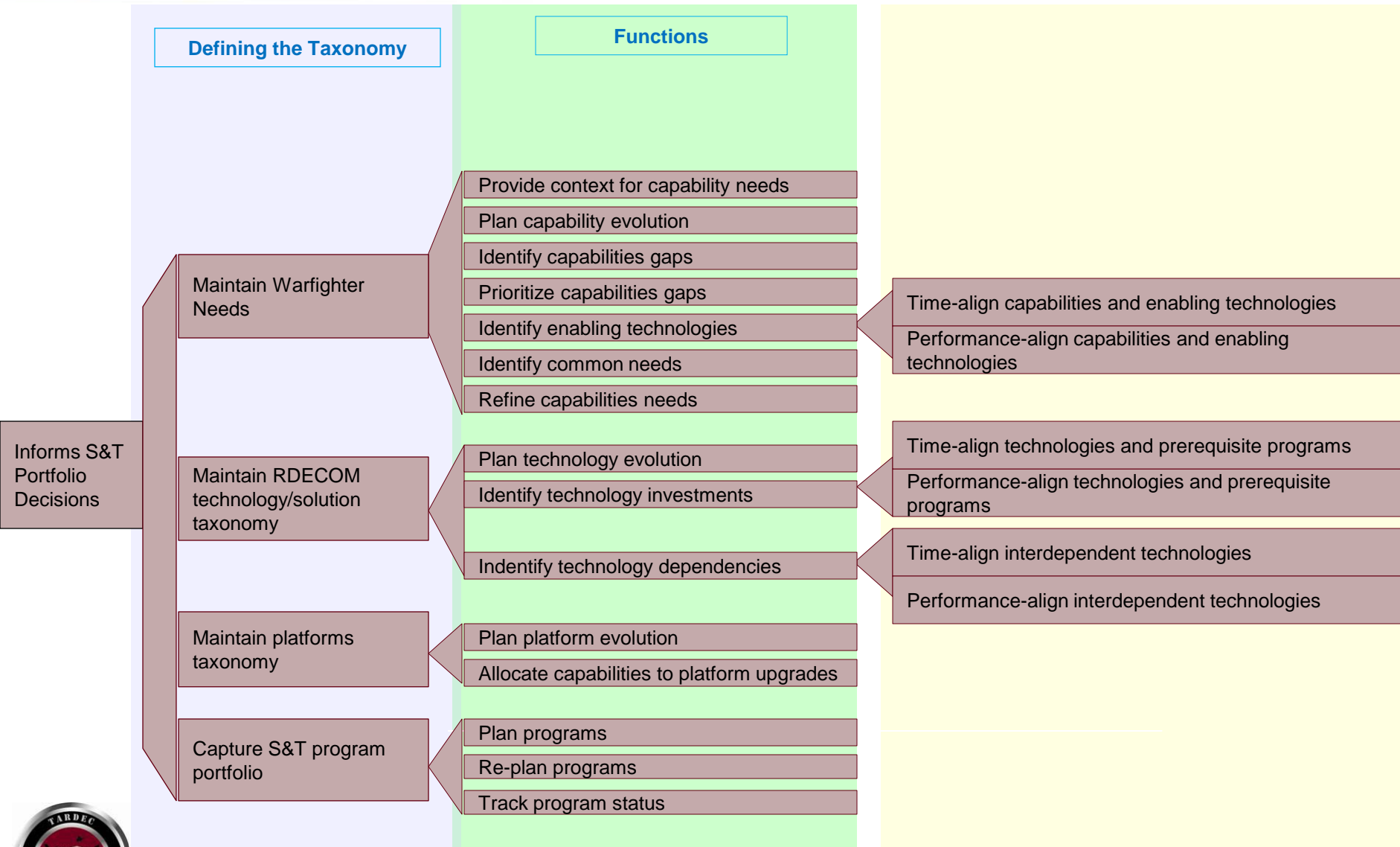
What is the top capability gap?

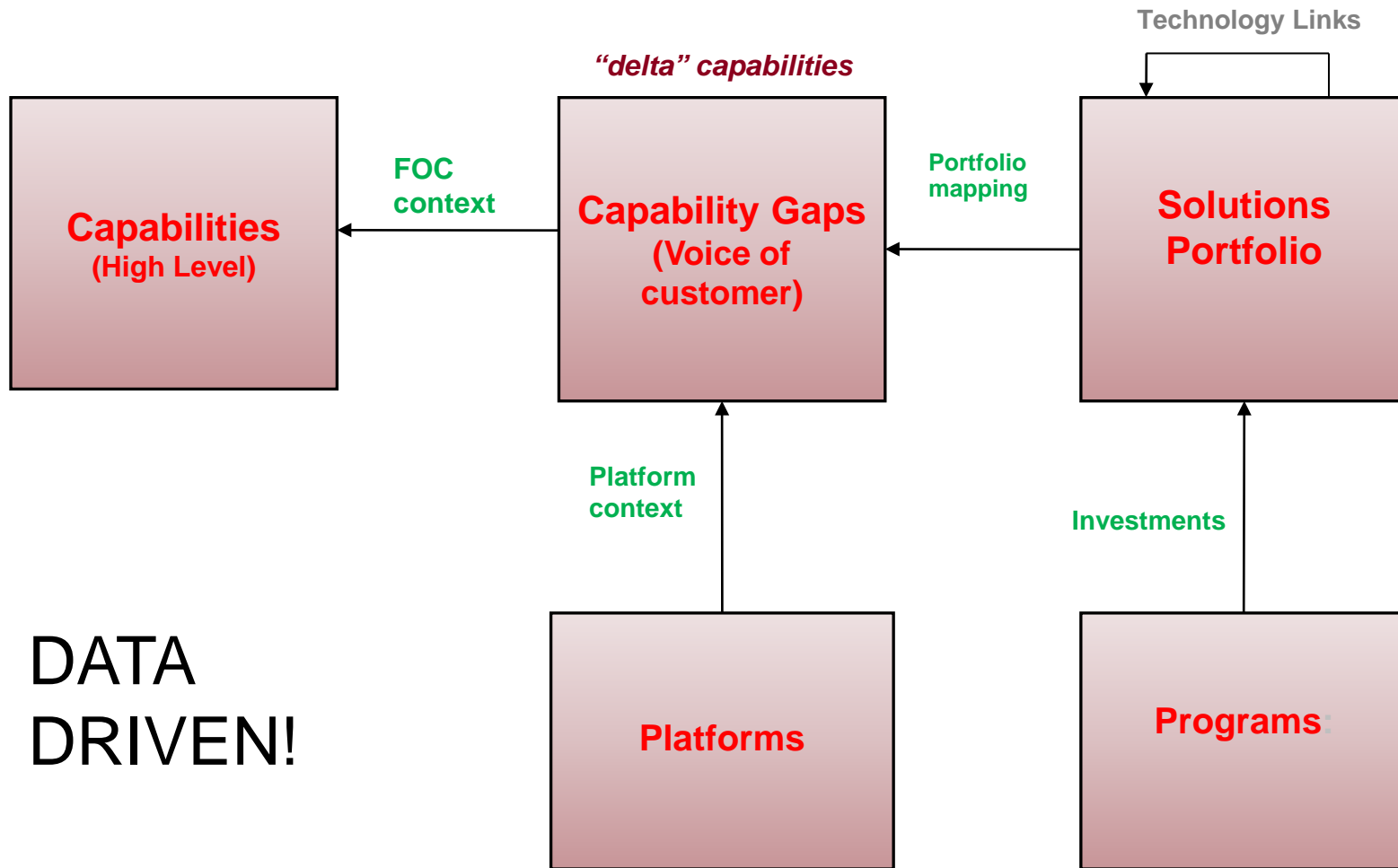
## Things do not align themselves!



**Things do not align themselves!**



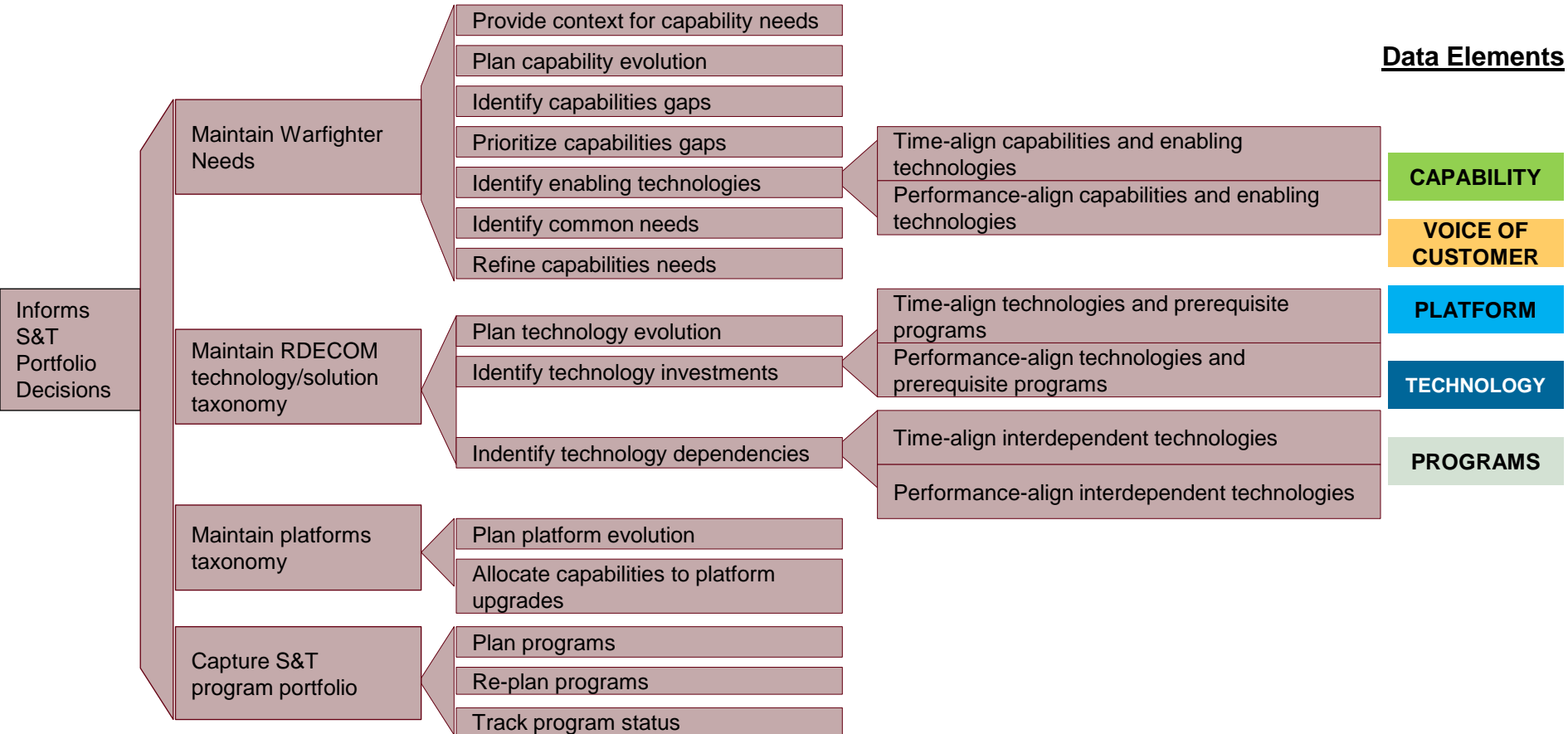




DATA  
DRIVEN!







Market "Pull".....

.....Technology "Push"

War fighter Needs  
Capability Gaps

- Prioritize
- Identify Common
- Decompose

Batch/Event  
Driven

Technology Focus  
Areas

- Power and Energy
- Mobility & Logistics
- Lethality

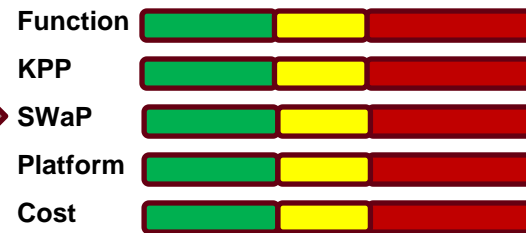
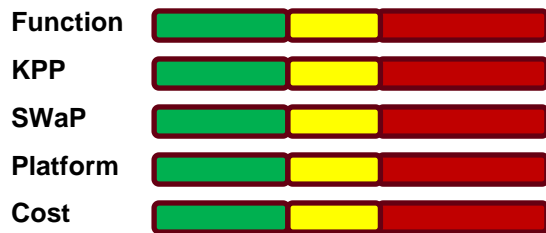
Requirements  
"Model"

- Functional
- Performance
- Platform Constraints

Technology  
Roadmap

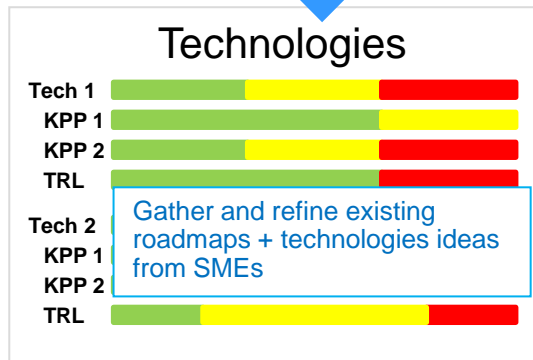
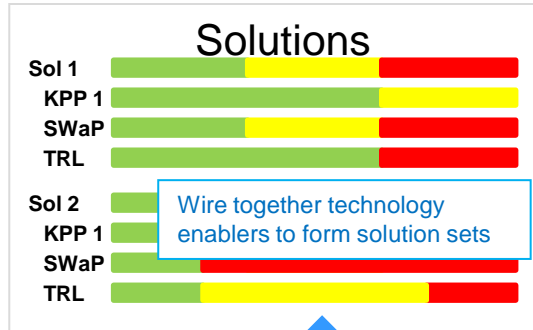
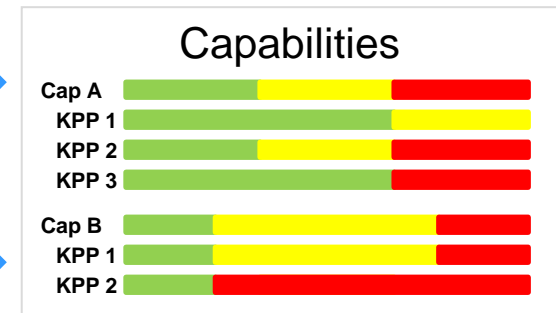
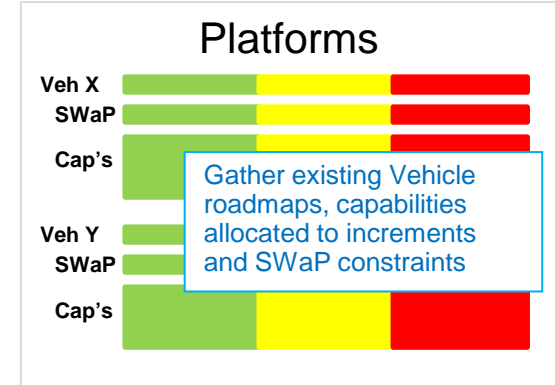
- Functional
- Performance
- Platform Constraints

Continuous  
Ownership model

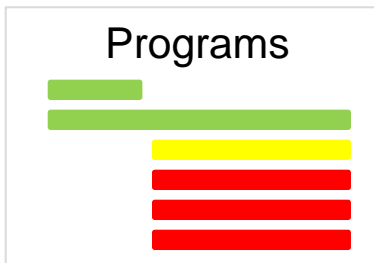


**Decisions:**

- D1: What is our vehicle/platform roadmap? Which capability gaps will be filled in which increments (customer)
- D2: What capability gaps will TARDEC attempt to fill? With which technologies and solution sets? (TARDEC)
- D3: How will we integrate our technology enablers into high-value (multi-use) solution sets? (TARDEC)
- D4: What portfolio of programs (investments) will best deliver the technologies and solutions that meet the warfighters' needs? (TARDEC)



Gather summaries of existing ATOs, SBIRs, Congressional Adds and identify their deliverables in terms of technology maturation (KPPs + TRLs)



Identify opportunities by analyzing PM 1-N lists, TFT Tech Gaps and WFOs

Decompose capability gaps into functions and KPPs using source requirements documents (due diligence to confirm alignment)



1. Everyone will fall into one of the alignment realms
2. Using non-conventional SE processes
3. Anything can be aligned
4. Structured information model - ready-for-use pattern



# Q&A Session



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