

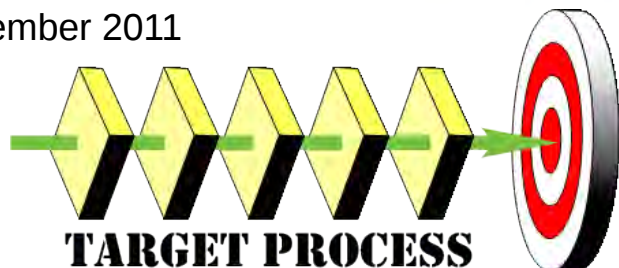


In Search of Innovation Excellence



TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

Heather J. Molitoris
TARGET Process Lead
9 November 2011



TARDEC Gated Evaluation Track
for Technology Development

Report Documentation Page			Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 09 NOV 2011		2. REPORT TYPE Briefing		3. DATES COVERED 09-11-2011 to 09-11-2011	
4. TITLE AND SUBTITLE IN SEARCH OF INNOVATION EXCELLENCE TARDEC Gated Evaluation Track for Technology Development			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Heather Molitoris			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army TARDEC ,6501 E.11 Mile Rd,Warren,MI,48397-5000			8. PERFORMING ORGANIZATION REPORT NUMBER #22371		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army TARDEC, 6501 E.11 Mile Rd, Warren, MI, 48397-5000			10. SPONSOR/MONITOR'S ACRONYM(S) TARDEC		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S) #22371		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Briefing to Stage-Gate Innovation Summit 2011					
14. ABSTRACT NA					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 13	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

- **Tank Automotive Research, Development, Engineering Center (TARDEC) Overview**
- **TARDEC Collaboration**
- **TARDEC/3M Partnership**
- **TARDEC's Gated Evaluation Track (TARGET)**



Disclaimer: Reference herein to any specific commercial company, product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply endorsement, recommendation, or favoring by the United States Government or the Department of the Army (DoA). The opinions of the author expressed herein do not necessarily state or reflect those of the United States Government or the DoA, and shall not be used for advertising or product endorsement purposes.

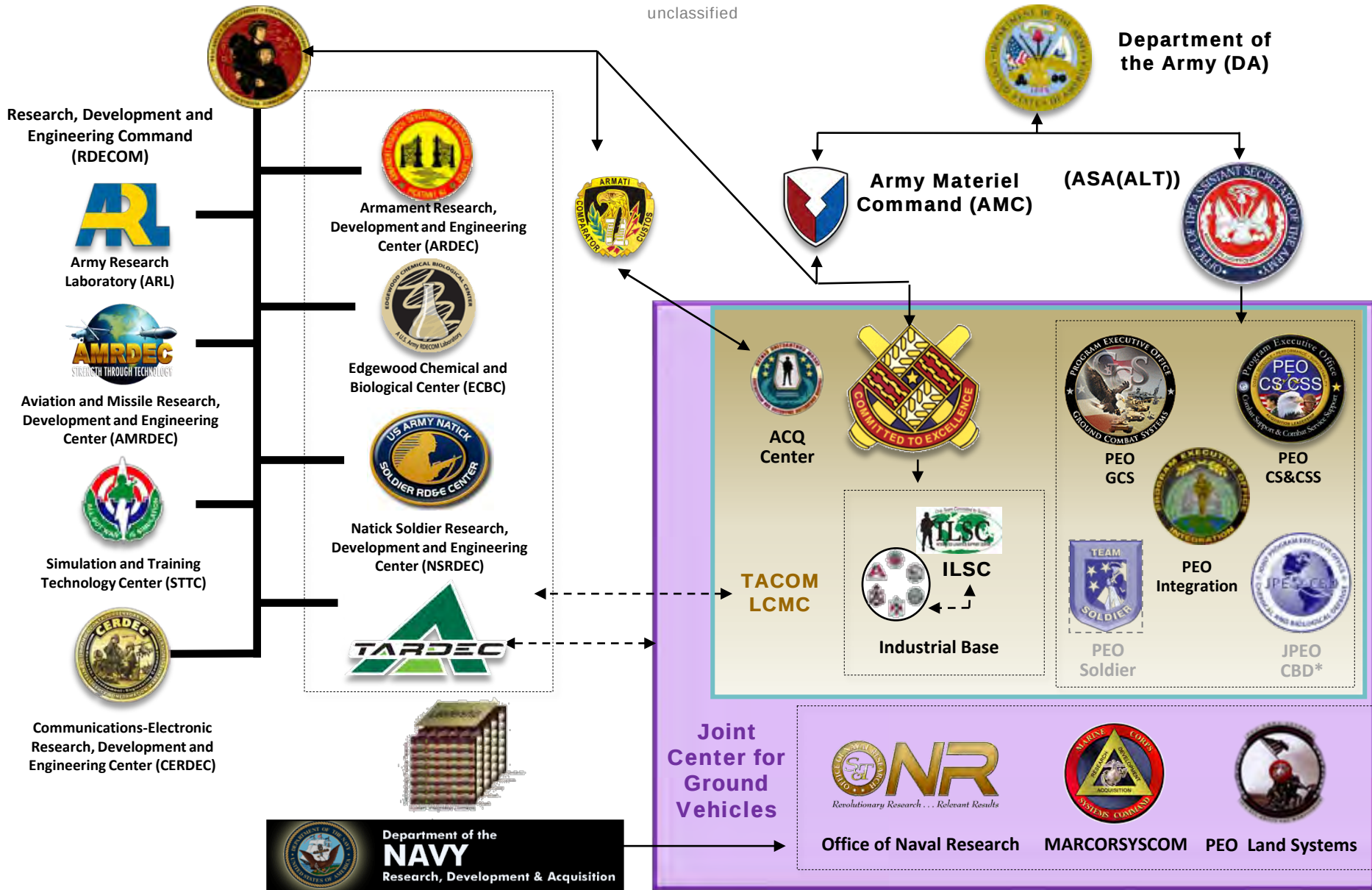
- TARDEC's mission is to develop, integrate and sustain the right technology solutions for all manned and unmanned Department of Defense (DOD) ground systems and combat support systems to improve Current Force effectiveness and provide superior capabilities for the Future Force.
- TARDEC's vision is to be the recognized DOD leader for ground systems and combat support systems technology integration and system-of-systems engineering across the U.S. Army TACOM Life Cycle Management Command.



Strategic Goal – Become world / national leader in Robotics, Energy and Underbody Blast

Lead. Innovate. Integrate. Deliver.

Ground Systems Enterprise



Government



Office of Naval Research



MARCORSYSCOM



PEO Land Systems

Created Joint Center



DOE



DOD-DOE AVPTA

Energy Initiative

Academia



Automotive Research Center (ARC)



Composites Vehicle Research Center



Fastening and Joining Research Institute (FAJRI) at Oakland University



Simulation Based Reliability & Safety (SimBRS)



Institute for Nano Soldier Technology

Industry

unclassified

Geographic Benefits

- Connected to World-Class Automotive Engineering Universities at our doorstep
- Defense Industry Ground Systems Hub
- Direct Linkage to World-Class Automotive Research and Development Centers
- Strategic Engagement with 1st, 2nd and 3rd Tier Automotive Supplier Network



Social Responsibilities

K-12



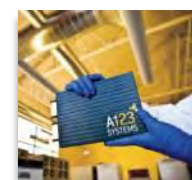
Outreach



International



New Industry

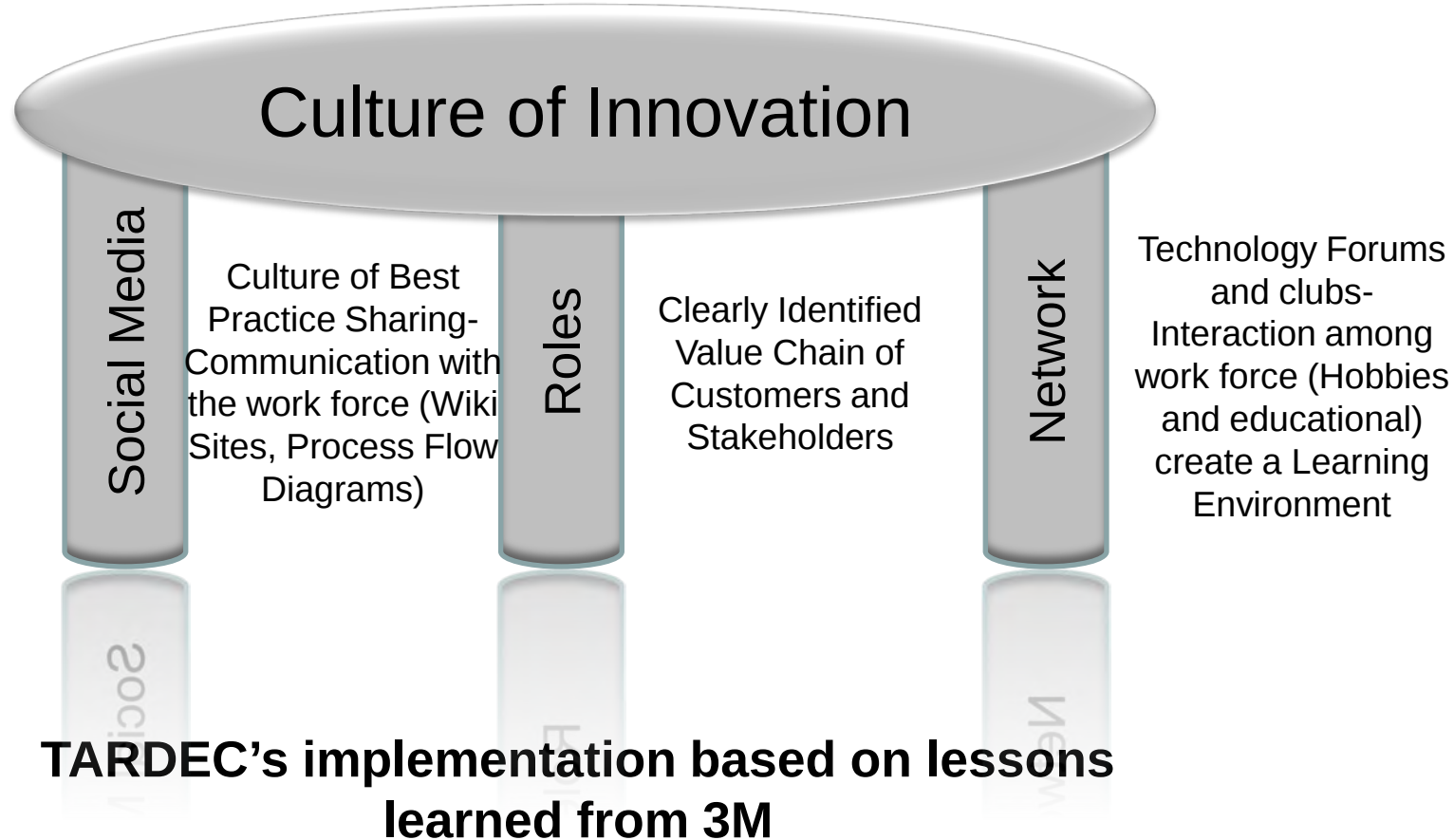


TARDEC exhibits our commitment to improving our communities in everything we do, from educational outreach to supporting local businesses

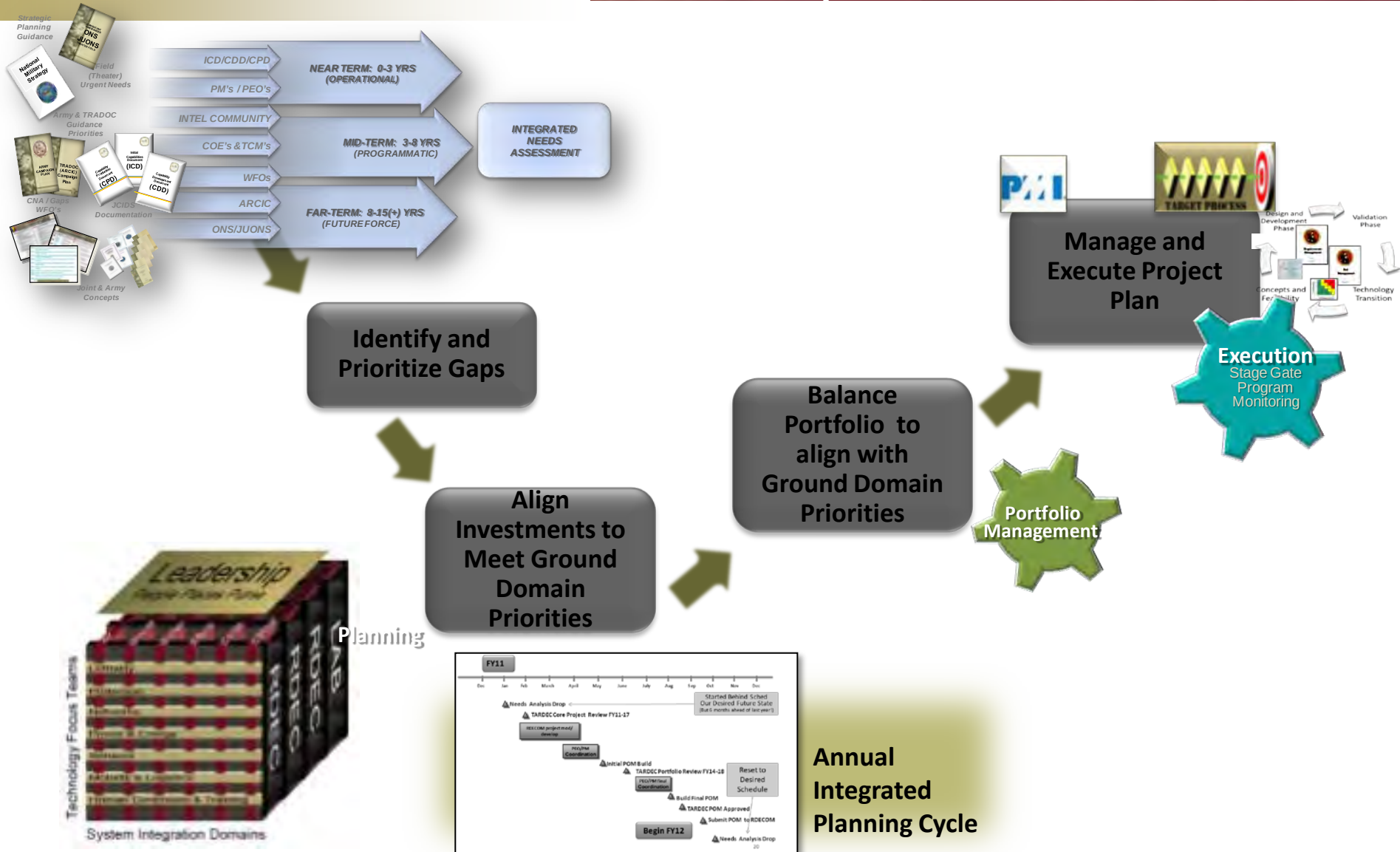
Innovation occurs at the intersection of culture and business processes

- Processes drive efficiency
- Build in innovative practices within the gated system
 - Create a Learning environment
 - Allow easy of sharing of best practices
 - Ingrain Voice of Customer
 - Empower project leads



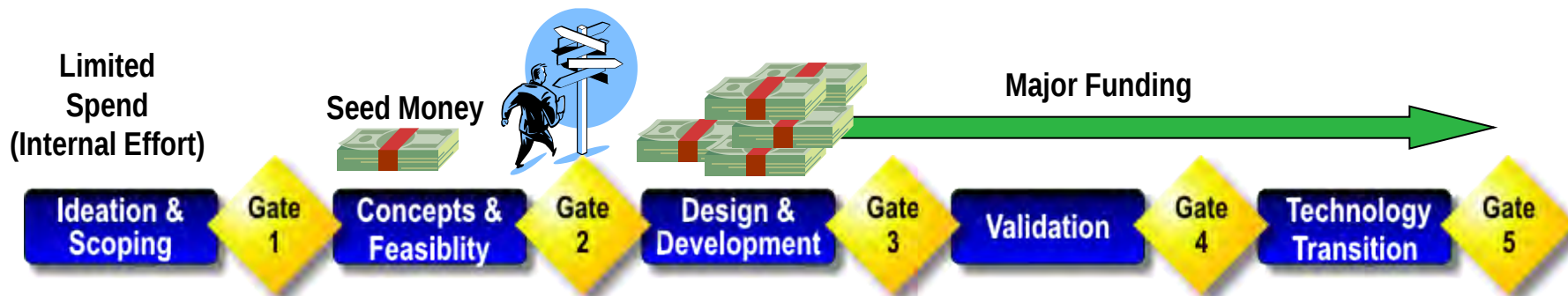


- Established Social Media capabilities (Wiki sites)
- Innovation Grants (Avenues to fund "Good Ideas")
- Networking Forums (Communities of Best Practice)



Science & Technology Gated System

Select Funding Path



Stage 1

- High Level Objectives**
- Alignment of Project with the big ARMY & TARDEC needs and strategy.
 - Understand the current technology landscape-current DoD Projects executing similar mission.

DELIVERABLE:
PROJECT CHARTER

Stage 2

- High Level Objectives**
- Establish Requirements Baseline
 - Identify Superior Concept and demonstrate technical feasibility
 - Complete TRA/MRA, establish project partners and determine in-house versus contracted Activities

DELIVERABLE:
PROJECT PLAN Requirements Baseline

Stage 3

- High Level Objectives**
- Develop a functional prototype that meets project performance objectives.
 - Complete Manufacturing Assessment/ Technology sensitivity assessment

DELIVERABLE:
Prototype Manufacturing Req

Stage 4

- High Level Objectives**
- Validate performance against customer requirements.
 - Define the operating range and the interface for technology technology.

DELIVERABLE:
Validated Prototype Operations Report

Stage 5

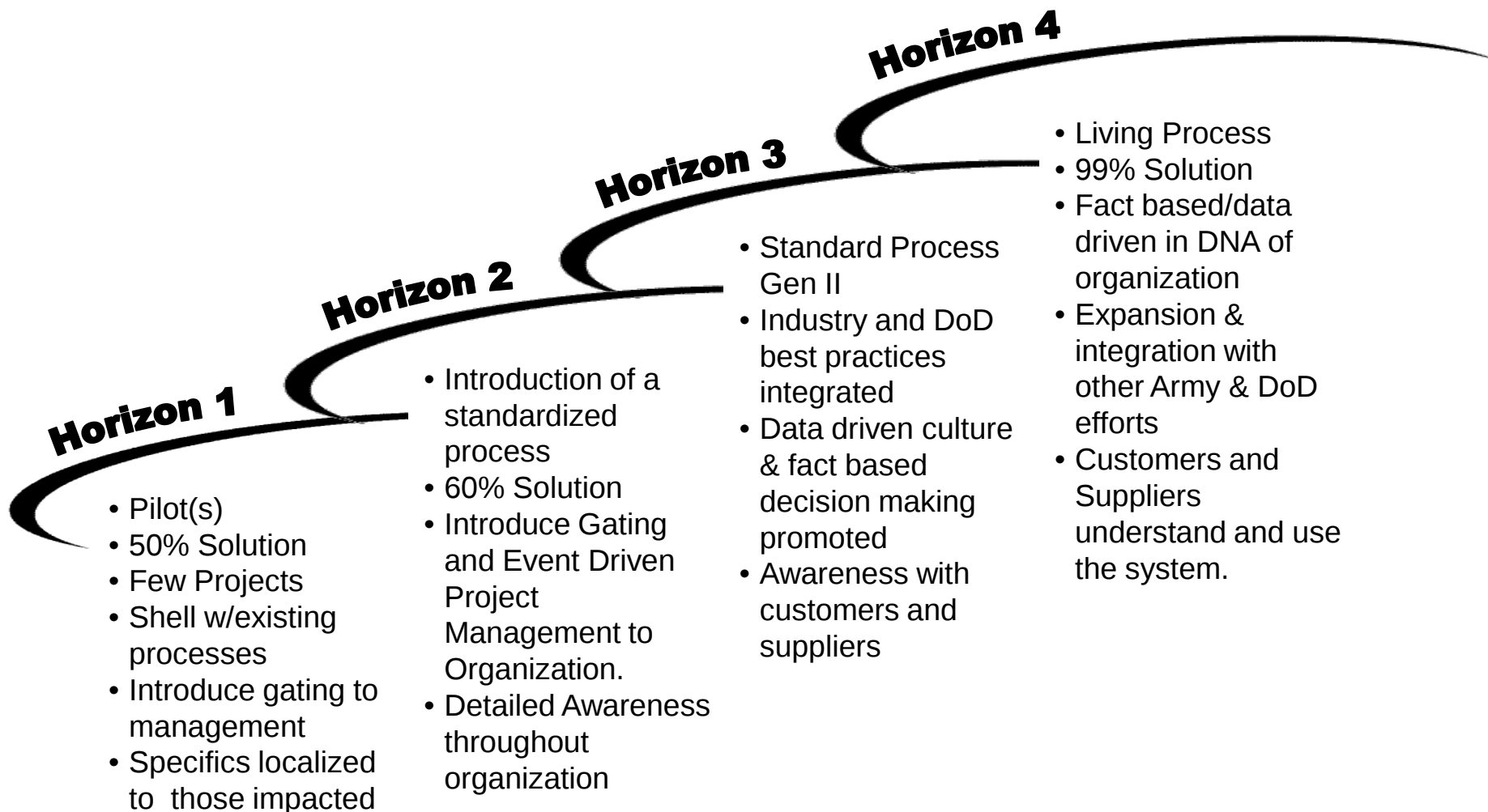
- High Level Objectives**
- Package the technology
 - Complete documentation of development.

DELIVERABLE:
Technology Support to Transition

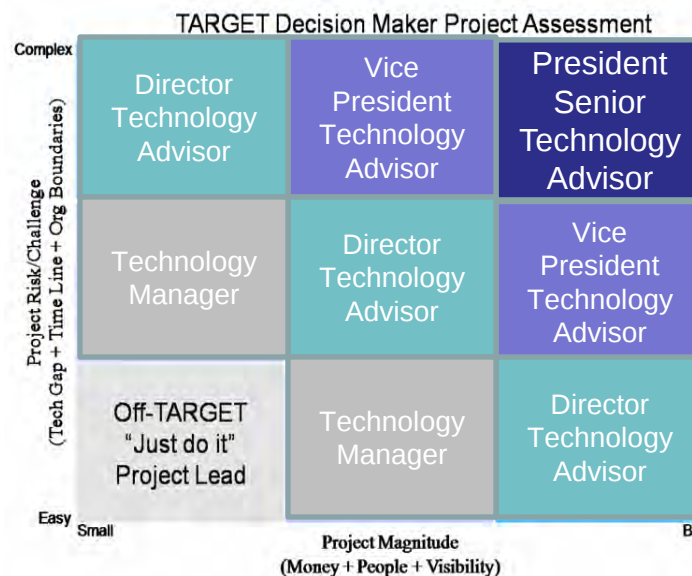
Unclassified

TARGET Maturity Model: Iterative Migration to Desired State

2010 2011 2012 2013

- Key **decision** points
 - Is the program healthy, valuable, & have a path forward?
 - Are adjustments needed?
 - Is this program still a top priority?
- Decisions driven by data
- Cross functional review committee – reviewers are responsible, accountable, or supply resources



- Outputs
 - Approval status & priority status
 - Work plan for next phase
 - Bounding box for team
 - Resource commitment
 - Timeline to next gate

Project: LZ Snow Removal System

Gate 1 (I&S→C&F) - Gate Decision Review Score Card

Gate Decision Authority Name: *Joe Gatekeeper*

Gate Pass Rating (R-G-B-I-K): *R*

Phase Deliverable	Gate Risk (R-Y-G)	GDA Scoring		Gate Risk (R-Y-G)	GDA Action Tasks
		Data Integrity (1-5)	Performance against "Go" criteria (1-5)		
Defined Enterprise Goals for Project		4	5	G	
		3	4	Y	
Technology Analysis		5		G	
Idea Definition		2			
Identified Customers & Stakeholders		1		R	
Project Charter					
Gate Plan					
Performance against I&S scope					
Detailed plan for CAF					
Initiation & Closing Gate Documents					
GDA Overall Score					

Gate Documents

- ☒ Draft overall project plan
- ☒ Detailed Project Plan for Concepts & Feasibility
- ☒ Program Charter
- ☒ Project Proposal Submission Package (Marketing chart & 8 question chart)
- ☒ Project Recommendation
- ☒ Gate Decision Authority Score Card

Project Metrics:

Project Slip Rate	
Cost	
R-Spend	

As the gates go, so goes the process – R. Cooper

- **Don't underestimate the importance of middle management**
- **Tenacity is the key with respect to culture change**
- **Invest time in branding**
- **Spend time on selecting the Pilots**

