

# UNPARALLELED COMMITMENT & SOLUTIONS Act like someone's life depends on what we do.





U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT & ENGINEERING CENTER





#### **IMMERSION THEORY**





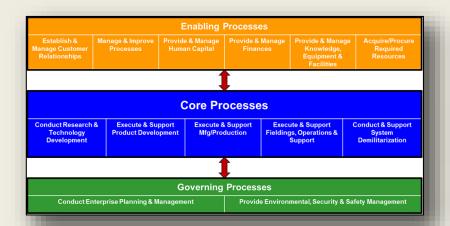


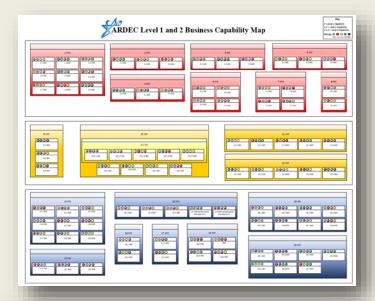


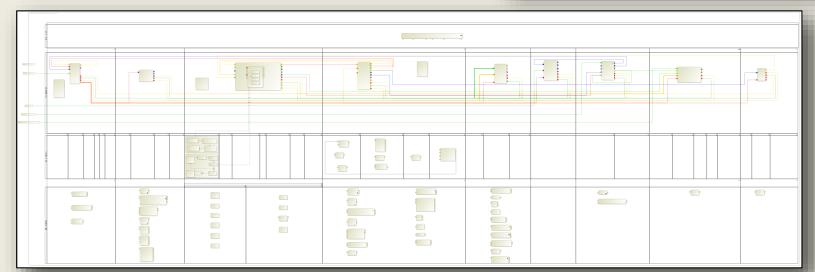


## IMMERSION THEORY (CONT'D)













## IMMERSION THEORY (CONT'D)

























to toggle hybrid

#### PRESENTER IN RANGE





Name: Kathleen

Walsh

**Employer:** US ARMY

ARDEC

**Office:** Strategic

Transformation

Office

Position: Enterprise

Architect

About: A certified Enterprise Architect working to improve the integration of strategic planning, systems engineering, and process development via the focused application of the Business Architecture (BA) discipline. Leading a crossdisciplinary team through the BA process and defining the Business Architecture capability at ARDEC.



Kathleen.r.walsh.civ@mail.mil



https://www.linkedin.com/in/kathleenrwalsh/





#### NASH EQUILIBRIUM

Keep quiet



## The prisoner's dilemma

#### Prisoner B

Prisoner B Both go to gets life jail for ten Confess imprisonment, years Prisoner A A goes free Prisoner A Both go to Keep gets life jail for one imprisonment, quiet year

B goes free

Confess

Source: Economist.com





#### **BUSINESS LAYER GAP**









#### **BUSINESS ARCHITECTURE FILLS THE GAP**







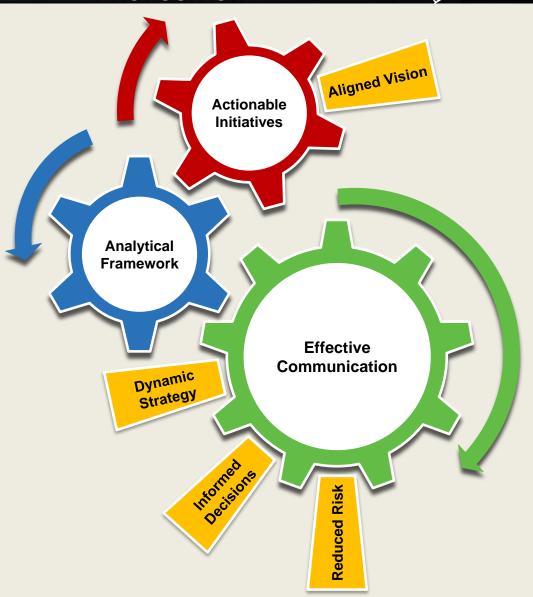


## BUSINESS ARCHITECTURE VALUE PROPOSITION



Provide an abstract representation of an enterprise and the business ecosystem in which it operates

Business Architecture is the link between strategy and operations





#### WHAT ARE WARGAMES?



## war-game (wôr-gām) noun

 A simulation, by whatever means, of a military operation involving two or more opposing forces, conducted using rules, data, and procedures designed to depict an actual or assumed real life situation.

The Dictionary of United States Military Terms for Joint Usage, 1 December 1964

- 2. A simulation, in accordance with predetermined rules, data, and procedures, of selected aspects of a conflict situation.
- An artificial or theoretical-conflict to afford a trial ground for the testing of strategic and tactical plans, and the acquirement of skill and experience.

Source: The United States Naval War College Fundamentals of War Gaming by Francis J. McHugh

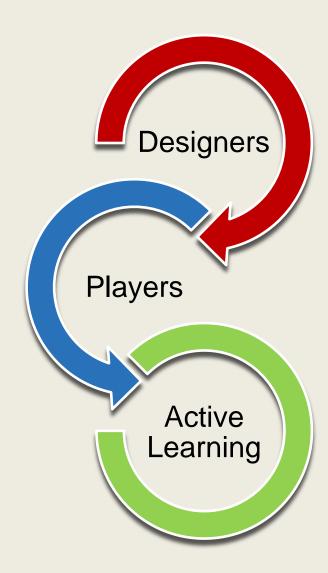




#### VALUE OF WARGAMES



Whereas lectures and articles merely disseminate information and ideas, wargames allow active learning in which not only the players but also teachers and game designers are confronted with continuous and often unexpected questions and challenges as they explore, experiment, and compete within the artificial model which the game provides.



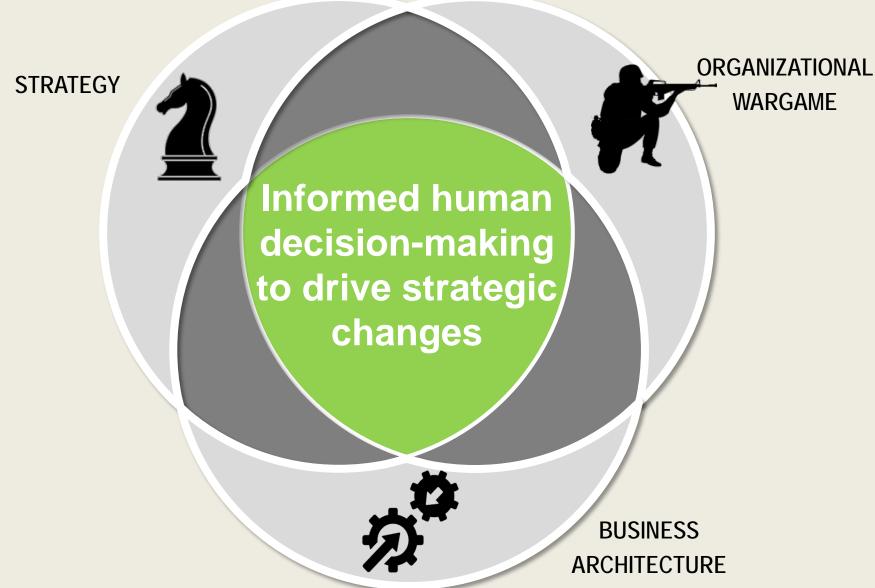
Source: The Educational Value of Wargaming by Philip Sabin





#### **A New Perspective**



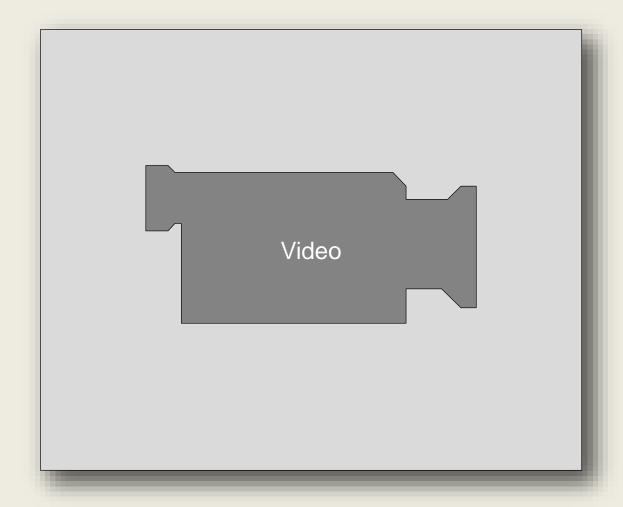






## **BUSINESS ARCHITECTURE IN ACTION**









#### ORGANIZATIONAL WARGAMING



Wargames Do Not:

Provide Finite Lessons

Have Built-in Answers

Become Off the Shelf Products

Wargames Do:

Start with a Blank Slate

Represent Specific Cases Explore Human Decisions

Contain
Quantitative
Measures

Test Strategies Save Resources

Source: **Business Wargaming** 







We turned Business Architecture into a game modeled after traditional DoD Wargaming.

The goal was to show the usage and value of Business Architecture artifacts, such as capability maps and the organizational model, to make **data-driven strategic decisions**.

We wanted to test whether a Capability Map can be used to make strategic decisions





#### **ENTERPRISE APPLICATION AND BUY-IN**



Capability Map could be used to make strategic decisions at all levels of the organization

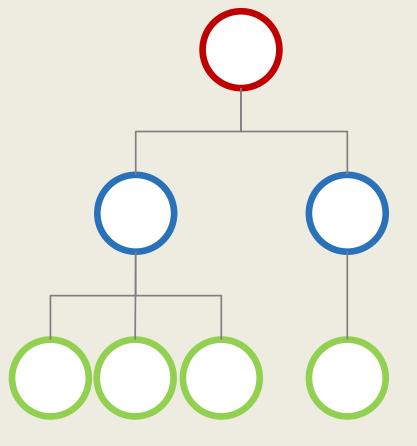
#### **Senior Management Level:**

snapshot of the organization to inform strategic decisions

#### Middle-Management Level:

evaluate proposals, prioritize needs and investments

Working Level: determine where to invest resources







#### **BUSINESS MODEL CANVAS**



Business Model Canvas is a strategic management tool for developing new or documenting existing organizational models.

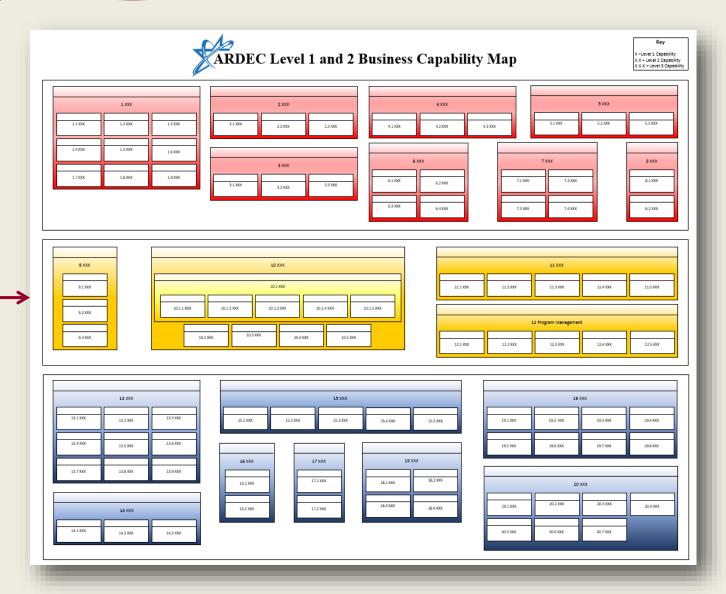






#### ARDEC BUSINESS CAPABILITY MAP









#### **ENABLER MATURITY RATINGS**



#### **CAPABILITY MATURITY TABLE**

CALABIETT MATORITI TABLE					
Maturity	People	Process	Technology	Information	
Level 1	Significant Resource Constraints and/or Skill Gaps Exist not Available	Ad Hoc The starting point for use of a new or undocumented process	Non-existent	Not Available	
Level 2	Some Resource Constraints and/or Skills Gaps Exist	Repeatable The process is documented and may be used by some pieces of the organization	Present but Significant Workarounds Required	Present but Highly Fragmented and Difficult to Access	
Level 3	Adequate Resources Available with Minimal Skills Gaps	Consistent The process is used as a standard business process	Present & Meets Basic Business Requirements	Present but Not Readily Accessible and/or inaccurate	
Level 4	Resources & Skills Available to Meet Primary Business Needs	Measured The process is quantitatively managed against defined metrics	Supports Business Requirements But Lacks Efficiency	Generally Accurate w/ Defined Reporting	
Level 5	Resources & Skills Available to Meet Business Needs including Specialized Skills	Optimized Process Management includes deliberate improvement	Contributes to Efficiency of the Capability	Readily Accessible & Accurate Including Ad Hoc Reporting Capability	

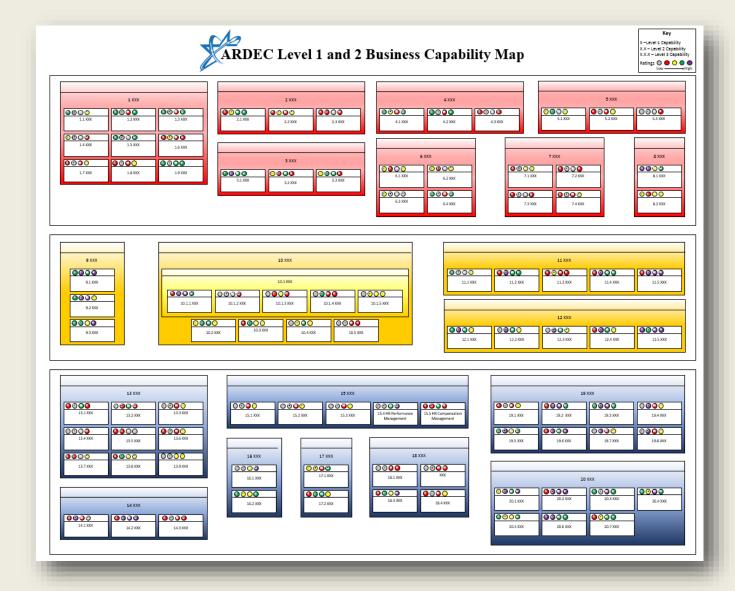
Source: Modified from table provided by Mandy Spiess, process section from Capability Maturity Model





#### RATED ENABLERS

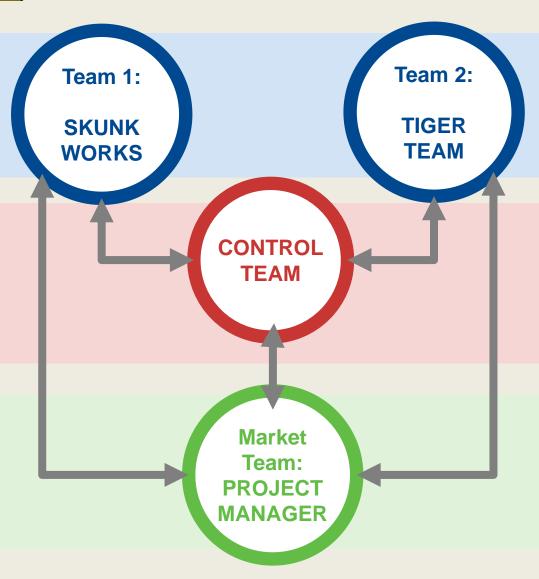






#### WARGAME DESIGN





#### **Teams**

- Create an offering for the market team
- Execute strategies
- Make adjustments based on reactions of market

#### **Control Team**

- · Structure and run the game
- Introduce external shocks
- Track models and variables
- Play all other participants

#### **Market Team**

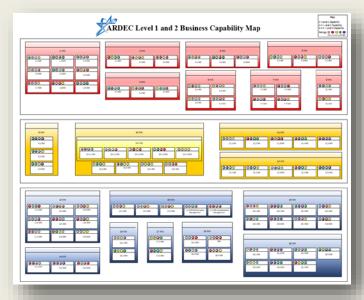
- React to strategies of the different competitors
- Drive the market dynamic
- Judge attractiveness of offerings





#### **DAY 1: TECHNICAL PROBLEM**







Planning and Identifying **Major Threat** Categories

The act of identifying necessary activities necessary and creating high-level groupings of current and future threats

Conduct Environmental Scan

The act of collecting and verifying source data used to identify and classify the threats **Analyze Data** 

The act of assessing our technical capabilities and those of our adversaries, including ranking them in terms of priorities for each specific threat

Make Strategic Decisions

The act of deciding how to best allocate resources to address the threats with the most impact

The act of sharing the organization's prioritized threats and mitigation strategies, as well as providing necessary training to understand the identified

Train and

Disseminate

Information

Planning and Conduct Identifying Environmental Major Threat Scan Categories 3.1 Plan Definition 1.5 Task Definition 1.7 Strategic Technology Definition 2.2 Research Result Management 6.3 Market Targeting 6.3 Market Targeting 7.2 Message Structuring 19.1 Information 18.2 IT Matching

Train and Make Strategic Analyze Data Disseminate Decisions Information 1.9 Strategy 1.3 Strategy Definition 3.1 Plan Definition 1.8 Strategic Research 7.2 Message Structuring 16.1 Training 18.2 IT Matching 19.4 Information Security
Management





#### **DAY 1: ASSUMPTIONS**





Teams will not document the capability allocation to the value stream steps...

...but teams did discuss it and some members documented pieces of it



Teams will focus on Technical Capabilities instead of Business Capabilities...

Teams went on 'technical tangents' but made it back to the Capability Map



Teams will distribute investments more or less evenly over the map...

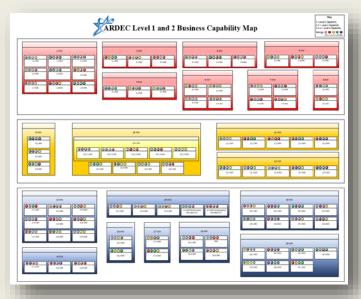
Teams made investments based on Capability relevancy and maturity





#### **DAY 2: ORGANIZATIONAL PROBLEM**









The act of marketing to the workforce the competency gaps that need to be grown in order to successfully meet to successfully and strategic goals

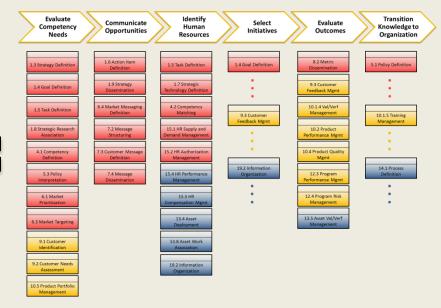
The act of selecting the appropriate employee(s) that have the required skills, interests, and motivation to successfully strategic goals

The act of defining the plan for how the competency gaps will be filled

The act of assessing the results of the initiative against organizational measures to determine the effects on competency growth

Transition Knowledge to Organization

The act of disseminating initiative deliverables to the organization



competency gaps and/or

organizational needs to

achieve the mission

predicting future





#### **DAY 2: ASSUMPTIONS**





Teams will not create a value stream for the new problem...

...but teams did discuss needing a defined 'process'



Teams will not document the capability allocation to the value stream steps...

...but teams did discuss it and some members documented pieces of it



Teams will not crosswalk the allocated Capabilities to consolidate investments

Teams verbally discussed this but got confused because they did not document capability to Value Stream







If you stop creating, stop challenging the status quo, stop striving to improve, you become vulnerable.







#### **COMPLACENCY VERSUS URGENCY**



Complacent Culture

Blind to Dangers to Existence

Rely on Past Successes to Drive Future

**Fail to Lead** 

Strategy with No Real Purpose

Low **Expectations** 

Repetition instead of Innovation

Urgent Culture Awareness of Opportunity

Awareness of Dangers to Mission Activities
Conducted
with Purpose

Source: Daniel Lock Consulting





#### **ALIGNING TO THE FUTURE**



We assume enemies change, but our business does not because our mission and strategy to get there is static and perpetuates the complacency.





#### **IMMERSION THEORY REVISITED**



An upfront investment of time to fully develop the Capability Map and Capability definitions paid dividends in the end.

Teams hit the ground running and achieved more than ever imagined in a total of 9 working hours.



Realistic Environment



Aligned Intent & Understanding



Active Participation





#### **NEW ROLE OF STRATEGY**



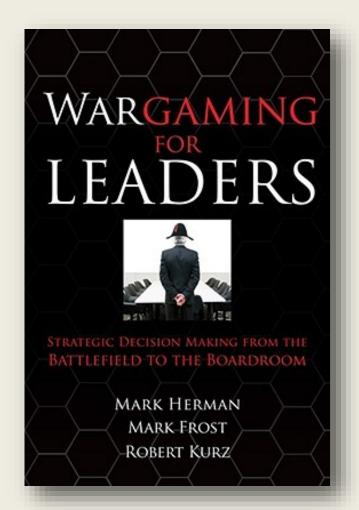
- Discovery-driven planning is a powerful tool for any significant strategic undertaking that is fraught with uncertainty
- Organizational Wargaming lets you quickly test out strategy and rapidly gain insight into the unseen uncertainties through player choice
- Business Architecture showcases authoritative organizational data for use in strategic planning to help avoid unconscious assumptions and break the equilibrium





#### How to get started





ISBN-10: 0071596887

- No practical guidance or tools on how to construct or use war game scenarios.
- Rather, the book is a series of descriptions (at a very abstract level) of how the authors have used war games with clients.





#### **CONTINUED PROGRESS**





In 2007 ARDEC became the <u>first</u> U.S. Federal and still remains the <u>only</u> DoD Organization to have won the Baldrige Award







## Thank You

Please stay in touch!



- kathleen.r.walsh.civ@mail.mil
- https://www.linkedin.com/in/kathleenrwalsh/