



## **Program Executive Office for Simulation, Training & Instrumentation**

# Game Innovation VII: Technology Roadmap for Serious Military Games

**Roger Smith**  
Chief Scientist & CTO  
US Army Simulation, Training,  
& Instrumentation  
[roger.smith@peostri.army.mil](mailto:roger.smith@peostri.army.mil)

Approved for Public Release.  
Security and OPSEC Review Completed: No Issues.

**SERIOUS  
GAMES SUMMIT**  
WASHINGTON D.C.  
OCT 30-31, 2006 **D.C.**

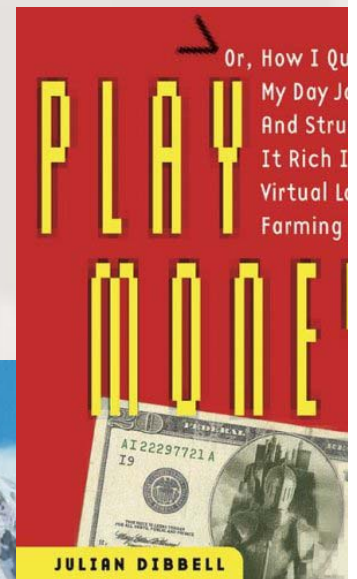


# The Power of Play

“Play is to the 21<sup>st</sup> century what steam was to the 19<sup>th</sup> century” - Power that can be harnessed for social and economic benefits.

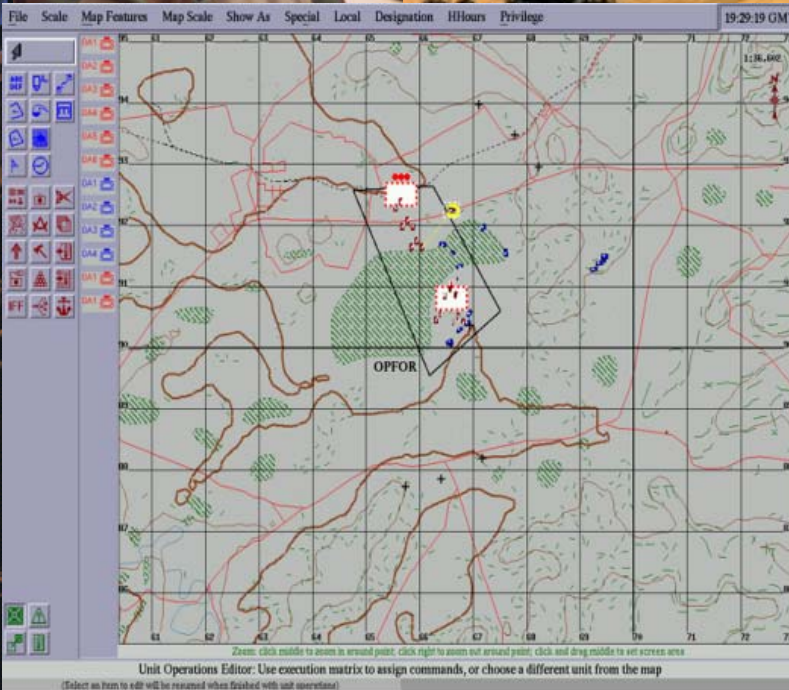
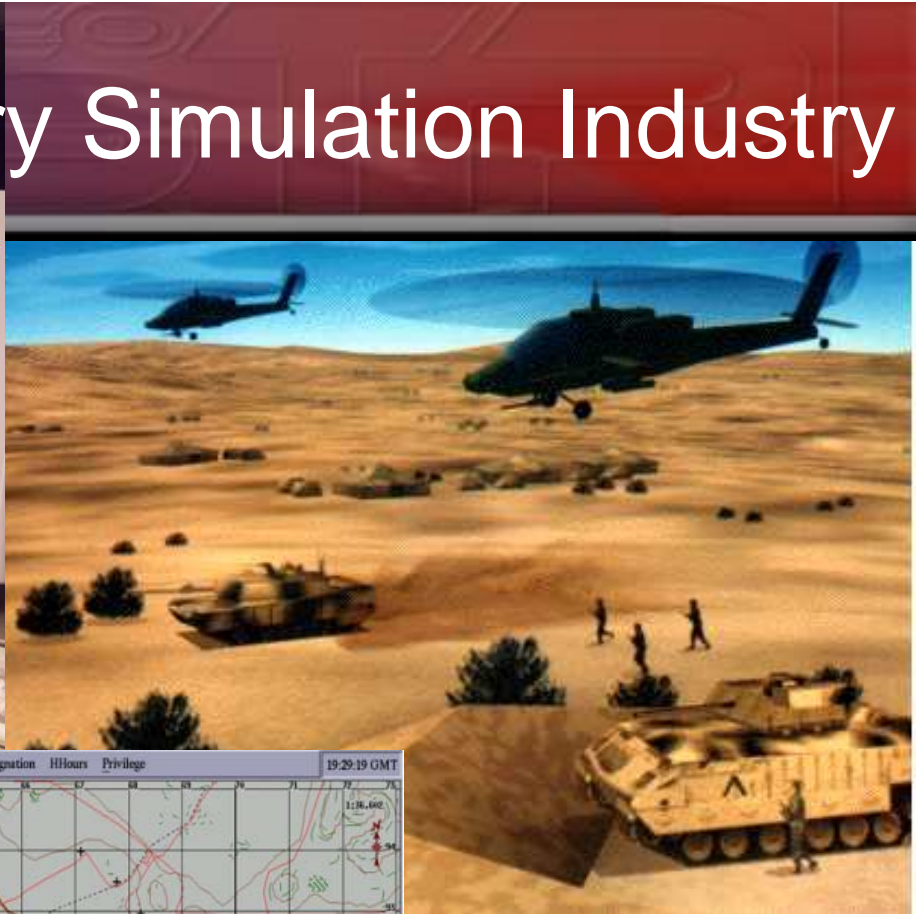


Julian Dibbell,  
*Play Money*



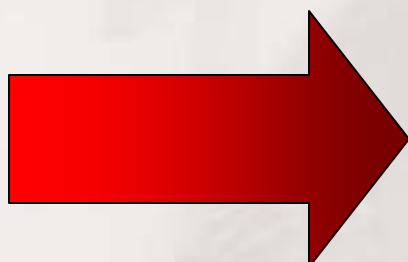
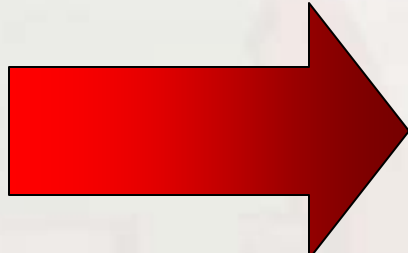
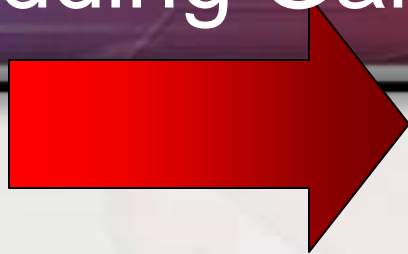
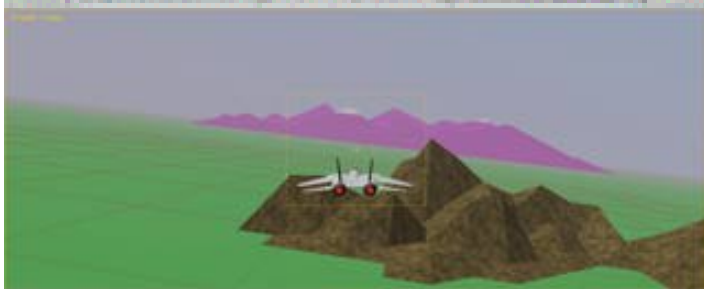


# Military Simulation Industry





# Modding Games





# Phases of Military Game Adoption

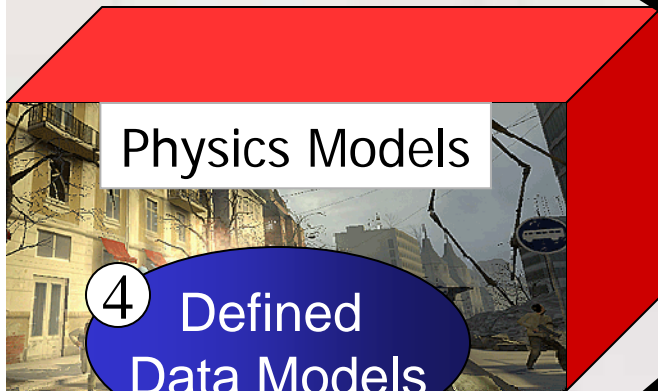
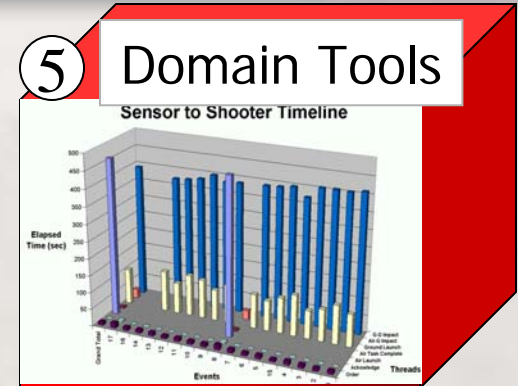
- Off The Shelf (Falcon 4.0)
- Artist Mods (Marine DOOM)
- Model Mods (Americas Army)
- Full Game Development (Full Spectrum Warrior)
- Game Decomposition and Technology Application (Every Soldier a Sensor Sim)
- Create Specialty Industry ...

... Searching for the right combination of technology and mission application.



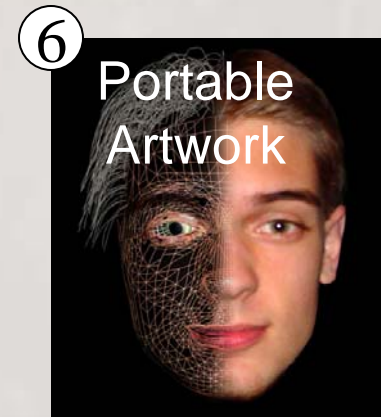
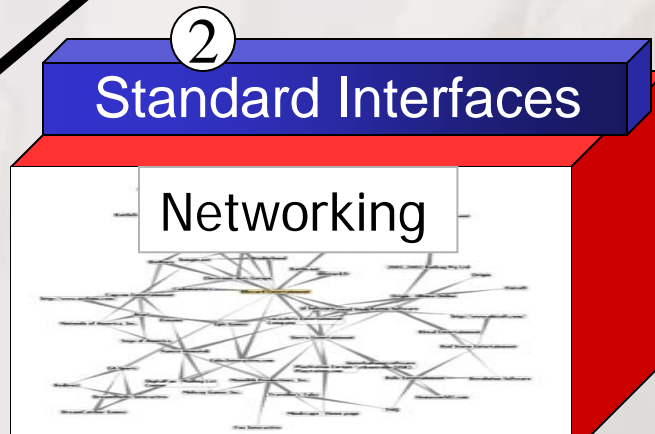
# Military Game Structure

① Separable Components



④ Defined Data Models

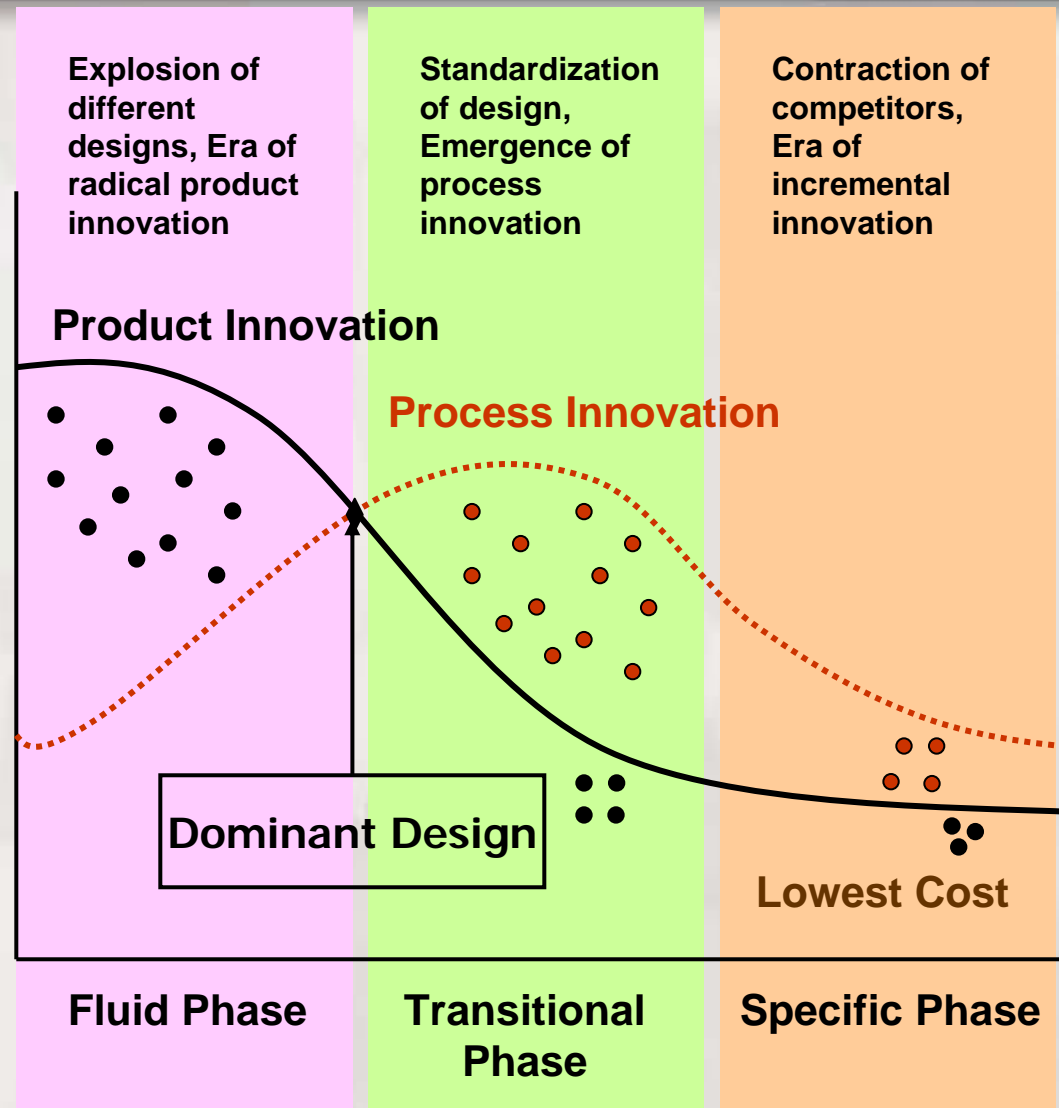
③ Middleware





# Serious Games & Dominant Design

- “Serious Games” for the military is a temporary phenomena
  - ❖ Military users will create their own unique industry, products, providers
  - ❖ Serious Games shops will be acquired or will shift emphasis
- Waiting for Emergence of ...
  - ❖ Dominant Design
  - ❖ Market Size



time

(Jim Utterback, 1996)





# Beyond the 3D Shooter

- Military started with combat operations – a.k.a. Trigger Pullers
  - ❖ Same start in more traditional training and simulation
- Low cost, rapid development will enable the acquisition of trainers for more diverse missions
  - ❖ Medical, Signal, Logistics, ...
  - ❖ MPs, Linguists, Maintenance, ...
- Moving beyond the traditional simulation audience is where the real benefit lies







# Accessible Console Platform

- Low Price Platform
  - ❖ Need to field to 100,000 Soldiers
- Community of Developers
  - ❖ Need talent for dozens of different titles
- Open to Experimentation
  - ❖ Need to experiment and explore
- Affordable Licensing





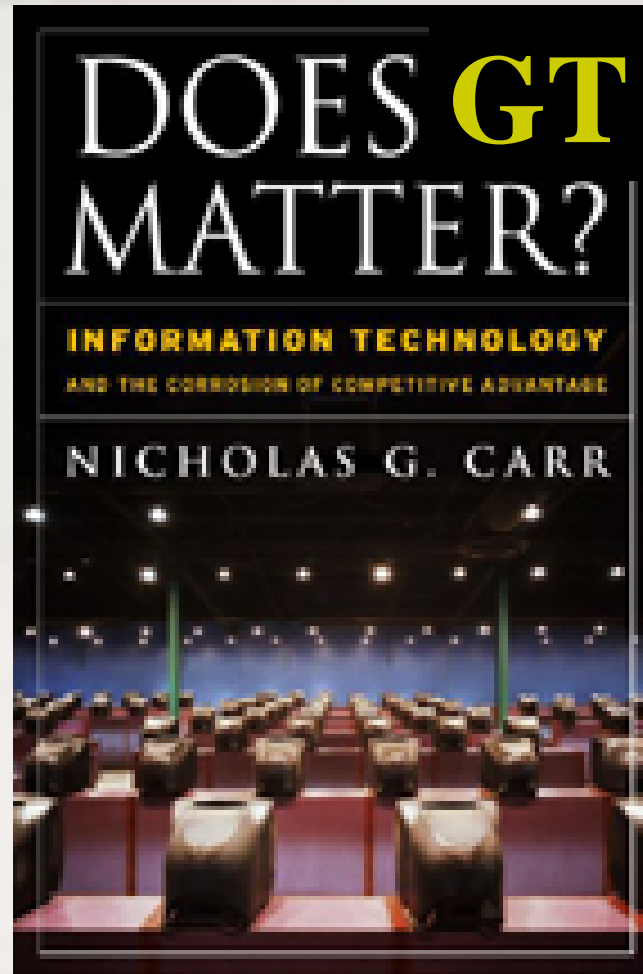
# Summary

- Serious Games Structure
  - ❖ Reconfigurable Game Tech
- “Serious Games” is a temporary phenomena for the military
  - ❖ Serious users will create their own unique industry, products, providers
- Beyond the 3D Shooter
  - ❖ New Customers – New Game Forms
- Accessible Console Platform
  - ❖ Low Cost, Standardized Delivery Platform





Does GT Matter?



**GDC 2007!**

March 5-9, 2007  
Moscone North & West  
San Francisco, CA

How Long Does GT Matter?