PROGRAM EXECUTIVE OFFICE FOR
SIMULATION, TRAINING & INSTRUMENTATION

Game Impact Theory

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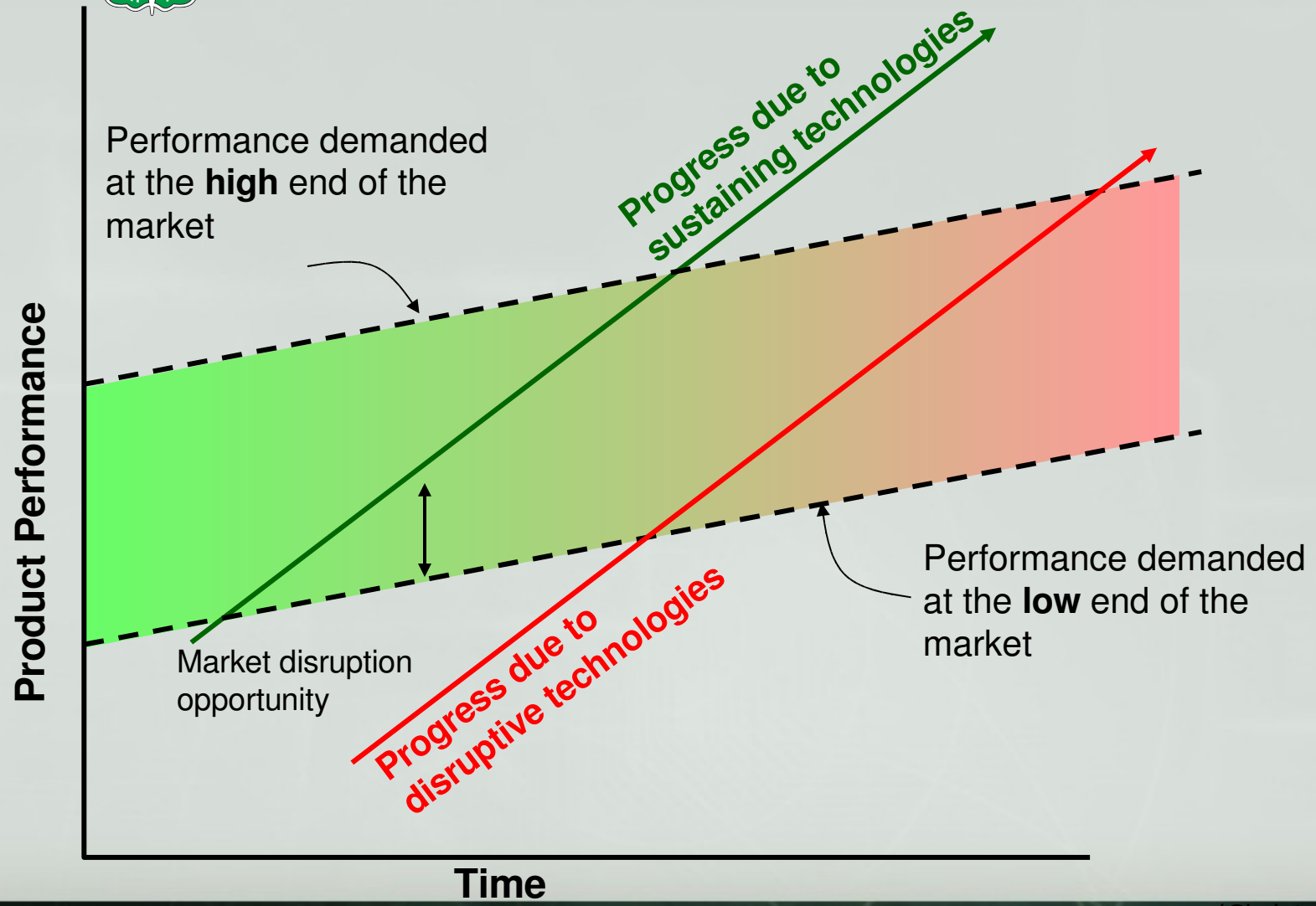
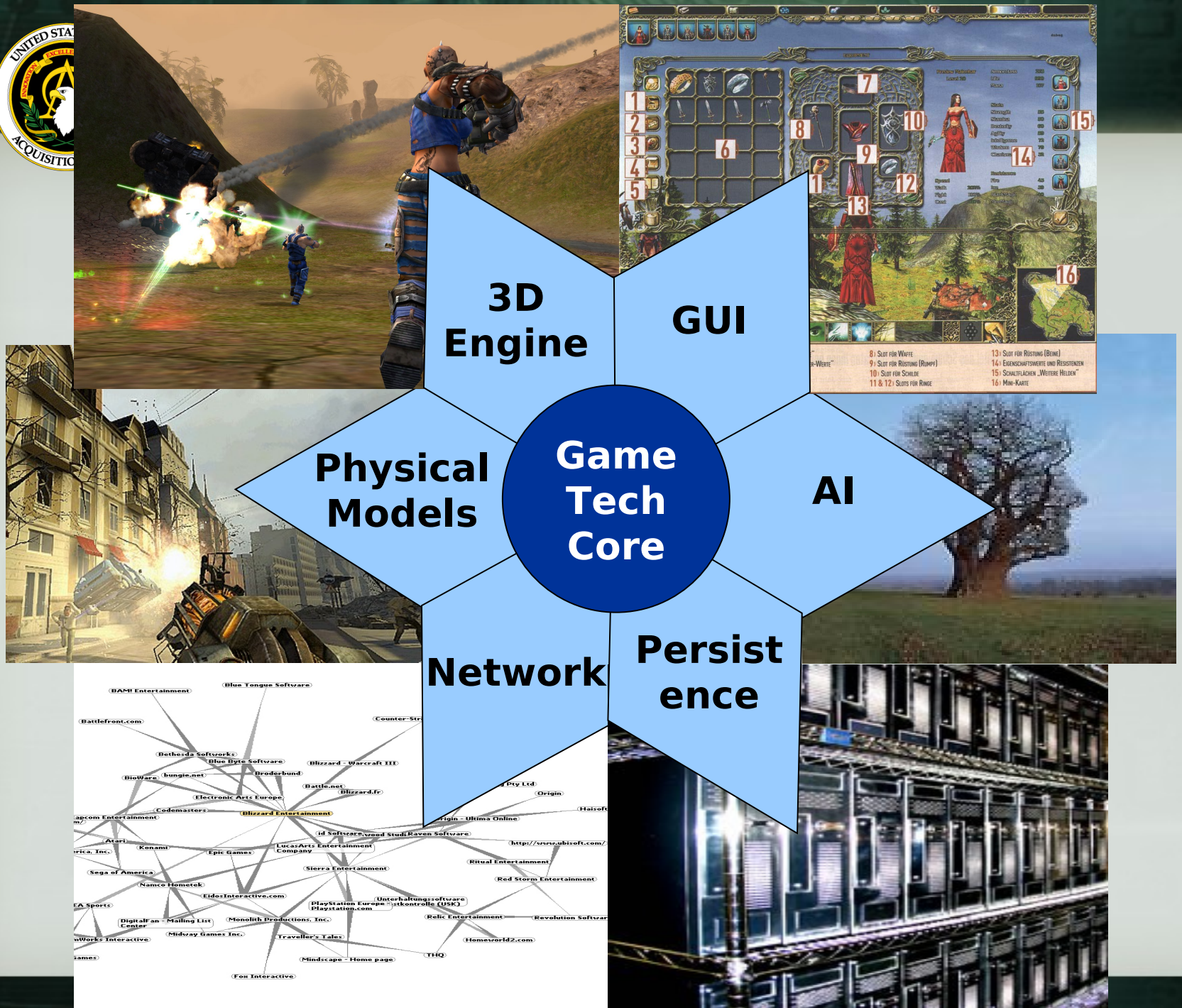
Approved for Public Release.
Security and OPSEC Review Completed: No Issues.

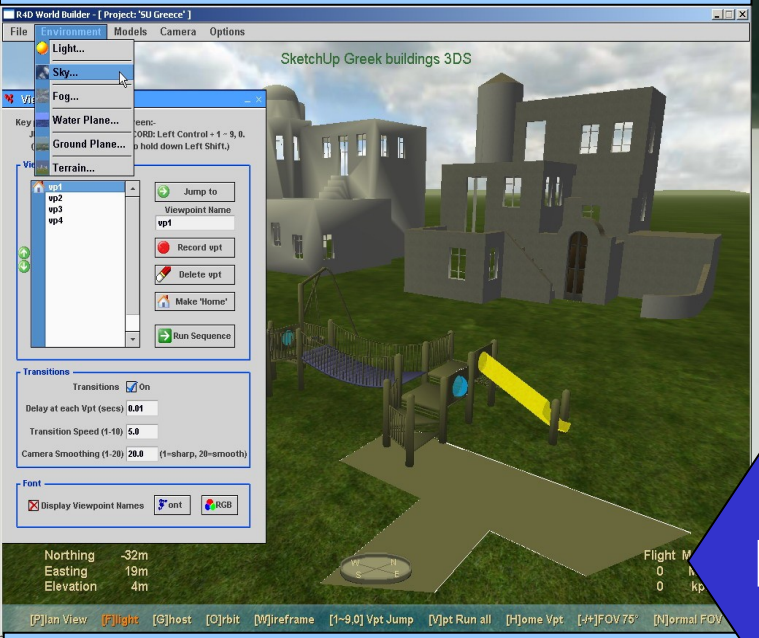
Christensen's Disruptive Innovation



(Christensen, 1997)


3D Engine
GUI
Physical Models
Game Tech Core
AI
Network
Persist ence

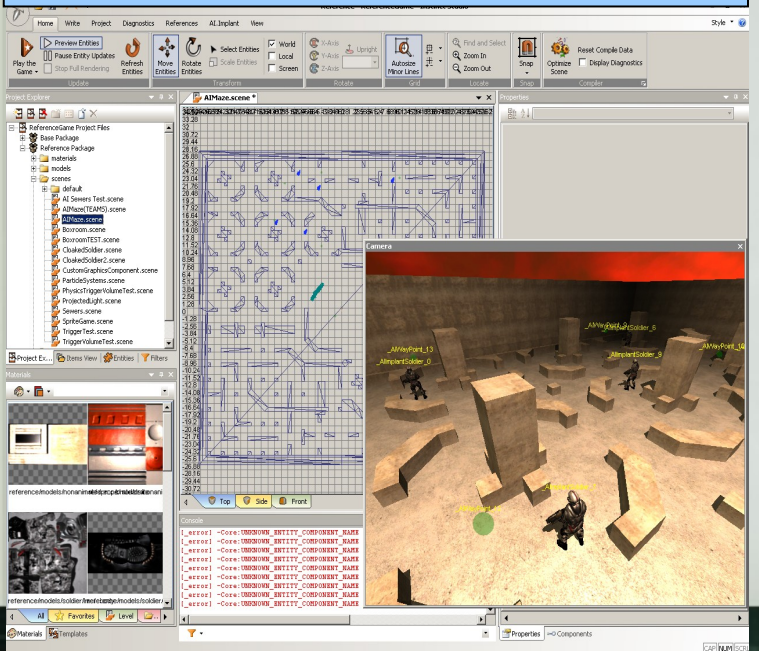
World Building Tools



Game Recording

Pre-Game

Behavior Scripting



Post-Game

Player & Team Stats

5 Forces for Game Adoption

Industry Success

•Success of the technology in other industries
•e.g. Military Training, Chemistry Experiments, Corporate Training, Architecture Design

Hardware Costs

•Significant reduction in computer hardware costs required to support game-based applications
•e.g. 10X Reduction for PCs
•100X for Consoles

Adoption Pattern

•Niche Area
•Unregulated Spaces
•Certified Applications
•Recommended Practice
•Mandatory Standard

Experimentation

•In-industry experimentation with the technology identifies areas for useful application

Software Power

•Significant power of game-based software applications and tools
•e.g. Intelligent Agents, 3D Worlds, Accessible GUI, Physics Models, Global Network, Persistent Worlds

Social Acceptance

•Growing social acceptance of game-rooted solutions to serious applications and industries
•Driven by Maturing Gamers, Social Prevalence, Media Image