Game Innovation VII:
Technology Roadmap for Serious Military Games

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“Play is to the 21st century what steam was to the 19th 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
2. Standard Interfaces
3. Middleware
4. Defined Data Models
5. Domain Tools
6. Portable Artwork

- 3D Engine
- Physics Models
- Networking
“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

Explosion of different designs, Era of radical product innovation

Standardization of design, Emergence of process innovation

Contraction of competitors, Era of incremental innovation

Fluid Phase

Transitional Phase

Specific Phase

Product Innovation

Process Innovation

Dominant Design

Lowest Cost

(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?

How Long Does GT Matter?