THE ERA OF

# COMPUTE R R GAMES



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## CONTENTS

- 1. The Business of Games
- 2. Serious Games
- 3. The future of gaming





#### HOW MUCH IT COSTS TO MAKE A GAME?

- What drives the cost?
- Salaries
- Equipment
- Software
- Licensing (Content, Platform)
- Overhead (Rent, Taxes, Legal, Accounting, Travel etc)



#### HOW MUCH IT COSTS TO MAKE A GAME?

- 1996 Crash Bandicoot
- 1999 Unreal Tournament \$2M
- 2004 Half life 2 \$40M
- 2006 Gears of WAR \$10M
- 2008 PS3/Xbox titles \$20-30M
- 2009 CoD modern warfare \$200M
- 2014 Destiny \$140M



#### FUNDING MODELS

- You get contracted to make a game
- Self funded Bootstrapping
- Trade equity for Money (Angels, VCs)
- FFF (Friends, Family and Fools)
- Funding Grant (Government, Foundation grands, Incubation programs, Tax incentives, Crowdfunding)
- Get a Publisher (Nintendo, Sony, Microsoft, EA, Activision) for PR, Marketing, Sales -Royalties



#### WHAT DO YOU NEED BEFORE FUNDING?

- Teaser
- Trailer
- Playable Demo
- Narrated Overview
- Detail Overview Video



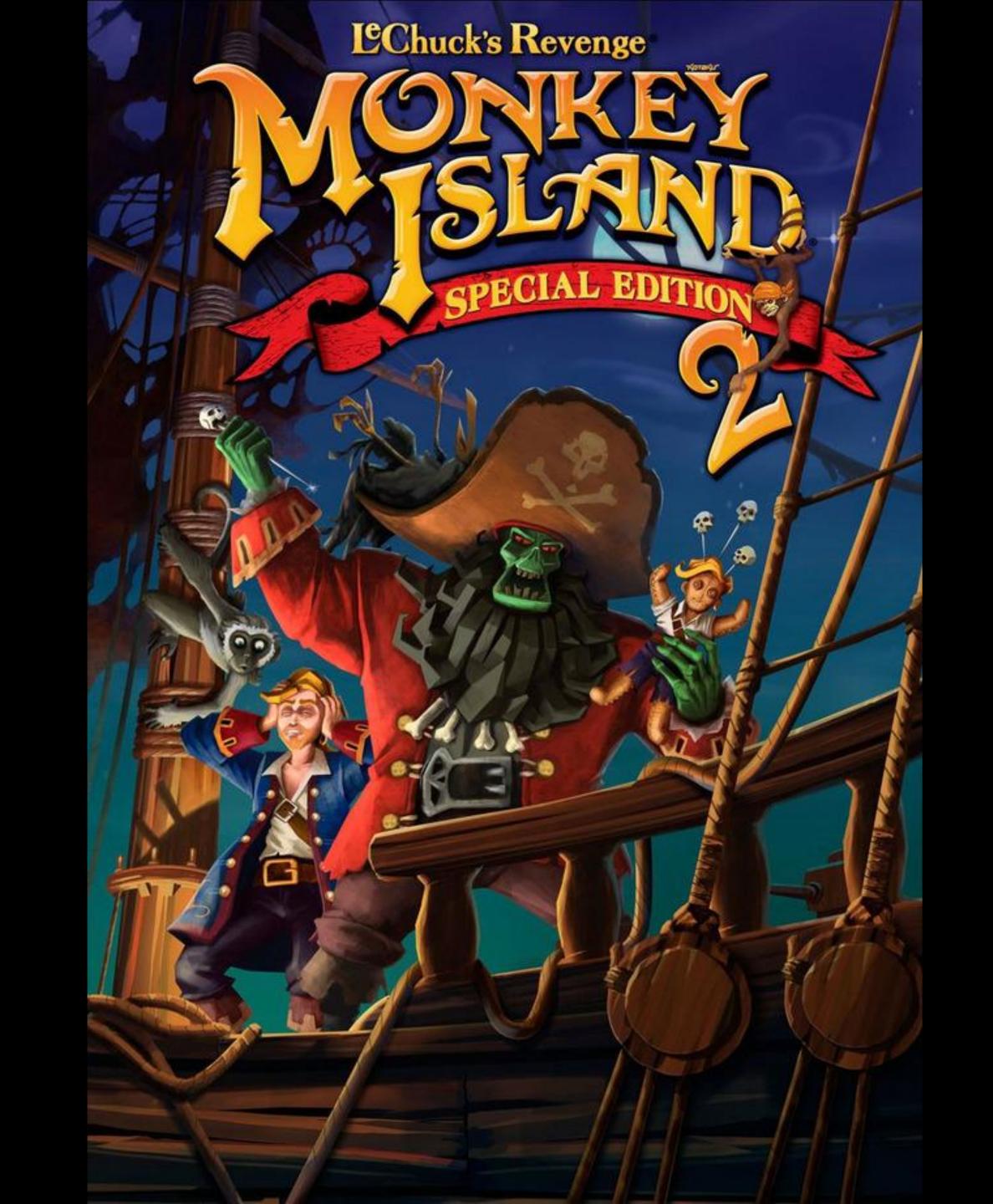
#### WHERE DO YOU SELL?

- Retail
- Platform Channels (XBLA, PAS, WiiWare)
- Steam (Digiral distribution channel for PC/MAC/Linux)
- iOS App store, Google Play, Amazon, Windows Store (70% developers, 30% publisher)
- Web based through your website (Minecraft)



#### REVENUE MODELS

- Subscription based
- Game is Free. In App purchases (Pay for in game consumables, other items)
- Ad-Supported
- Sponsorship/Licensing (Licensing to other companies, different platform, brand)



#### IP PROTECTION

- PATENTS
- COPYRIGHTS (works, source code, protect the expression of the idea)
- TRADEMARKS (Word, name, symbol), is your brand.
- TRADE SECRETS (NDA's with employees)



"You don't make money by working on things; You make money by shipping things." DAVE LANG (KILLER INSTICT 2)

#### SERIOUS GAMES

A serious game or applied game is a game designed for a primary purpose other than pure entertainment

#### WHY USE SERIOUS GAMES?

Practice (Learning by doing)

Repetition/Habit

Realistic - Risk free environment



## CASE STUDIES - COOKING SKILLS



## CASE STUDIES - BIOLOGY





Source: zoo Tycoon 2

## CASE STUDIES - HISTORY







Source: Civilization III, Revolution

## CASE STUDIES - HEALTH

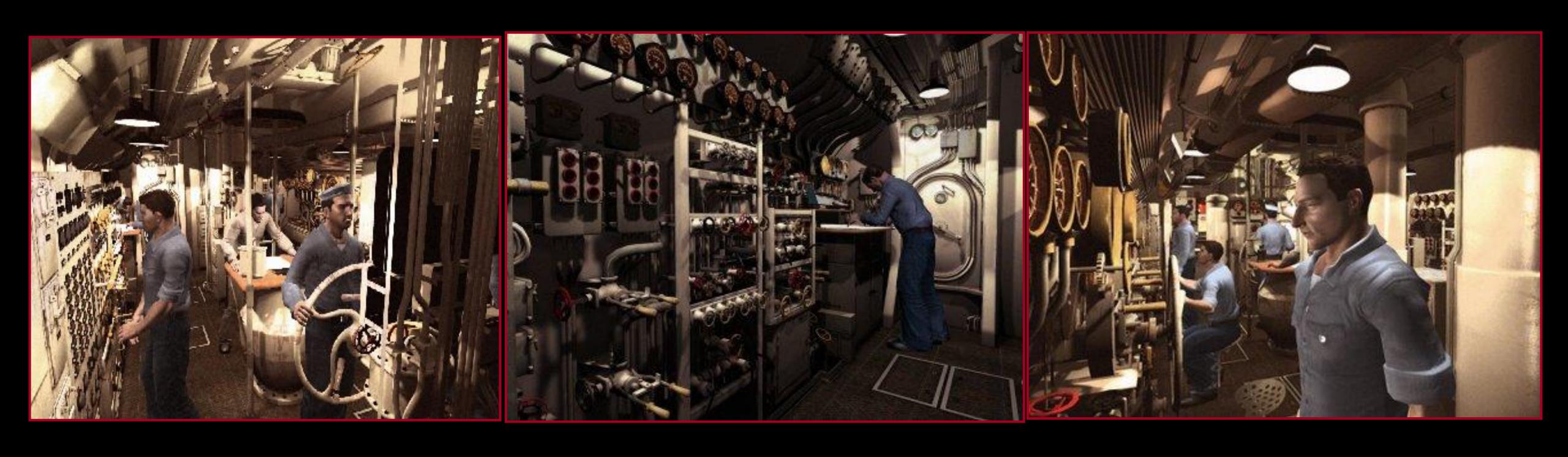








## CASE STUDIES - MILITARY

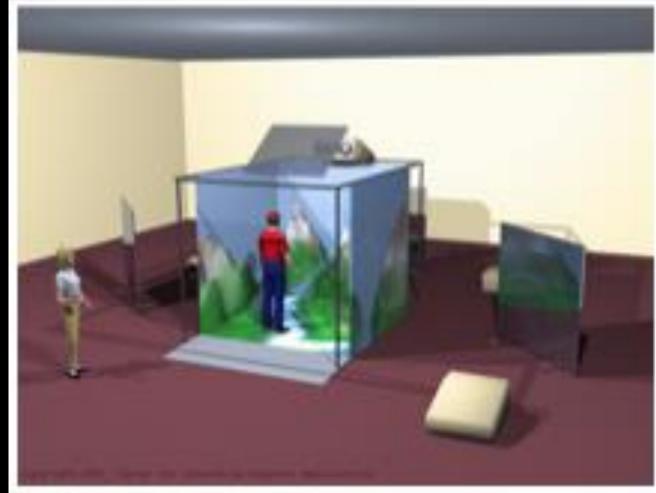


Source: Civilization III, Revolution

## CASE STUDIES - POLICE







## CASE STUDIES - MILITARY



Modelling areas that is difficult for the military to access (Occupied areas, Divided line)

#### TRAINING SIMULATOR







Team leader places his team and material in the field







#### NETWORKED TRAINING FOR THE TEAM



 The seven team members and the leader can connect and take control of the placed avatars

One can be in the VR system





#### NETWORKED TRAINING FOR THE TEAM

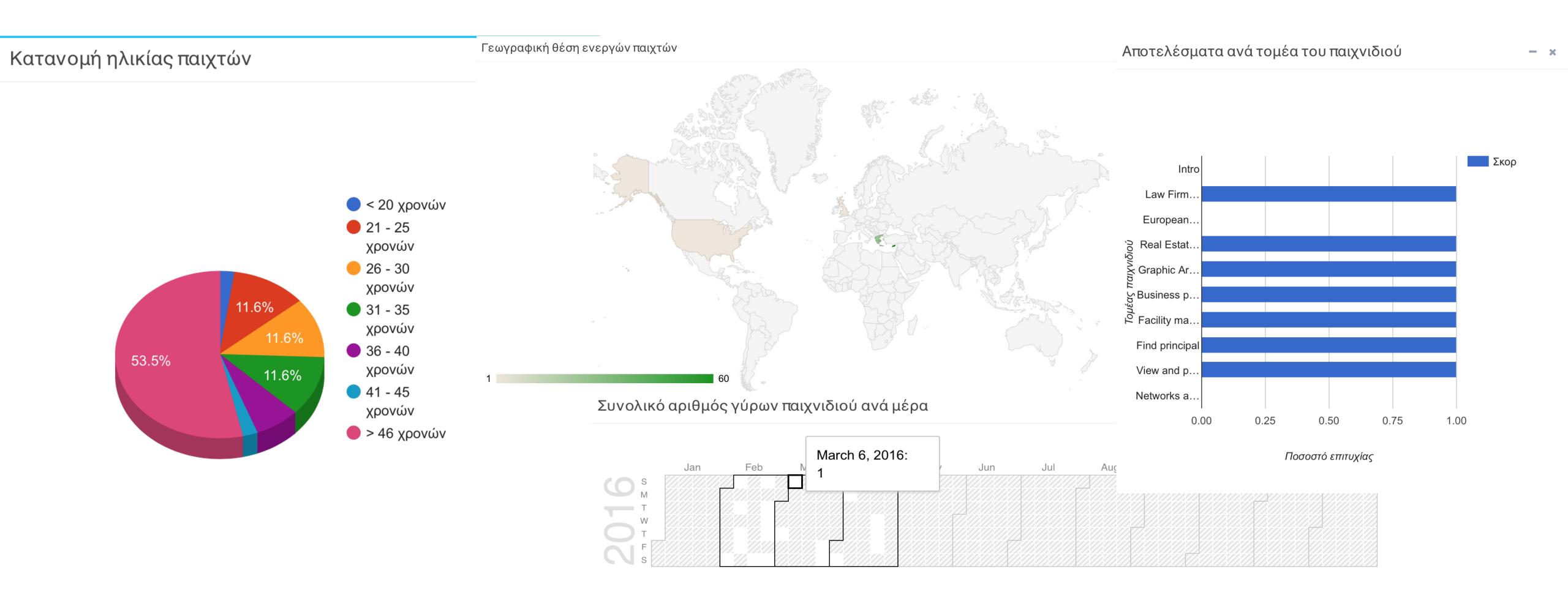


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## BECOME A SUCCESSFUL ENTREPRENEUR



#### REAL TIME ANALYTICS



#### 3D Synthetic Worlds

#### Multiplayer

Single Player

Virtual Social Worlds (VSW) Massively Multiplayer
Online Role Playing
Games
(MMORPG)

Role Playing Games (RPG)

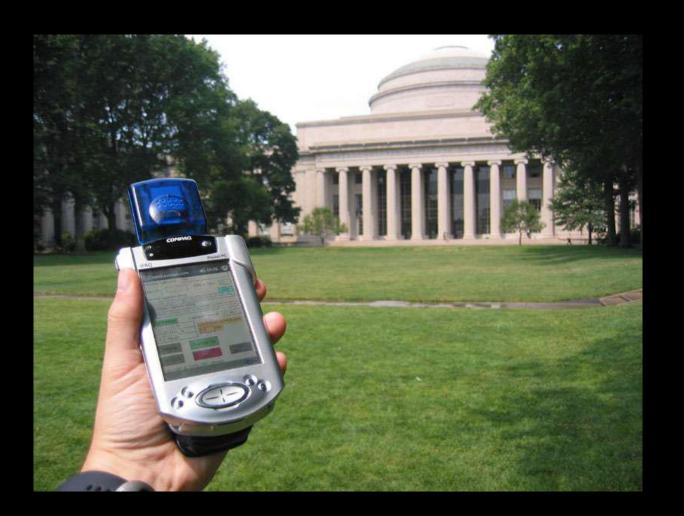
Unbounded Space
Social Interaction
Communities
Real-Time
Communication
User-Created Content
Business
Virtual Economy

Avatar-Mediated Persistent World Immersive Interactive

Bound by a Narrative Defined Roles Non-Player Characters Rules Tokens Levels

#### ARG (ALTERNATE REALITY GAMES)

- I LOVE BEES (HALO / Microsoft)
- LOST EXPERIENCE (Movie Lost)
- PAC-MANHATTAN
- TOURALITY
- GEOCATHING







## VIRTUAL WORLDS



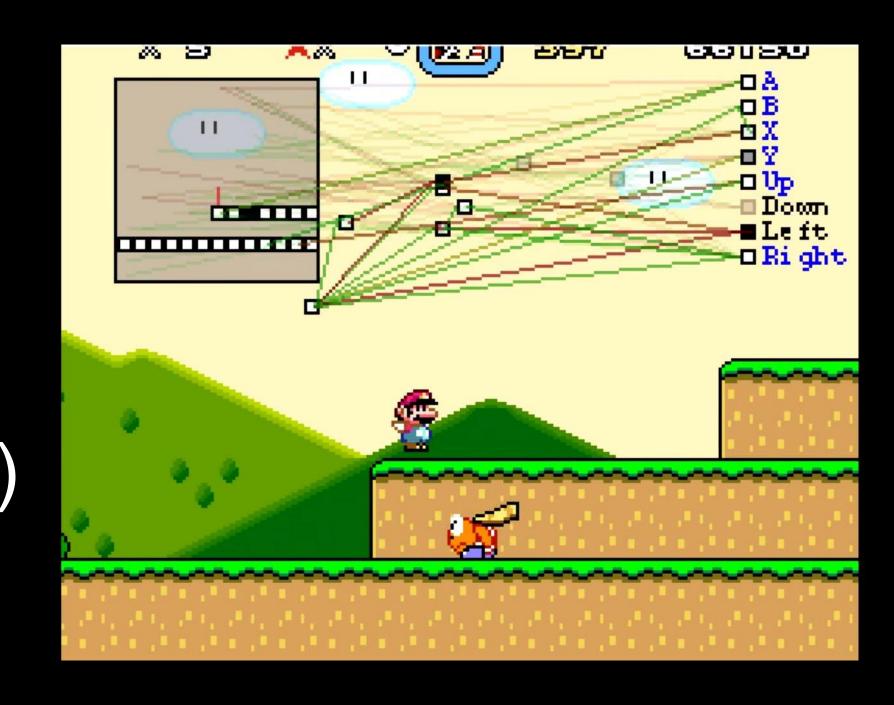


## VIRTUAL REALISM



#### PERSONALIZATION / ADAPTATION

- The system automatically adapts its behavior
- Based on the current user's behavior
- Is specific to each user
- It learns the user's behavior (Machine learning)

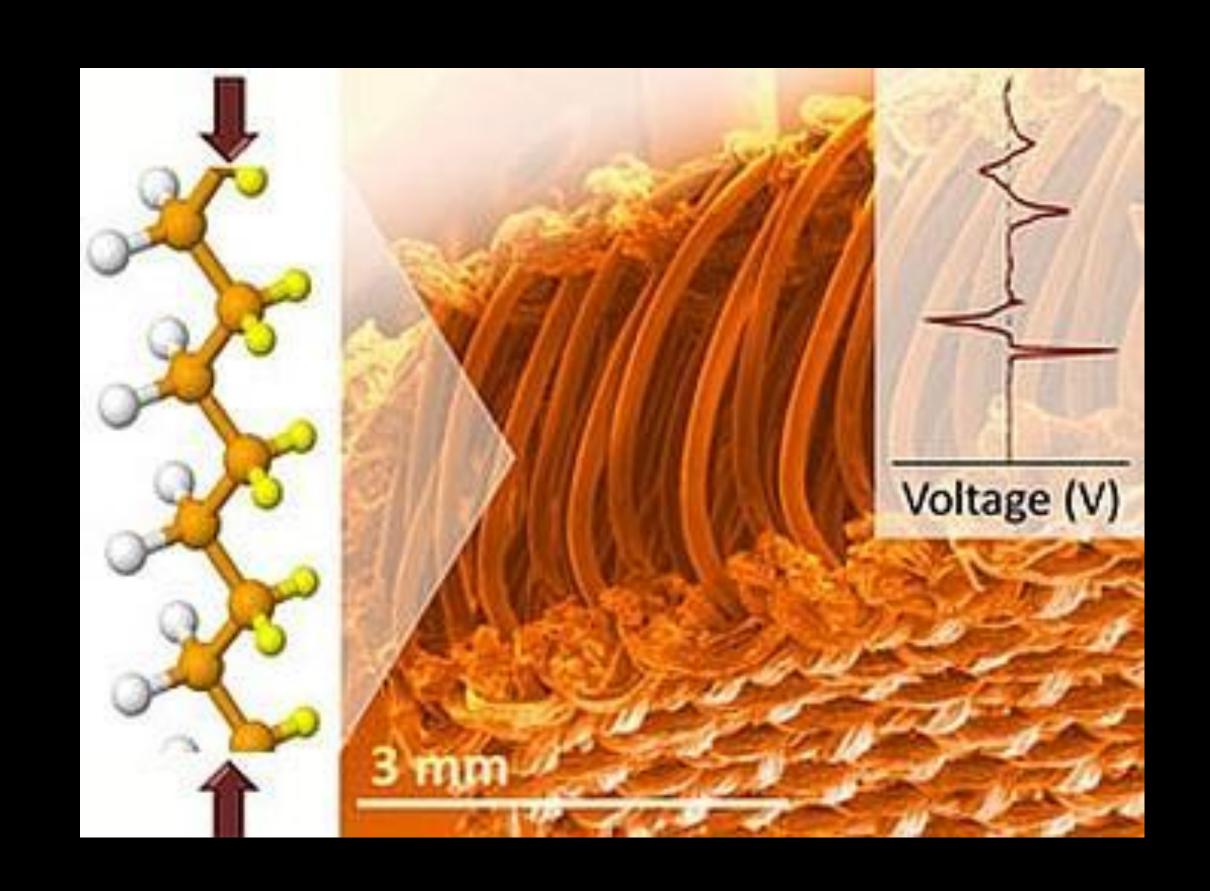


## SENSORY INDUCTION GAMING

New Ways of Control (Gestures)

Flexible fabric embedded programmable

Wearable Gaming



### SENSORY INDUCTION GAMING

(REBIRTH OF VIRTUAL REALITY)

- Facial Expressions
  - Cloud Gaming
- Emotion recognition
- All senses stimulated



## HOLOGRAPHIC GAMING

A new experience of visual aesthetics

• Entire battlefields can be created

