



**Better than Fun?**

**Fun**  
sucks!

Divorce kid of

**Psychology**

and

**Video Games**

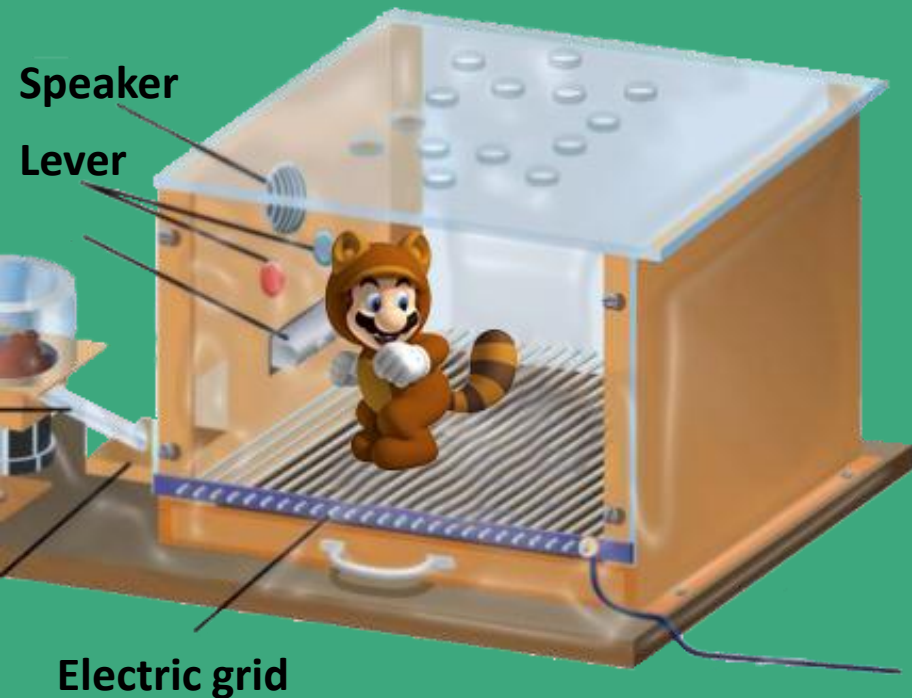
**Me**

„Violent and addictive“

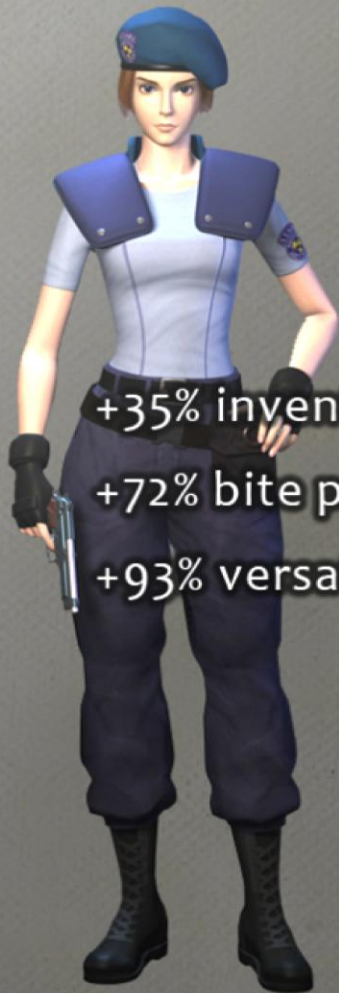
„Manipulative and ignorant“



# User Experience Research



1



+35% inventory space  
+72% bite protection  
+93% versatility

2



+99% "likes" in target audience

**GAME DESIGN**

**SENSORY**

**ELEMENTS**

**TECHNICAL**

**FLAWS**

**CHALLENGE**


**REWARDS**

**Fun**



**Fun**



A magnifying glass with a silver frame and a dark green handle is positioned over a list of psychological concepts. The magnifying glass is centered over the text, which is arranged vertically. The background is a solid light green color. A large, faint, grey watermark of the word 'Psychology' is visible in the background, partially obscured by the magnifying glass.

**Beliefs**  
**Perception**  
**Memory**  
**Needs**  
**Behavior**  
**Emotion**  
**Motivation**



**Perceived Competence**

**Self-Control**

**Needs and Incentives**

**Social Norms**

**Learning Experience**

**Dispositions**

**Intelligence**

**Reaction Time**

**Heart Rate**

**Genetics**

**Preferences**

**Upbringing**

# GAMES

Perception

Interpretation

Genetics

Evaluations

Attitudes

Reception

Experience

Belief Forming

Feelings

Reactions

Biography

Verbal Output

# Behavior

# Fun



# Fun

Perceived Value



Enthusiasm



Interest in Developer



Retention (9 months)



# Fun

Can we measure it?

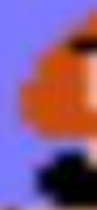
Does it help us predict behavior?

Is it specific enough to help us improve our products?

# GAMIFICATION

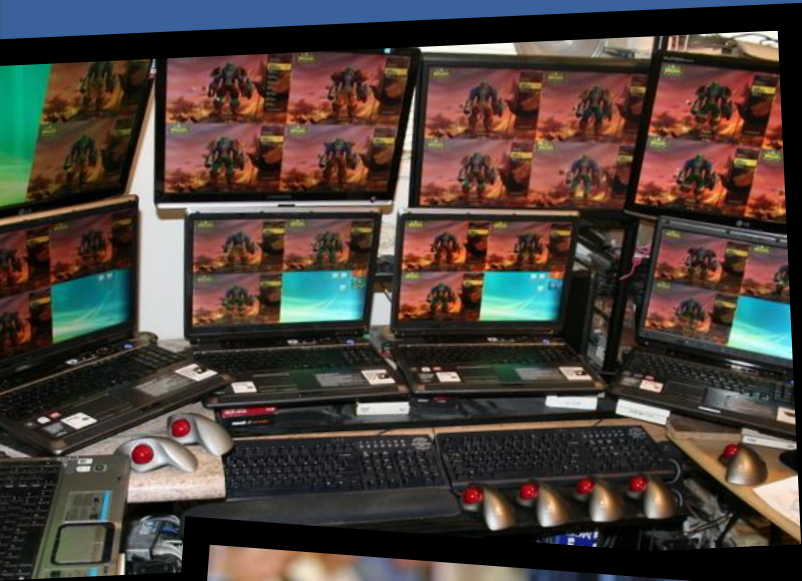




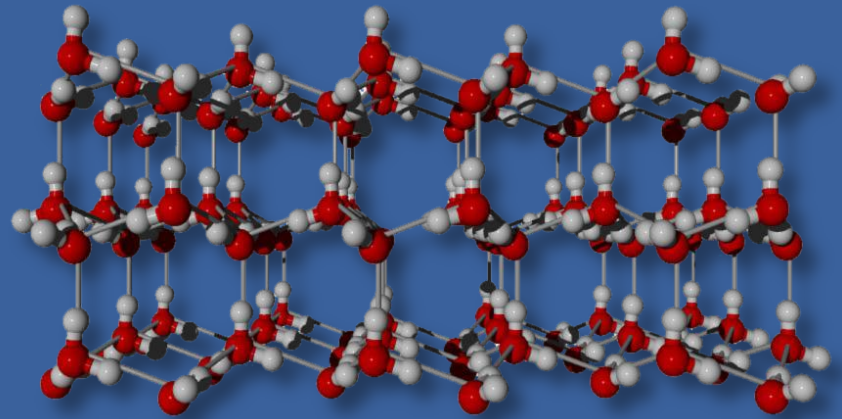
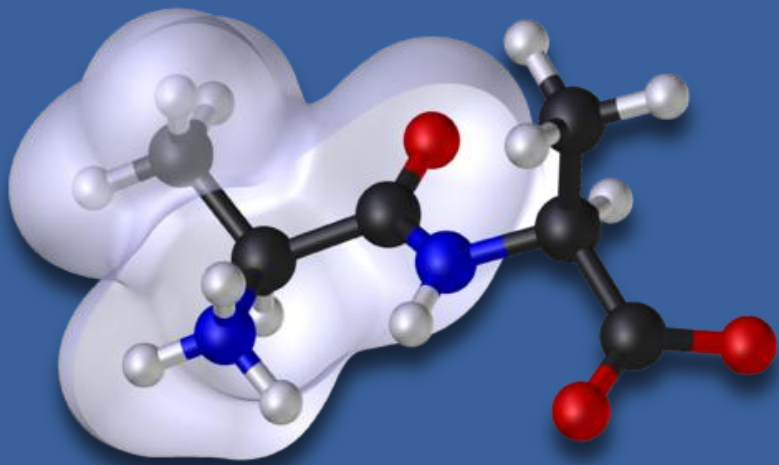












# PSYCHOLOGY ON GAMES

INCENTIVE THEORIES

FLOW EXPERIENCE

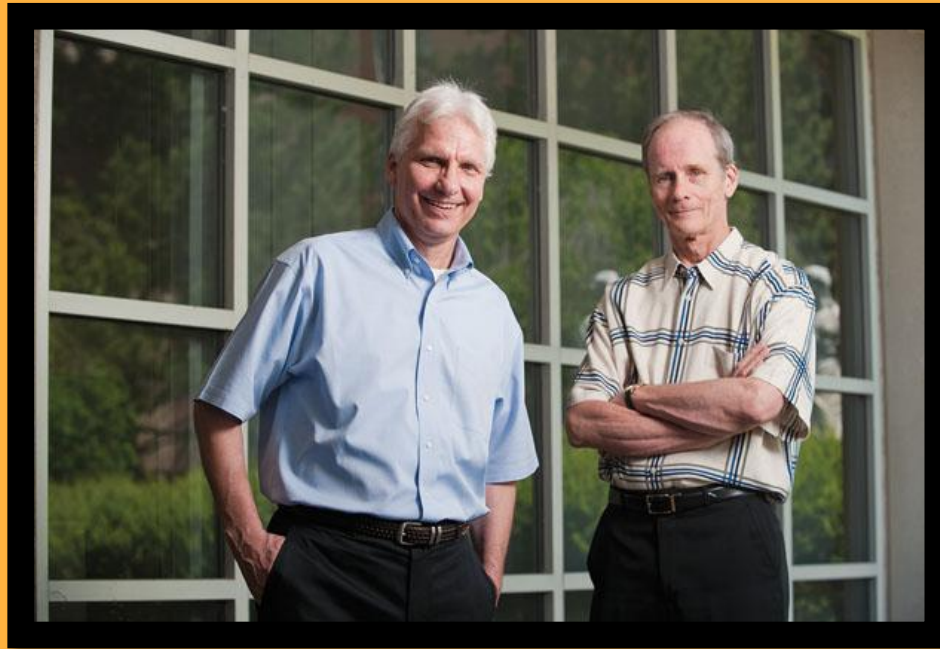
COGNITIVE THEORIES

SELF-DETERMINATION THEORY

# COGNITIVE THEORIES

## SELF-DETERMINATION THEORY

Richard M. Ryan



Edward L. Deci

Satisfaction of



fundamental needs

Intrinsic motivation

**Self-Determination**



Satisfaction of



The need for **Competence**

The need for **Autonomy**

The need for **Relatedness**

Intrinsic motivation

# Self-Determination

The need for  
**Competence**



# The need to feel **effective**







**JAYHAWKS**  
The talent is brought to you  
let them talk  
and by the way



Meaningful Feedback



Optimal Challenge



Mastery Experience



Context





Too Easy/Hard



Control Issues



Unspecific Feedback







241,267



355

x4

x4

x4



# The need for **Autonomy**



# The need to feel volitional









Unique Identity



Opportunities for Action



Choice of Paths





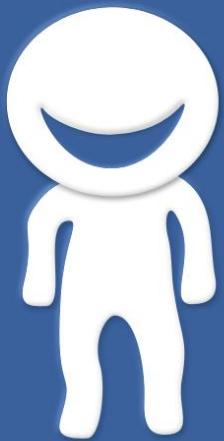
Forced Action



Fake Opportunities



Loss of Control





# RED DEAD REDEMPTION



Battlefish





SCORPION

SEKTOR

# RG

## UNIT COUNTERS




  
 Detector    Detector


  
 Detector    Detector


**Baneling Nest**


**Spine Crawler**



**Strong Against:**   
**Weak Against:**  



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   



**Strong Against:**   
**Weak Against:**   


**Spire**


**Nydus Network**


**Greater Spire**

Detector

Detector

# Autonomy $\neq$ Choices



The need for  
**Relatedness**

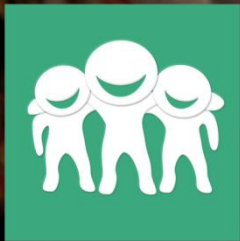


# The need for meaningful relations











Being Acknowledged



Receiving Support



Making an Impact





Isolation



Hostility



Indifference





이제루스의  
구원자 코르델

이제루스의  
구원자

이제루스의  
구원자

이제루스의  
구원자

이제루스의  
구원자

이제루스의 구원자 죽음의요새의길의  
이제루스의 구원자 EXCALIBUR <즐거움공격대>  
<즐거움공격대>

이제루스의 구원자 사구  
이제루스의 구원자 괴도리팡 <즐거움공격대>  
<즐거움공격대>

이제루스의 구원자 폭속 이제루스의 구원자 Y.L. 빌트먼 자  
이제루스의 구원자 VERBAILLE <즐거움공격대>  
<즐거움공격대>  
이제루스의 구원자 DETONATOR <즐거움공격대>  
<즐거움공격대>  
이제루스의 구원자 LURKER <즐거움공격대>  
<즐거움공격대>

이제루스의 구원자 엘라  
이제루스의 구원자 시계천체  
<이제루스의 구원자 데오비안 >  
<즐거움공격대>

전문 검투사 박  
이제루스의 구원자 궁어의배신자  
<즐거움공격대>  
<즐거움공격대>

이제루스의 구원자 ZILTOO  
<즐거움공격대>

이제루스의 구원자 ZEDKA  
<즐거움공격대>

이제루스의 구원자 VINO  
<즐거움공격대>  
이제루스의 구원자  
<즐거움공격대>

이제루스의 구원자  
<즐거움공격대>







Damage  0%

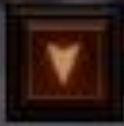
Hunger  24%

Tiredness  22%

Reward  Good Boy! 20%







Enchantress: A powerful enemy we have laid low.

Guard of the Keep: Our champion is too powerful! Those bastards didn't stand a chance!

# Needs

Perceived Value



Enthusiasm

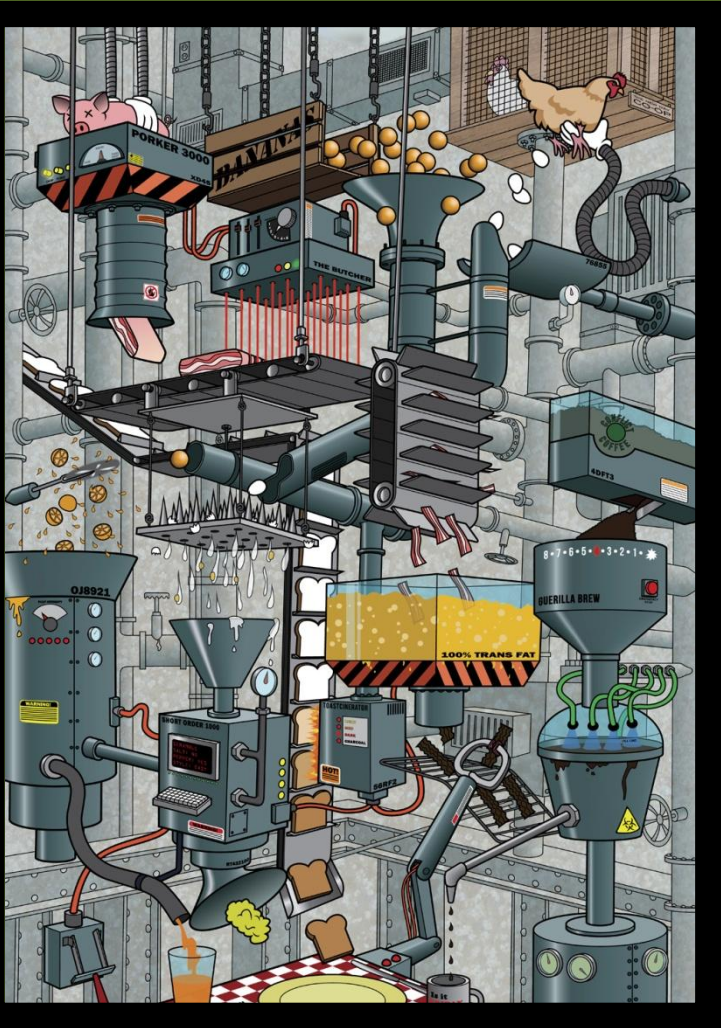


Interest in Developer



Retention (9 months)





← **Self-Determination  
Theory**

→ **Product  
Improvement**



# TANKWARS

# Tank Deathmatch



Real-time Multiplayer

**Unity 3D**

**Crossplatform**

**Facebook**



# Indie Developer



# Death Star I

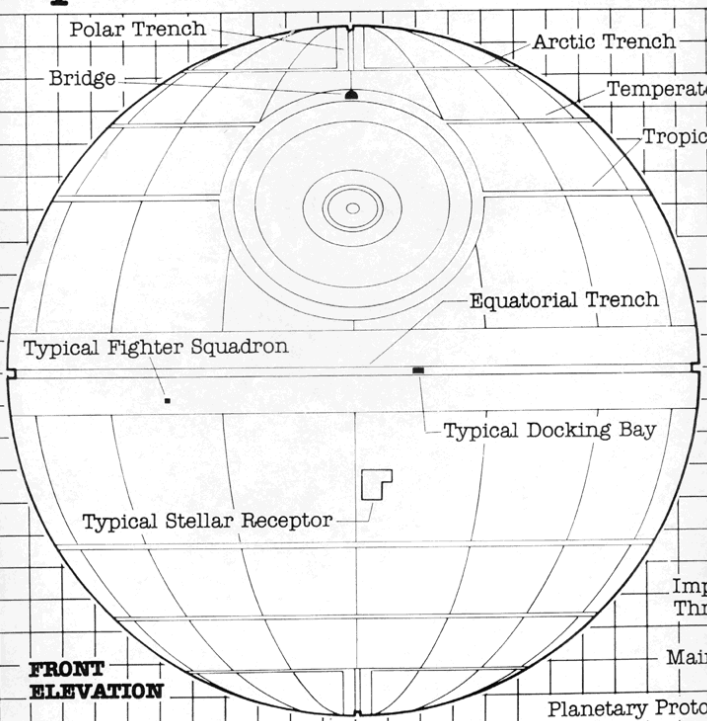


## Imperial Battle Station

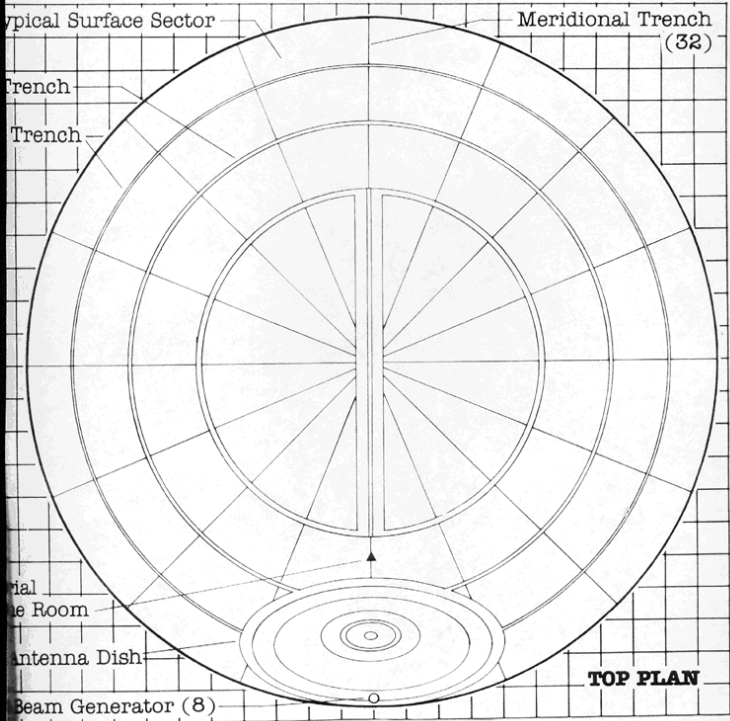
Kilometers

Kyrellian Leagues

Imperial M.S.U.



**FRONT  
ELEVATION**



**TOP PLAN**





**ME**



**Usability**

**Heuristics**

**GameFlow**

# I n G a m e E

Inventory for Game Motivation and Experience





Inventory for Game Motivation and Experience

**Developer Training**

**Player Questionnaire**

**Motivational Review**



„How many strategies lead to success?“

„To what extent can players influence their identity?“

„How frequently are mastery moments offered?“

„What kind of feedback is given?“

„What elements of the game scale in difficulty?“

„How is the player's impact on the world made visible?“

„How is a supportive community encouraged?“





I strongly agree

1

2

3



„When I failed I knew why.“



„I was satisfied with my performance.“



„The goals were clear to me.“



„I felt supported by the other players.“



„I felt free to express my own playstyle.“



„I felt that my contributions were unique.“

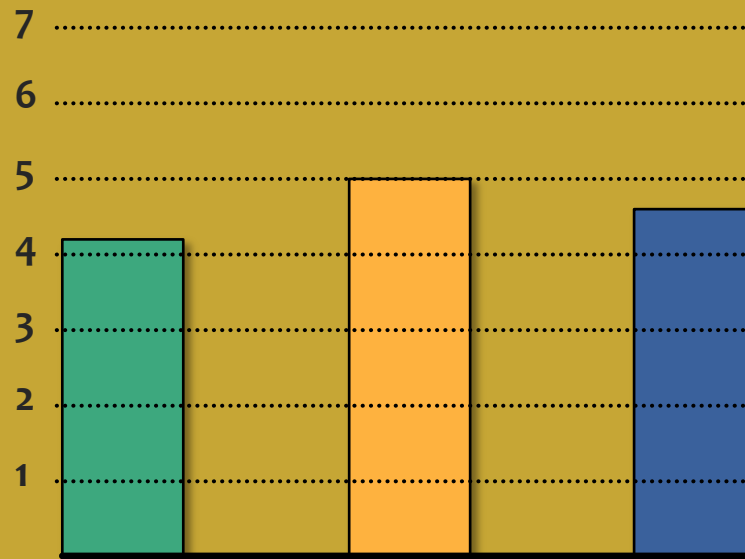


„The game allowed me to create a unique identity.“



„When I failed I knew why.“





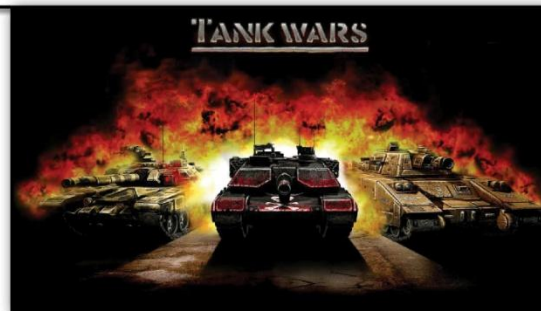




## Motivational Review

Client: **yoone UG**

Product: **TankWars**



## 2. Need Satisfaction

1. Introduction

### 2. Need Satisfaction

- 2.1. Competence
- 2.2. Autonomy
- 2.3. Relatedness

3. Contingency Design

- 3.1. List
- 3.2. Evaluation
- 3.3. Suggestions

4. Usability

- 4.1. Score
- 4.2. Explanations

5. Appendix

- 5.1. Pictures
- 5.2. References
- 5.3. Impressum



**Competence 9.2**

Context 10

Feedback 8.0

Challenge 9.5



**Autonomy 8.0**

Identity 7.4

Opportunities 8.6

Choice 7.0



**Relatedness 7.7**

Acknowledgement 9.0

Support 4.5

Impact 7.4

**3**

*Did you know?*

When playing action games, player behavior is more strongly influenced by competence satisfaction than with other game genres.

## 2.1. Competence

1. Introduction
2. Need Satisfaction
  - 2.1. Competence**
  - 2.2. Autonomy
  - 2.3. Relatedness
3. Contingency Design
  - 3.1. List
  - 3.2. Evaluation
  - 3.3. Suggestions
4. Usability
  - 4.1. Score
  - 4.2. Explanations
5. Appendix
  - 5.1. Pictures
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  - 5.3. Impressum

### Feedback

#### Micro-Feedback

TankWars gives immediate visual feedback on these player actions: Moving, shooting and using abilities. Acoustic feedback is given on shooting and using abilities. However, no acoustic feedback is given on movement. A central issue with TankWar's micro-feedback is that no prominent distinction between success and failure is given.

#### 1. Hit/Miss

Though feedback is given on explosion of the projectiles, no distinction between hitting terrain (= missing) or an enemy player is made. The enemy player's life bar can be used as an indicator but is restricted to sight range and can not distinguish between the source of the damage taken.



Overall Feedback

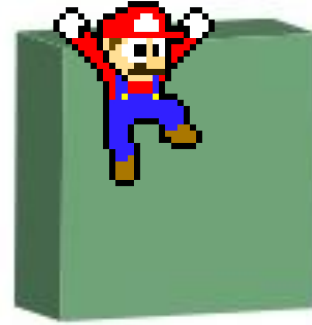
4

#### *Did you know?*

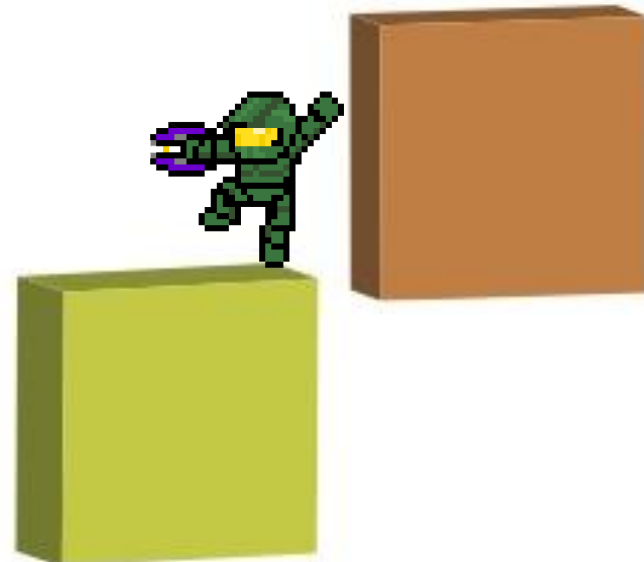
Excellent benchmark games for micro-feedback are *Diablo 3*, *Guitar Hero* and *League of Legends*.



# Community Analysis & Player Typology



THANK YOU FOR LISTENING!



**Questions?**

**References?**

**Feedback?**



Inventory for Game Motivation and Experience

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Ben Dressler 