



VIDEO GAME ECONOMY DESIGN (FUNDAMENTALS)

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Introduction: Game is life

Economy is the science of efficient allocation of scarce resources.

“Games are microcosms of life”



Introduction: Game is ^{life}_{not}



BAD ECONOMICS

- Low quality education
- Higher unemployment rate
- Lower consumption rate

GOOD ECONOMICS

- Higher average income
- Lower unemployment
- Improved public services



Introduction: What's good game economy

- 1 Right amount of friction
- 2 Good amount of satisfaction
- 3 Guaranteed game longevity

Economy Design Steps

How to keep players coming back?

- Keep things **INTERESTING**
- Keep things **CHALLENGING**
- Keep things **EXCITING**

1

Establish the basics

Keep things
INTERESTING
CHALLENGING
EXCITING



TIME is players real resource while playing a game

Compensate **TIME/DIFFICULTY** with **REWARDS**

1

Establish the basics: Player Archetypes

Keep things
✓ **INTERESTING**
CHALLENGING
EXCITING

Explorers



Play games to discover.
Motivations: freshness

Socializers



Play games to interact.
Motivations: connection

Achievers



Play games to become experts.
Motivations: prowess

Killers



Play games to assert dominance.
Motivations: victory

Segment the player base and try to balance difficulty/reward curve to make the game **INTERESTING** for that player archetype.

2 Differentiate the resources

✓ Keep things
INTERESTING
CHALLENGING
EXCITING

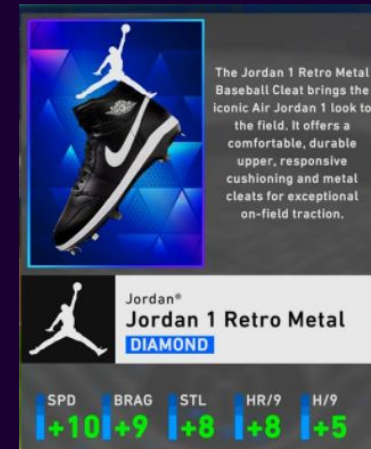
Non Investment

Gives euphoric sense of autonomy



Investment

Makes progress faster



RESOURCES

2

Differentiate the resources (contd.)

Keep things
✓ **INTERESTING**
CHALLENGING
EXCITING



Introduce **new rewards** in time

Introduce **ways to accumulate wealth**

Surprise players with **new and fresh items**

3 Construct the (cost) system

Keep things
✓ **INTERESTING**
✓ **CHALLENGING**
EXCITING

What needs to be paid to acquire in-game resources?

TIME/EFFORT

SOFT CURRENCY

HARD CURRENCY



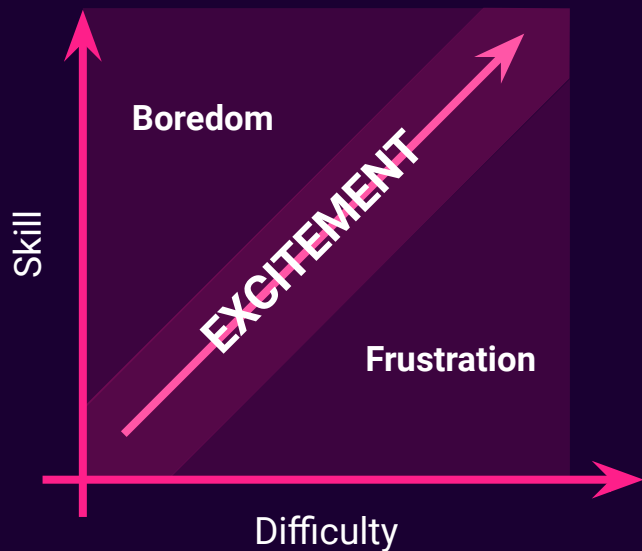
How much needs to be paid?

IT DEPENDS!

Just make it **CHALLENGING**, and not impossible

4 Modulate and adventure

Keep things
✓ **INTERESTING**
✓ **CHALLENGING**
✓ **EXCITING**



Monitor players

Use the power of data science

Fake rarity

Force equilibrium

Let players make decisions

Balance

Balanced
Economy



Captivated
Players



Sustainable
Business



Make the game economy **zero-sum!**

Supply early, demand late

Make the currency **flow** with taps and sinks

Conclusion

The Ultimate Goal

Keep players coming back

Subgoals: Keep things

INTERESTING

CHALLENGING

EXCITING

BALANCE
Make sure the game is
not boring or frustrating

INSPECT
Monitor and know
the players

**Game Economy
Design Cycle**

DESIGN
Design resources and cost
systems and keep the game fun
and fresh

Conclusion (contd.)

Economy is the science of efficient allocation of scarce resources.

Game Economy is the “science” of **designing resources** and **efficiently fabricating scarcity**.



References and more resources

- [Game Economy Design Fundamentals, Tom Hammond, userwise.io](#)
- [Game Economy Design Best Practices, Tom Hammond, userwise.io](#)
- [Game Economy Design Warning Signs, Tom Hammond, userwise.io](#)
- [Game Currencies: Types and Uses, Javier Barnes, jb-dev.net](#)
- [Friction-free Economy, John Case, inc.com](#)
- [Difficulty Curves, David Strachan, davetech.co.uk](#)
- [Game Design: A Different Approach to Difficulty Curves, Alex Vu, gamedev.net](#)
- [Free Market: A Case Study in Team Fortress 2, Jacob Rickabaugh, TEDxPSUBeaver](#)
- [Design a Fun and Sustainable Game Economy, Daniel Spaventa, RDC2019](#)
- [What Does Grinding Mean in Video Games, Soham De, makeuseof.com](#)
- [Pay to Win Games, Bryan Wirtz, gamedesigning.org](#)

THANKS



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- userwise.io
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