

# Designing a sustainable and ethical monetization scheme for a free to play game

This is my thesis proposal draft. Other ideas, suggestions, or problems are welcomed.

## Overview

This thesis would be investigating hows games could be using more ethical and sustainable monetization/reward schemes that are integrated in the gameplay. Meaning that the focus is not on the overall monetization model such as subscription services, in-game advertisement, commodification of user data etc. Focus would be on schemes that the player interacts with in a gameplay loop, e.g., a scheme such as loot boxes.

The project would have three stages. First, conducting a literature study to create design guidelines. Second, create one or more prototypes based on the guidelines. Third, evaluate the prototypes on users with an emphasis on the user experience.

In this proposed study, Embark could of course contribute with expertise in the area and focus could be directed towards their game that is under development, with the design prototype being aimed towards that game and developed in their game engine.

## Introduction / Background

"Predatory monetization" schemes, e.g., loot boxes, are being used in more and more games, and are being debated in academia and media regarding their gambling-like design [1]–[4]. Games employing many other ethically dubious monetization schemes as well [5], [6], e.g., pay-to-win, price skimming, "whaling", etc. Design that sometimes is referred to as "dark design patterns" [7]. People in the gaming community are becoming more aware and upset by these practices. For example, Star Wars Battlefront 2 was critiqued for its heavy monetization model at its release in 2017 [8]. Similarly, with the release of Diablo Immortal in June 2022, many gamers gave it heavy critique for its monetization schemes [9]. Logically, this could hurt the reputation of a gaming company and their retention and acquisition of players. Finding more sustainable monetization designs would therefore be in the interest of the industry.

When designing for long-term engagement of players, and get them to use a monetization scheme, we make use of "motivational design" [7]. Design that makes use of theory and knowledge from fields such as behavioral psychology and behavioral economics. There are two fundamental views on motivation, extrinsic and intrinsic. Extrinsic coming from the environment (e.g., being given food to do something) and intrinsic coming from within oneself (e.g., doing something because it is honorable). Monetization schemes such as loot boxes mostly rely on the 'variable ratio reward schedule', coined by the behavioral psychologist B. F. Skinner, and is said to be the most 'addictive' schedule of extrinsic motivation [7]. Loot boxes, and many other monetization tricks [5], [6], raise

ethical concerns as the design become manipulative rather than motivational. Meaning that the self-interest of the user is disregarded.

One paper [10] suggest that gaming with these monetization schemes and gambling are converging. Another paper [11] describe how paid “loot boxes” have in the focus of recent years and how countries are investigating putting regulations on them. E.g., Belgium deems paid loot boxes as gambling and China has a law saying the probability of loot boxes rewards needs to be disclosed. Hence, one can expect more regulations being put in place and in more countries if gaming companies does not implement more sustainable monetization designs.

A recent literature review on free-to-play game research [12] showed that research has focused mostly on behavioral economics and aspects of how to maximize player bases and profits. Leaving out aspects such as meaningful game experiences and societal implications. One paper [13] gives suggestions for regulations that could be put into place, but also some design guidelines. Most of the guidelines regards to the whole monetization model, such as implementing the ability for the user to put a spending limit or that the in-game purchasing has a two-step process to discourage spontaneous spending. However, some guidelines are concerned with the game mechanics, such as disclosing odds of receiving items in “loot box mechanics” and that the audio-visual saliency (the “juiciness”) of opening a loot box should be reduced.

Finding more sustainable and ethical monetization game designs seem like novel research and worthwhile to conduct a study on, both for society and industry.

Many game design methods and patterns are based on norms of what constitutes a good playing experience, and they are mostly based on analyses on developed games [14]. This could lead to a designer being engaged in “cargo cult” design [15]. Design methods, from general design research, focusing on the design or development process could avoid following norms [16]. This study would therefore take a bottom-down approach in the design process.

## Problem

It is unclear how more sustainable monetization schemes could be designed and be integrated in a gameplay loop. The research questions to investigate is as follows.

RQ 1: What are some examples of ethically questionable monetization schemes and what guidelines could more sustainable and ethical monetization schemes be designed after?

RQ 2: How could a sustainable and ethical monetization scheme be integrated with a gameplay loop of a game and provide a good, ethical, player experience?

## Method

I will first conduct a literature study on monetization schemes in relation to human psychology in UX, building (if not found in literature) a set of guidelines for designing more sustainable monetization schemes.

Then I will engage in research through (game) design by prototyping one, or more, gameplay mechanics with an integrated monetization scheme. The design research will be conducted as reflection-in-action, where the design process will help construct new knowledge.

The prototype will finally be evaluated with user testing, focusing on a qualitative approach to measure the UX.

The thesis will delimit itself by not looking at aspects of economic value, e.g., evaluate how a design perform in terms of profit.

## Plan

The "official" semester is 20 weeks long from 9 January to 28 May 2023. My plan is to begin work 2 January and have the thesis defended at the latest in June 2023.

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