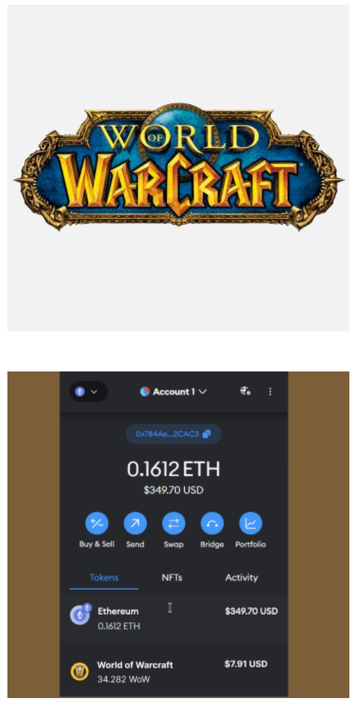
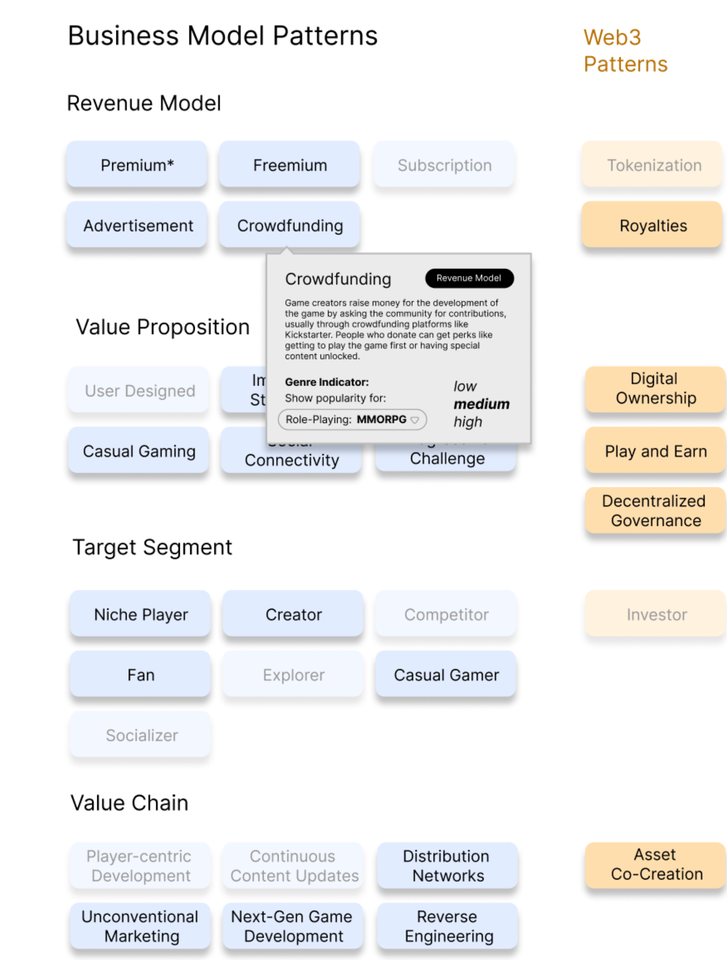
HSLU Hochschule Luzern

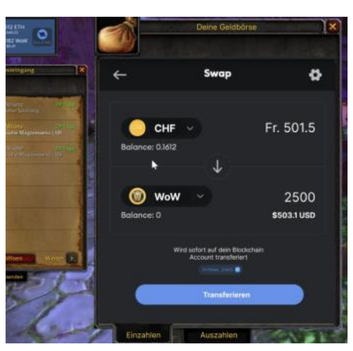
Technik & Architektur
Master of Science in Engineering
Business Engineering and Production

Master Thesis, Master of Science in Engineering

Play to Earn: A Business Model Framework for Blockchain-based Gaming

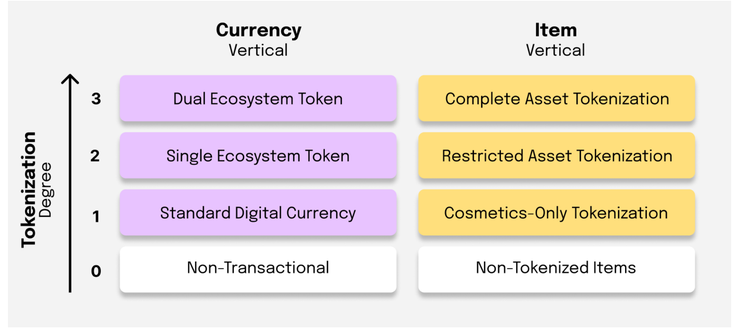






Applied *Business Model Framework* for the case study with a blockchain-based *World of Warcraft*™ adaption

Snippets of prototypes created for the *World of Warcraft*™ case study



Tokenization Framework

Problem Statement

The gaming industry, transitioning from traditional 'Pay-to-Play' to innovative 'Free-to-Play' models, now embraces blockchain technology, which offers new player engagement methods and monetization opportunities.

Blockchain integration in gaming introduces novel concepts such as digital ownership through NFTs, 'Play-to-Earn' models, and decentralized governance. However, challenges like balancing the 'fun factor' of gameplay with monetization strategies has been a significant hurdle. An overemphasis on earning potential with unsustainable economic models has led to a decline in player interest in popular Web3 games.

This thesis aimed to examine the industry's shift towards Web3 elements and to align the interests of investors and gamers.

Solution Concept

The solution focused on the development of two frameworks: the *Business Model Framework* and the *Tokenization Framework*. These provide game publishers with a systematic method for designing their business models, offering a template that includes a range of patterns for each dimension and multiple degrees of tokenization.

Results

The study recommends a balanced tokenomics approach that aligns with player preferences and enhances game mechanics. Key findings include a strong player opposition to 'Pay-to-Win' dynamics, highlighting the need for fair play and skill-based advancement.

Players showed a strong interest in the digital ownership of in-game assets, with a majority supporting the trading of cosmetic items.

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