Making the Mechanics Monetizable: On the Development Process of Free-to-Play Games

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EXTENDED ABSTRACT

Free-to-play games are created in inherently different ways from games with other revenue models, among other things because the prerequisite of 'monetizability' makes it necessary for all features to fit into the monetizable core game mechanics (Chew 2016; Järvinen 2012; Luton 2013). Scholarly publications increasingly address the issue of ethics regarding the design of microtransactions (e.g., Alha 2014; Earp et al. 2018; Karlsen 2021). However, although handbooks (e.g., Luton 2013) and publications in business studies and behavioral economics provide practical guidelines for how to optimize revenues within the freemium realm (Alha 2019), more critical accounts on the implications of the free-to-play revenue model and the way it shapes the development process as a whole have gotten less academic attention.

This paper takes a closer look at the lived experiences and professional routines within free-to-play game production and unpacks the complex interplay between game design and monetization by asking **how and when the free-to-play monetization model intersects with the development process**. The study is based on 18 face-to-face interviews with freemium game developers from large and small German free-to-play studios, including game designers, producers and monetization experts (for a discussion of monetization-related roles see Van Roessel & Švelch 2021). The interviews each took about 90 minutes and were transcribed and then thematically coded with the help of MaxQDA. It is shown that the profound integration of game design and monetization in free-to-play games permeates all phases of the development process, with different emphases in different stages.

Kerr (2017) distinguishes between five main production logics in the global digital games industry, which describe "relatively stable sets of institutional relationships generated by the commodification of cultural production" (66). These logics are only partly defined by technology, but also by other factors such as business models and conventions. The partly still stabilizing **platform logic**, which encompasses the production of free-to-play games, is characterized by the continuous flow of user data (see also Mäntymäki et al. 2020) and the role of indirect revenues by, for instance, microtransactions, which in the case of mobile games are facilitated by the app stores, which serve as the central brokers along with commercial social networks.

This paper contributes to the emerging field of game production studies. Specifically, it takes on a **design research** perspective, in which the different phases and activities

of collaborative creative processes—such as game or software development—are the object of analysis. Literature on game development processes generally describes game development as iterative processes, that is, processes consisting of several design cycles with multiple user testings (e.g., Fullerton 2014). But in free-to-play development there is also a close connection to data-driven design as well as software-as-a-service (Dubois & Weststar, 2021).

The interview findings show that in free-to-play games, the monetization model is an integral part of the development process and pushes the game design in a **'monetization-friendly'** direction. Because free-to-play is typically a given upfront, game developers need to take into account the potential monetizability of the core mechanics at conceptualizing. For example, at pitching a game concept, designers need to convince management that the game concept will likely monetize well, otherwise the idea will not be green-lit. Accordingly, genres that are known to monetize well are preferred to more experimental ideas. In addition, the games-as-a-service model (cf. Dubois & Weststar 2021) requires monetization mechanisms to be repeatable and inexpensive in terms of production, which further reduces the range of possibilities for free-to-play game designers to apply novel game ideas and according monetization mechanisms.

Prototyping the initial game concept ideally also enables the monetization to be tested. Yet, it is hard to simulate monetization in first versions of the game, not only due to the lack of a functioning payment system in such prototypes, but also due to the difficulties to imitate the context in which the game eventually will be played. Aiming to reduce financial risks and unforeseen game dynamics, in early game prototypes developers apply strategies such as finding 'proxies' for the monetization in the form of player motivation and retention. One studio also simulated the monetization in internal playtests by having the testing staff donate money to charity for any microtransaction they were willing to pay for. In addition, also in this phase, developers closely examine and monitor other free-to-play games in the same market segment. This type of **'benchmarking'** enables them to reuse best practices in terms of game design and monetization mechanisms.

As soon as the state of the game allows for it, small qualitative **playtests** are replaced by larger user tests and **data-driven design** (Mäntymäki et al. 2020**)**. In the production phase, mathematical formulas facilitate monetization balancing and pricing. Finding the right balance between monetization and design is difficult, and even harder in multiplayer games, where the game should offer a level playing field for paying and non-paying players. Traditional game design approaches (such as flow theory) are therefore leveraged alongside metrics-driven design. When conflicts within the team occur, for example about the degree in which the monetization should be 'aggressive', the problem is 'outsourced to the metrics', meaning developers trust in player data to show whether the monetization is accepted or deemed out of line. This again illustrates how in free-to-play game development two worlds come together: that of game design as creative media production and freemium business models as used in online software services, which rely on the analysis user data to find a minority of users willing to spend money.

At **soft launch**, the ensemble of collected metrics should paint a convincing picture of the game, that is, retention, conversion rate and average spending ideally all predict a successful and long-lasting game-as-a-service. If, however, even after tweaking, it turns out that the marketing costs to acquire players exceed the average revenue generated per player, the game project might be canceled altogether, or in some cases sold to another company. It should be noted here, that due to the games-as-a-service model, the development of a free-to-play game is never finished, and during 'live

operations', the game is constantly finetuned, updated and complemented on the basis of player metrics – which is however beyond the scope of the current study.

As the overall findings show, free-to-play game production is characterized by strategies of **risk-avoidance**. Whereas in AAA games risks are typically minimized by licensed intellectual property, for instance in the form of franchises and sequels (Nieborg 2014), in free-to-play mobile game development it is done by closely monitoring the market and, in later stages, metrics-driven design as well as mathematical formulas and marketing techniques to define the right pricing. This paper contributes to game production studies by providing in-depth insights into the routines and practices of free-to-play game development, and showing how different methods and logics (e.g., genre conventions, market monitoring, data-driven design combined with traditional game design tools and theories) govern developers' design decisions.

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