Analyzing Random Reward System Mechanics and Social Perception

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INTRODUCTION

So called "loot boxes" continue to be a highly controversial topic among the gaming press, player communities and in wider public discourses. Loot boxes and similar mechanism constitute an "implementation of random procedures used for selection and delivery of rewards in video games" (Nielsen and Grabarczyk 2018, 2). They are employed by game developers as a means of monetization and to retain players by introducing chance-based rewards. Current debates are focused on developers' pricing policies and the question of whether such rewards systems constitute a form of gambling (e.g. Drummond and Sauer 2018, Macey and Hamari 2019, Zendle and Cairns 2018), and would therefore warrant legislative action, as has been considered by various authorities (Stukenberg 2018, United Kingdom Gambling Commission 2017, Yin-Poole 2018).

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The growing debate about loot boxes has also contributed towards a rise in academic interest (e.g. Ball and Fordham 2018, Macey and Hamari 2019, Nielsen and Grabarczyk 2018). However, to facilitate a fruitful debate on this contentious topic, a clear definition of what we talk about, when we talk about loot boxes becomes necessary. Nielsen and Grabarczyk (2018), in their discussion of whether loot boxes can be considered gambling, employ the term "random reward mechanism" to cover game mechanics that are currently commonly subsumed under the term "loot boxes". They differentiate between four distinctly different types of such mechanisms, depending on whether the resources necessary to trigger the reward (eligibility condition) or the reward itself are either isolated from or embedded into the real-world economy (i.e. use of real money vs. in-game skill; virtual unsellable vs. sellable object as reward).

While they conclude, that the implementation model most closely resembling gambling is characterized by being doubly embedded into the real-world economy (i.e. the use of real currency and sellable objects), they also, to their surprise, observe that "games which spawned the current controversy, do not contain this particular implementation" (Nielsen and Grabarczyk 2018, 13). Consequently, factors aside from embeddedness and isolation appear to determine whether players are willing to accept random reward mechanisms in a specific game or not.

Nielsen and Grabarczyk's typology is developed based on their specific research interest in clarifying the relationship between games containing random reward mechanisms and gambling. Our interest lies more in the discursive position of loot boxes as a potentially highly controversial mechanism among players. Being primarily concerned with the conditions and concrete forms of implementation, under which players are more prone to reject such a game, a more differentiated taxonomy of the implementation of random reward mechanisms is necessary.

Towards this end, the most fundamental differentiation appears to be whether random reward mechanisms can be triggered through purchase with real money (embedded) or not (isolated). Or, to phrase it differently: whether they are implemented as a means of monetization or not. Building up from this basic differentiation, the aim of this project is to establish an empirically grounded taxonomy of monetized random reward mechanisms, by comparing how they are implemented in different games on different platforms. In our analysis we concentrate on the context, in which the random reward mechanism is implemented (e.g. game genre, platform, business model, scale, franchise, publisher etc.), reexamine the eligibility conditions for triggering random rewards (e.g. only via real currency, also earnable in-game, periodic free attempts, etc.), the concrete content of the rewards and their relation to the game (i.e. cosmetic items vs. "pay-to-win"), and the specific implementation of the mechanism (e.g. as integral part of the game or strictly optional).

By carrying out an empirical comparative study of random reward mechanisms based on such variables, we provide a definitional basis for further discussion on the topic. Through the examination of player discourses in concern to the respective games (e.g. through user reviews, community sites, etc.) it also becomes possible to identify the variables contributing towards a negative reception of games incorporating random reward mechanisms. In doing so, we hope to provide a clearer picture of the current debate on loot boxes and its origins.

Aside from their controversial use as a method of monetization, we consider that random reward systems positively contribute towards play experience by introducing and managing the scarcity of rewards. In a first step towards our taxonomy, we focus on how game designers define the relationship between game content and rarity management. We begin by focusing on the Japanese market, due to its broad adaptation of random reward mechanisms as the dominant monetization method in free-to-play mobile games, especially in the form of so called "gacha games" (also see Koeder and Tanaka 2017, Shibuya et al. 2015). By analyzing random reward mechanisms in gacha games from the point of game design and user experience, we arrived at two axes concerning: (1) the relation between rarity management and game content and (2) how random reward systems affect the diversity and complexity of games (see figure 1).

We found that a defining characteristic of each game lies in the management of duplicate rewards and how they benefit players, i.e. whether their benefit is limited to the same item or generally applicable. Furthermore, to extend the life of a game and enhance its tactical depth, it is beneficial that the range of possible rewards (items, equipment, characters, cards etc.) in the game is varied. Consequently, we need to differentiate whether different random reward systems are included in a game for different rewards, such as items or characters, or whether a universal system encompassing different types of rewards is used. The former makes it easier for developers to manage the rarity of rewards, while the latter is more easily understood by users.



Figure 1: Suggested preliminary taxonomy

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