

Misleading omissions of loot box presence disclosures: widespread unfair commercial practices in video game advertising on social media in Ireland and the EU

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Keywords

Loot boxes, gacha, information disclosure, consumer protection, video game law and regulation, advertising, social media, Ireland

INTRODUCTION

Gambling-like in-game purchases—popularly known as ‘loot boxes’ and ‘gacha’ mechanics—became controversial in recent years. Unlike other in-game purchases, these mechanics provide the player with randomised rewards, whose exact identity is not known at the point of purchase with real-world money (Xiao et al. 2022; Woods 2022). In Western European and East Asian countries, loot boxes now prevail in over 80% of the highest-grossing mobile games (Xiao and Lund 2025). Concerns have been raised about players’ engagement with loot boxes and in particular, potential harms to young people and children (Spicer et al. 2022).

Policymakers across the world have taken different regulatory approaches of varying degrees of restrictiveness, ranging from bans to requiring more transparency (Xiao et al. 2022). Responding to the conference theme, any regulation of video games arguably restricts the pleasures associated, including gameplay but also excitement from engaging with gambling-like mechanics and companies’ economic interests. The European Commission (2021, 105) has opined, on the basis of pre-existing EU consumer law, that companies are required to disclose the presence of loot boxes in any relevant video game advertising. This is intended to help consumers and parents recall the loot box-related risks associated with a game before they decide whether to download or buy a video game (for their child).

Importantly, whether social media ads promoting games that sell loot boxes duly disclose their presence as required has not been assessed in the EU context. Prior research conducted on other jurisdictions—specifically, the UK (Xiao 2025) and South

Proceedings of DiGRA 2026

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Korea (Xiao et al. 2025)—found that less than 10% of social media adverts for popular video games with loot boxes disclosed their presence as required. However, neither is (or remains, due to Brexit) an EU member state against which the European Commission interpretation directly applies.

We replicated prior research conducted in other jurisdictions and assessed compliance with EU consumer law in Ireland (where the DiGRA 2026 conference is held) using Meta’s ad library (for Facebook and Instagram) enabled by the EU Digital Services Act (DSA), which now require large social media platforms to publish information about advertising shown on their services.

METHOD

A list of 372 game titles known to contain loot boxes was collated using the results of prior research. Between March and April 2025, we searched for these games’ advertising using Meta’s ad library. For each game found to have been advertised in Ireland in the past year, we collected up to 10 of the most recent ads.

We also collected ‘targeting’ and ‘reach’ data associated with those ads. Targeting refers to which age groups and genders the ad was intended by the advertiser to be shown to. ‘Reach’ is defined by Meta (2025) as the number of unique accounts that saw the ads at least once, meaning that actual ‘impression’ number may be higher as the same account may have seen the same ad multiple times. Such detailed contextual data were not published by Meta for South Korea and the UK when prior studies were conducted (Xiao 2025; Xiao et al. 2025).

We then conducted content analysis on the obtained advertising materials to check whether they disclosed (i) the presence of in-game purchases in general (without specifying loot boxes) and (ii) the specific presence of gambling-like in-game purchases offering randomised rewards, such as loot boxes.

RESULTS

In total, we collected 1,417 ads from 147 different games. As to legally required disclosures, 86.3% of ads failed to disclose the presence of in-game purchases generally, and 88.6% failed to disclose the presence of loot boxes specifically. About half of the already very small minority of games that disclosed in at least one advert failed to *consistently* disclose, meaning that only some of their adverts disclosed, whilst others not.

The mere presence of a disclosure does not equate to compliance with consumer law. Disclosures must be sufficiently visually prominent. Amongst the disclosures identified, 81.4% (158 of 194) of generic in-game purchase disclosures and 79.0% (128 of 162) of loot box disclosures were visually obscured and not reasonably prominent. For example, as shown in Figure 1, the disclosures were often presented in a small and faint font sometimes set against a background with poor contrast.

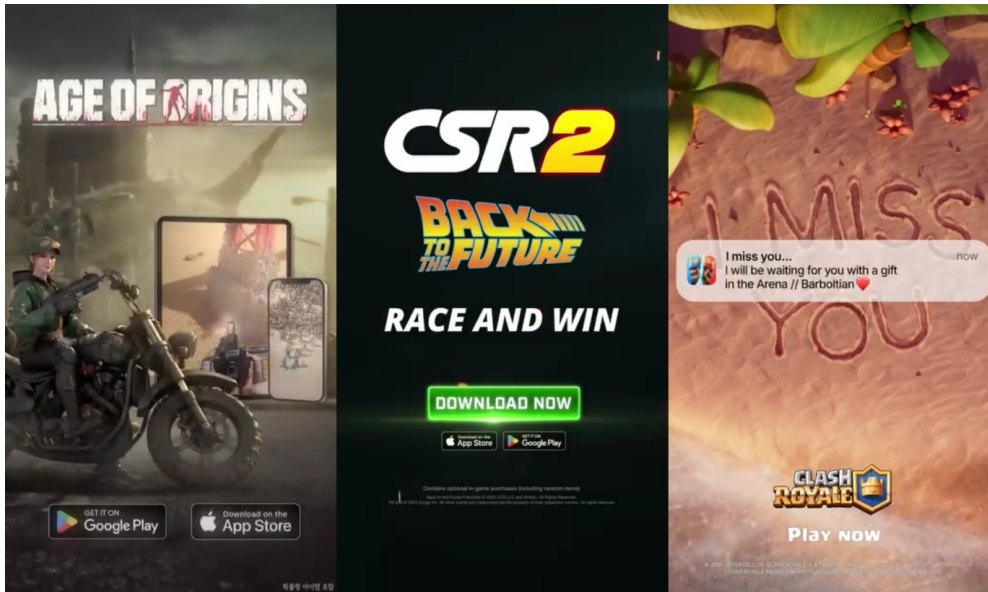


Figure 1. From left to right, a screenshot of a frame of the Meta advert ID# 619182977520106 for *Age of Origins: Tower Defence*, of the Meta advert ID# 642282328189378 for *CSR 2*, and of the Meta advert ID# 619182977520106 for *Clash Royale* in which the loot box presence disclosure was shown in a small and faint font, making the disclosure difficult to see. In the *Age of Origins: Tower Defence* ad, the disclosure was in Korean only ('확률형 아이템 포함 [Includes probabilistic items]'; bottom right corner of the left pane). © 2025 Camel Games, Zynga, NaturalMotion, & Supercell

Specifically, as to loot box presence, only 3.4% (5 of 147) of games visually prominently disclosed that information in at least one ad, and just 2.4% (34 of 1,417) of ads fully complied with consumer law. Only one game, *Golf Clash* (Electronic Arts, 2017), consistently visually prominently disclosed in all 10 of their adverts we studied.

This 2.4% figure could be deemed as the compliance rate in Ireland from ads collected in early 2025 and was exactly the same as the UK rate for ads collected in late-2024 (Xiao et al. 2025).

Combining our disclosure compliance results with the reach data provided for Ireland by Meta as mandated by the DSA, amongst the 676,126 reach (this number is low because the most recently published adverts we collected sometimes had very few views) gained by the 1,417 ads studied, only 7,199 of the reach (1.1%) was achieved by ads compliant with consumer law.

DISCUSSION & CONCLUSION

Non-compliance and non-enforcement are widespread. Due to Meta's DSA obligations, we also had access to targeting and reach data for Ireland, which previous research in other jurisdictions did not have equivalent access to. Illegal misleading video game ads that omitted material information about loot box presence 'achieved'

98.9% of all reach, affirming that Irish consumers nearly always saw those instead of compliant ads.

The industry narrative that only a small minority of bad actors are harming consumers is debunked: leading companies based in Europe (e.g., Supercell) and beyond are breaking the rules and committing criminal offences by hiding important information consumers need to make informed decisions. Contrary to popular belief, EU and Irish video game players do not have a high standard of protection even though this was promised. Pre-existing consumer law must be more proactively and strictly enforced.

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