

## Features of monetization systems in video games

### What this research is about

Monetization refers to ways that video game developers use to increase revenues. Monetization systems in video games have changed substantially over the past decade. Besides purchasing a game outright, people can now encounter subscriptions, downloadable content, microtransactions, loot boxes, battle passes, and in-game advertisements. These systems are often built directly into gameplay and can influence how people spend money, engage with games, and make decisions.

Research on video game monetization has mostly focused on loot boxes because of their similarities to gambling. However, other monetization systems may rely on similar design features that make them equally risky. In this review, the authors developed a classification framework for understanding the types of monetization systems in video games. This framework focuses on the psychological factors embedded in these systems to influence player behaviour.

### What the researchers did

The authors reviewed past research on video game monetization, behavioural design, and digital consumption (i.e., how people use digital media and internet technologies). They specifically looked at the design features of different monetization systems in video games and how these features may influence people's behaviour and spending.

Based on this review, the authors developed a framework for classifying video game monetization strategies. They grouped these monetization strategies into four categories according to how they make money, how they are integrated into

### What you need to know

Monetization systems are increasingly common in video games. In this review, the researchers developed a classification framework for understanding the types of monetization strategies used in video games. This framework focuses on the psychological factors embedded in these systems to influence player behaviour.

The authors identified four categories of monetization strategies in video games: traditional sales, microtransactions, gamblification, and in-game advertising. Similar psychological factors are shared across these monetization strategies, such as cognitive biases (e.g., fear of missing out), reward and reinforcement processes, and design features to increase engagement. Most games include multiple monetization strategies, whose interaction may increase risk for harm (e.g., overspending) and problematic gaming or problem gambling. This review can inform researchers, policy makers, and consumer protection organizations.

gameplay, and the psychological factors they use to influence people.

### What the researchers found

The researchers identified four categories of monetization strategies in video games: traditional sales, microtransactions, gamblification, and in-game advertising.

Traditional sales include premium game purchases, subscriptions, and downloadable content. Premium game purchases mean paying a cost upfront to own

a game, subscriptions involve paying a recurring fee for continued access, and downloadable content is additional game content that players can pay to gain access. These monetization systems rely on mechanisms like sunk-cost bias (i.e., a tendency to continue investing time or money because one has already invested) and loss aversion (i.e., a tendency to be motivated by avoiding losses over making equivalent gains). For example, people may continue spending money after buying a game because they feel invested or want access to the “full” experience.

Microtransactions are purchases embedded within gameplay. They include virtual currencies, cosmetic items, pay-to-win mechanics, pay-to-skip features, extra lives or retries, inactivity penalties, and battle passes. Common psychological factors underlying microtransactions include making costs less transparent through virtual currencies, social comparison, fear of missing out, sunk-cost bias, loss aversion, and making it seem like the person has just narrowly missed a desired reward. These mechanisms can encourage ongoing engagement and spending by making purchases feel less costly, creating pressure to “keep up” with other people, or rewarding frequent participation.

Gamblification captures gambling-like features embedded within video games, such as loot boxes, gacha systems, and social casino games. These features often rely on the same mechanisms seen in gambling products. For example, loot boxes and gacha systems rely on reward uncertainty, where people pay without knowing exactly what they will receive. Social casino games give out intermittent rewards, where wins occur unpredictably to encourage continued gaming. More recent developments include skin gambling (i.e., use of in-game cosmetic items for betting) and blockchain-based systems that often adopt pay-to-earn models.

Finally, in-game advertising includes static, pop-up, deceptive, and personalized advertisements. People are often repeatedly exposed to the same advertisements while playing, and receive in-game rewards for watching them. They may encounter advertisements that misrepresent gameplay to attract downloads, as well as advertisements that are tailored to their interests and digital behaviour.

Similar psychological factors are present across all four categories of monetization systems, even when they look different on the surface. Many games combine multiple monetization systems at once, and risk emerges from their interaction, rather than isolated features. Together, these design features encourage continued engagement and may lead to harm (e.g., overspending) and increase risk for problem gaming or gambling.

### How you can use this research

This review can inform researchers, policy makers, and consumer protection organizations.

### About the researchers

**Jan Ivern** and **Xavier Carbonell** are affiliated with the Facultat de Psicologia, Ciències de l'Educació i de l'Esport Blanquerna at Universitat Ramon Llull in Barcelona, Spain. **Mark D. Griffiths** is affiliated with the International Gaming Research Unit at Nottingham Trent University in Nottingham, United Kingdom. For more information about this study, please contact Jan Ivern at [janis@blanquerna.url.edu](mailto:janis@blanquerna.url.edu).

### Citation

Ivern, J., Carbonell, X., & Griffiths, M. D. (2026). Psychological mechanisms in video game monetization: A typology of contemporary strategies beyond loot boxes. *Journal of Behavioral Addictions*, 15(2), 582–596.  
<https://doi.org/10.1556/2006.2026.00038>

### Study Funding

This study received no direct funding.

---

### About Greo Evidence Insights

Greo Evidence Insights is an independent, non-profit organization specializing in research, knowledge mobilization, and evaluation in the health and well-being sectors. Greo transforms research and insights into actionable strategies to prevent and reduce harm related to gambling, gaming, technology use, and substance use. To learn more about funding for Research Snapshots visit [our website](#).

