



# Misleading and Deceptive Monetisation in Roblox

Evidence of False Pricing, Manipulative Design, and Consumer Harm in a Children’s Digital Platform

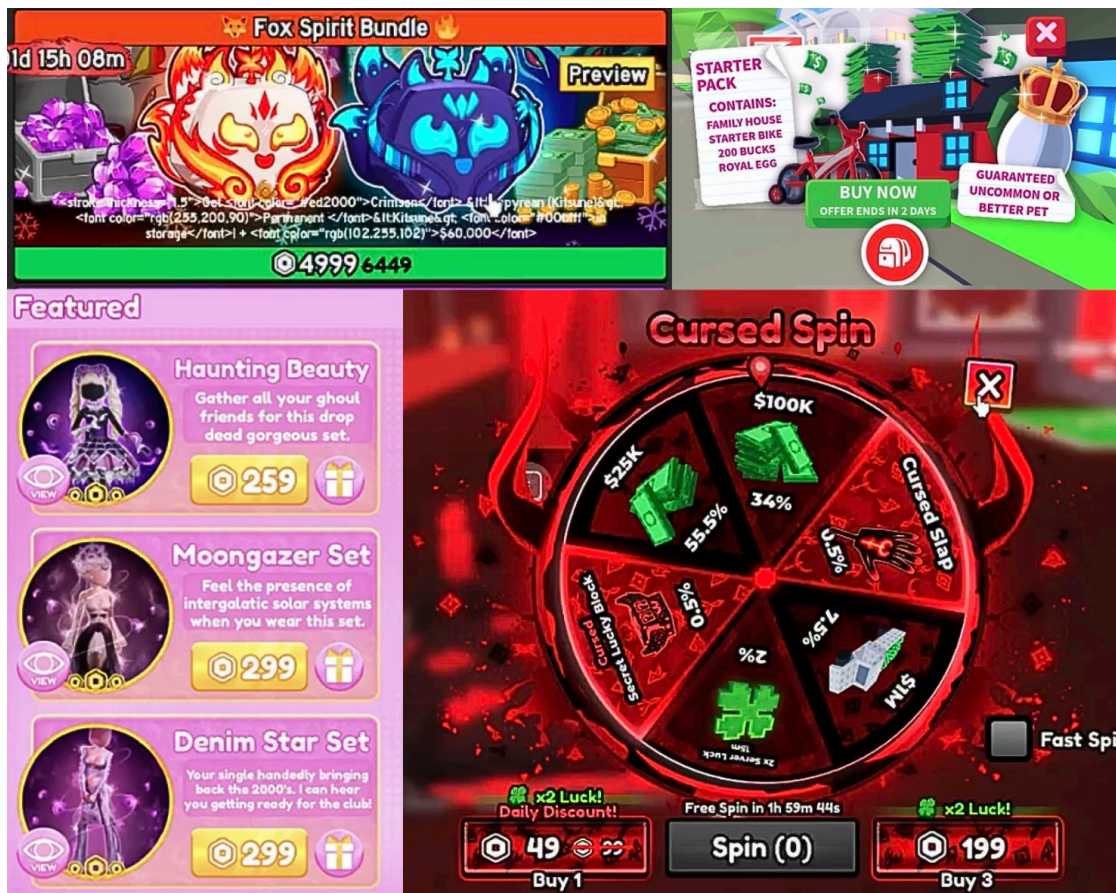


Figure 1 - Examples of Misleading, Manipulative or Deceptive Monetisation Designs from Popular Roblox Games

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## How to Cite This Report

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# Monetising Children

Games on Roblox routinely employ misleading and deceptive design practices that are likely to distort user understanding of in-game purchases and their economic consequences.

With approximately 350 million monthly users worldwide, Roblox is a major digital platform on which third-party developers create games and players discover and play them. As of 2026, Roblox hosts millions of games (called ‘experiences’), and has become a mainstream cultural space in which many young players spend time, socialise, and play together. More than 56% of Roblox’s player base consists of minors under the age of 17<sup>1</sup>, with 40% under 13.<sup>2</sup>

The scale of the platform is comparable to that of major social media companies, with daily visits by an estimated 151 million users and an estimated annual revenue of at least USD\$5.6 billion (AUD\$8.04bn).<sup>3</sup> The majority of this revenue is generated from the sale of Robux, Roblox’s virtual currency. Players purchase Robux with money and spend it on microtransactions: in-game advantages, game passes, and other cosmetic user-generated content (UGCs).

The design of these microtransactions, typically obfuscated by a second layer of virtual currencies, is a major site of concern for players of any age. Many Roblox games feature microtransactions with gambling-like designs, predatory feedback loops, and pay-to-win gameplay to coerce players into spending. To reach a clear consensus on what economic and social costs are borne by children in digital environments like Roblox, it is critical to understand how monetisation is designed, presented, and experienced – and especially the deceptive or “dark patterns” involved in the process.

The study identified a consistent pattern across the sampled games in which pricing representations, purchase prompts, and reward mechanics were designed in ways likely to mislead child consumers about the cost, value, or consequences of spending.

Across the games analysed, monetisation was not a peripheral add-on but embedded into the core experience of play. Roblox games are not “freemium”, but “paymium”: nearly all aspects of play are purchasable, spending friction is embedded throughout progression, prices rarely deflate, and the resulting experience is qualitatively different from conventional freemium games.

Overwhelmingly, the design of these purchases and microtransactions employ misleading and deceptive tricks that are treated as illegal in comparable non-game contexts. We argue that it is imperative that consumer protection authorities pay closer attention to Roblox games, especially given the game’s young player base.

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<sup>1</sup> Statista, “Distribution of Roblox audiences worldwide as of December 2024, by age group,” November 27 2025 “<https://www.statista.com/statistics/1190869/roblox-games-users-global-distribution-age/>”

<sup>2</sup> Brooks, L. & Otte, J. “Risks to children playing Roblox ‘deeply disturbing’, say researchers,” The Guardian, April 14, 2025.

<sup>3</sup> Q3 2025 Revenue was USD\$1.4Bn, see Roblox, “Q3 2025 Supplementary Materials” Roblox Q3 Report, October 30 2025.

## Research Context

This research is funded by an Australian Research Council Future Fellowship (FT220100076) on *The Monetisation of Children in the Digital Games Industry*, awarded to Professor Marcus Carter at The University of Sydney. This project is concerned with how children experience game monetisation, how game monetisation is designed, and the regulatory and governance frameworks that shape it. The present report is a summary of key outcomes relevant to consumer protection organisations from a detailed study into the monetisation ecologies of Roblox games, ongoing work that seeks to analyse and critique the hyper-embedded and entwined nature of microtransactions in Roblox games.

## Our Methodology

This study used a qualitative, observational approach based on direct gameplay analysis. 15 Roblox games were selected and played for at least 30 minutes each between October 2025 and February 2026, with gameplay screen-recorded to capture monetisation prompts, interfaces, points of purchases, and mechanics as they appeared in real time. Games were selected using Roblox's Top Earning Games list as a reference point, and included at least one representative from each major genre, to ensure they reflected the most commercially successful titles as well as a broad cross-section of gameplay styles and monetisation models present on the platform. Gameplay was conducted by the 2nd and 3rd authors, who have over a decade of experience playing Roblox games.

Recurring monetisation features were identified and coded into common patterns, including purchase prompts, interface features, reward mechanics, pricing structures, and progression-linked spending incentives. Our analysis is not exhaustive, as games present additional purchase prompts dynamically throughout gameplay that may not have appeared within the first 30 minutes of observation, or may only appear to players depending on specific game states (such as having spent money).

After selecting particularly deceptive practices in some of the analysed Roblox games, approximately AUD \$150 worth of Robux was spent on key monetisation features in those games to record the entire process of pre-purchase state, the transaction itself, and the post-purchase state. This enabled closer analysis of how monetised systems operate over time and how information is presented or withheld before, during, and after purchase, as well as the potential social and financial effect on children. In limited cases, VPN access was used to observe monetisation features related to loot boxes - particularly in the games *Adopt Me!*, *Steal a Brainrot*, and *Blade Ball* - that were regionally restricted or altered due to AU/NZ regulations. This was done to ensure the study could document the full range of monetisation practices and dark patterns embedded in each game's design, including features that were otherwise inaccessible in certain jurisdictions but remained central to progression, reward systems, and overall gameplay structure. The analysis was supplemented by a review of relevant consumer protection laws in various countries (Australia, Singapore, Canada, some states of USA and UK); dark patterns literature; and prior controversies involving Roblox to contextualise observed practices.

A **Summary of Results** is presented on page 32.

## Contact Information

For further information about this research, please contact **Professor Marcus Carter**, at The University of Sydney.  
Email: [marcus.carter@sydney.edu.au](mailto:marcus.carter@sydney.edu.au)

# Results

Our analysis identified 14 deceptive, misleading or manipulative design practices in the studied Roblox games, with all but one occurring in more than one game.

Each practice corresponds to a recognised form of misleading or aggressive trading conduct in at least one consumer protection framework. The classification of these practices draws on Australian and international consumer law, including prohibitions on misleading or deceptive conduct and unfair commercial practices, as well as established scholarship on dark patterns and manipulative design. Together, these practices illustrate how monetisation, interface design, and gameplay mechanics can combine to distort users' understanding of price, value, probability, or necessity at the point of purchase.

Crucially, these practices do not arise solely from third-party game developers. Roblox Corporation actively shapes the monetisation environment through its official developer guidelines, which explicitly recommend many of the design patterns documented in this report. These guidelines advise developers to surface purchase pop-ups at the moment a player “lose[s] a match in which the starter pack’s items might have been helpful”,<sup>4</sup> to deploy limited-time offers because “temporary availability incentivizes players to engage with the content and imparts prestige to those who acquire it”,<sup>5</sup> and to prioritise conversion, defined as the number of players spending money, “one of the most important metrics”.<sup>6</sup> As a platform that retains approximately 50% of all revenue generated by developers, Roblox Corporation is not a passive host of third-party content. It is the architect of a commercial environment that incentivises, recommends, and profits from the practices described in this report.

A list of the design practices, and occurrence within the studied games, can be found in the **Summary of Results** on page 32.

## 1. Timed False Reference Pricing

False reference pricing occurs when a product is advertised at a reduced price relative to a higher price that is either ingenuine or not recently offered. *Timed* false reference pricing is an example of this, where the falsehood is grounded in claims regarding a window of limited availability. In our study, 3 of 15 games included timed false reference pricing, such as a “Daily Discount” which was available every day, or a sale price (where no dates for the sale are identifiable). To verify whether these claims represented genuine short-term discounts or falsehood, we played 5 of these games 10 times over a 14-day period.<sup>7</sup>

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<sup>4</sup> Roblox Corporation. (n.d.). *Starter pack design*. Roblox Creator Hub.

<https://create.roblox.com/docs/production/game-design/starter-pack-design>

<sup>5</sup> Roblox Corporation. (n.d.). *LiveOps essentials*. Roblox Creator Hub.

<https://create.roblox.com/docs/production/game-design/liveops-essentials#content-cadence>

<sup>6</sup> Roblox Corporation. (n.d.). *Analytics Essentials*. Roblox Creator Hub.

<https://create.roblox.com/docs/production/game-design/analytics-essentials#monetization-metrics>

<sup>7</sup> The games were *Steal a Brainrot*, *Anime Simulator*, *Fisch*, *Pet Simulator 99* and *Rivals*.

One example of this can be observed in Steal a Brainrot. Steal a Brainrot is one of Roblox's most popular games, with a peak of 25 million concurrent players in October 2025<sup>8</sup>. The game is a fast-paced, competitive collection and stealing experience in which players attempt to obtain rare "brainrot" characters by taking them from other players, with status and progression tied to the perceived rarity and value of these items. In this game, players can access a randomised spin-wheel feature that grants one free spin during limited themed event "hours" (see Figure 1). These events temporarily alter the game's theme and unique 'brainrots' become available (i.e. "Cursed" themed which turns them all red). During this time, players may spin for a chance to win various rewards such as currency, lucky blocks, increased server luck, or weapons. The game also advertises a 'double luck respin' at a discounted price of 49 Robux, marked down from 99 Robux, labelled as a "Daily Discount": a form of reference pricing. The label frames the offer as time limited offer and is available after unfavourable spin outcomes, in conditions that encourage reliance on rapid, intuitive thinking which is linked to a higher likelihood of impulsive purchases.



Figure 2 - Examples of 'Spins' in Steal-A-Brainrot, both with a 'Daily Discount' available everyday in our study.

Across 10 logins over a 14-day period, the "Daily Discount" remained consistently available. The offer persisted across multiple events, including the 'Radioactive' and 'Cursed' events, without any indication of expiry. On this basis, these observations indicate that 49 Robux operated as the regular price rather than a time-limited discount, and that the "Daily Discount" therefore constitutes an instance of timed false reference pricing.

As another example, the game Anime Simulator advertises all game passes (permanent in-game advantages such as 2x speed, 2x strength and 2x defence) at "50% OFF" without disclosing any end date, employing misleading omission and fostering a false sense of urgency (see Figure 2). Anime Simulator is one of many anime-themed battle games on Roblox, a genre typically centred on character training, stat growth, and competitive boss battles. These gamepasses not only promise advantages in battles but also claim to be heavily discounted, doubling its appeal to players. However, observations across ten separate logins over a 14-day period showed that the "discount" remained unchanged, indicating that it operated as a sustained pricing level rather than a genuine short-term offer. By maintaining a

<sup>8</sup> Rolimon's. (2026). [SOON] Steal a Brainrot | Roblox Game. [https://www.rolimons.com/game/109983668079237?\\_rosealRequest=](https://www.rolimons.com/game/109983668079237?_rosealRequest=)

continuous sale without a clear end date, the game effectively normalises the reduced price as the standard,<sup>9</sup> thereby devaluing any supposed special offer.



Figure 3 – Microtransactions in Anime Simulator advertised with a displayed sale price that is actually the normal price.

What makes these examples misleading is that the framing of these prices relies on a persistent suggestion of scarcity and limited-time opportunity, when in practice the lower price appears to function as the default. By presenting a permanent or regularly recurring price as a temporary discount, players are led to believe they must act quickly to avoid missing a better deal. Section 29 of the ACL prohibits false or misleading representations about the price of goods or services<sup>10</sup>. The pricing practices observed in these games risk breaching this provision by framing standard or continuously available prices as limited-time discounts, thereby creating a misleading impression of value and urgency for players.

## 2. False Value Reference Pricing

Another way in which in-game discounts can mislead is through false value reference pricing, where a comparison point is used to imply savings or added value that cannot be verified. This occurs in two main ways: first, by displaying higher crossed-out prices that do not appear to reflect a genuine previous selling price; and second, by presenting inflated value claims, multipliers, or bundled “worth” totals without a clear basis. In both cases, the reference point frames the current price as a bargain without transparent evidence to support it. 5 of 15 games studied featured false value reference pricing in some form.

For example, in Steal a Brainrot, certain items in the in-game shop are presented with strikethrough labels such as “worth 9999” and “worth 499” positioned above the listed price, visually mimicking the format of a genuine markdown discount (see Figure 3). However, there is no clear evidence nor information provided by the game that supports whether these “worth” figures reflect amounts were previously charged.

<sup>9</sup> Price displays. (2024, July 10). Australian Competition and Consumer Commission.

<https://www.accc.gov.au/consumers/pricing/price-displays#toc-misleading-drip-pricing-practices>

<sup>10</sup> Australian Competition and Consumer Commission. (2011). *Competition and Consumer Act 2010 (Cth)*, Schedule 2 – Australian Consumer Law, s 29(1)(i). <https://www.legislation.gov.au/>



Figure 4 - False value reference pricing in Steal a Brainrot. The 'admin panel' is not available for purchase in any other way, and we were unable to identify any basis for the 9999 Robux price. 3 out of 4 items included in the 'Starter Pack' are not available for individual purchase and thus we were unable to validate its 499 Robux worth.

While we could not directly verify the changes in price, the Steal a Brainrot Wiki page, on which community members routinely keep track of elements and changes in the game, it is reported that the price of the Admin Panel was originally R\$1,999, then increased to R\$4,999 following a July 12, 2025 overhaul, and later to its current price of R\$7,499 alongside the addition of new commands<sup>11</sup>. A note on the same page states that “It is likely that the Admin Panel containing the Admin Commands will soon become the R\$9,999 price it says its discounted on.” This suggests that, in the experience of many players, the crossed-out “worth” price has not functioned as a genuine previous sale price but instead appears to reflect a potential future price point used to frame the current cost as a discount.

Another example of false value reference pricing can be seen in Rivals. Rivals is a competitive first-person shooter game in which players purchase weapons, gear, and consumables to gain an advantage in matches. In this game, bundles offer packages of multiple in-game items intended to accelerate progression or improve performance. These bundles are marketed using prominent “value” labels (e.g. “12x Value”) (see Figure 4) as if to justify their steeper prices compared to individual item purchases in the game. However, many items included in these bundles were not available for individual purchase, leaving no clear reference point against which the claimed multiplier or savings could be verified. As a result, the presentation implies substantial added value or a discount without transparent comparative pricing, which may mislead players about the bundle’s true worth.



Figure 5 - False value reference pricing in Rivals using 'X Value' labels even though there was no clear reference point to substantiate this claim as not all items in bundles have individual sale prices i.e. skins, poses, etc.

Taken together, these examples illustrate how false value reference pricing can shape players' perceptions of savings and value without a clear or verifiable basis. By relying on crossed-out “worth” figures, projected future prices, or unsubstantiated value multipliers, these practices frame purchases as bargains even where no

<sup>11</sup> Steal a Brainrot Wiki contributors. (n.d.). *Admin Commands*. Fandom. Retrieved [February 8, 2025], from [https://stealabrainrot.fandom.com/wiki/Admin\\_Commands](https://stealabrainrot.fandom.com/wiki/Admin_Commands)

genuine comparison point exists. This misrepresentation distorts players' understanding of what they are paying for and encourages decisions based on perceived value rather than transparent, accurate price information.

### 3. Urgency Cues

Urgency cues are marketing pressure tactics that convey time limits and scarcity to encourage consumers to make a quick decision at the expense of acquiring perfect information about a product. Urgency cues are widely used in Roblox games, with 13 out of the 15 games we studied employing them in some form. Common examples include countdown timers, expiring offers, or limited-time bonuses. When used legitimately, urgency cues reflect real constraints, such as an offer that genuinely expires at a fixed point in time (e.g. 'happy hour' between 3-5pm). When artificial or misleading, however, they can distort decision-making by inducing fear of missing out and reducing a user's ability to make considered choices.

Authorities in the EU are increasingly treating urgency cues as unfair practices, even if the urgency cue is real. This is because such practices can fall below the standard of "professional diligence," meaning not done out of the expected good faith that businesses are assumed to have, and also materially distort a consumer's economic behaviour by affecting the average person's ability to make a free and informed decision, leading them to make a purchase they otherwise might not have made under time or scarcity pressure.<sup>12</sup>

For example, Fisch is Roblox's most popular fishing simulator game, and its in-game shop is centred around selling items and boosts that aid in fishing. Fisch features a section for 'Limited' items within its in-game shop (see Figure 5). Many of these items are featured with urgency cues, such as countdown timers showing when an item would leave the shop and numerical displays of the remaining stock available for purchase.



Figure 6 - Limited items for sale via microtransactions in the game Fisch are an example of a genuine urgency cue, as these items are removed from the store at the end of the timer, or after the specified number are sold

<sup>12</sup> European Parliament and Council of the European Union. (2005). *Directive 2005/29/EC concerning unfair business-to-consumer commercial practices in the internal market* (Unfair Commercial Practices Directive), arts. 2(h), 5(2). <https://eur-lex.europa.eu/>

As seen in Figure 6, some urgency cues in Fisch create uncertainty, while others manufacture anxiety. The “Beetle Bundle” sits under a label that says “Can update every week!” and “Limited”, leaving its current stock level and time left on sale opaque. This not only manufactures urgency but uncertainty as well. Players are motivated to buy the item quickly due to not knowing how long the item will be available.

Then there’s urgency cues that manufacture anxiety where the stock levels and time left on sale is clearly labelled such as the “Gothic Archer”. Here, urgency is established through competition with other players to purchase first. Inherently, none of these items are actually scarce since they are digital assets that can be replicated to infinite amounts. Game developers intentionally produce limited items to generate a surge in player purchases.

In fact, Roblox’s official game development guidelines encourage manufactured scarcity as a design tactic for developers to alter consumer behaviour and lead to a surge in purchases. In the Content Cadence tutorial, Roblox says: “Limited-time events are content that’s available for a restricted period that players can earn or purchase. This temporary availability incentivises players to engage with the content and imparts prestige to those who acquire it.”<sup>13</sup> This official endorsement could explain the sheer prevalence of urgency cues across Roblox.

Even when the information is clear and accurate, building scarcity into gameplay is an aggressive predatory practice that exploits children’s impulsivity and fear of missing out. Yet, this practice is encouraged and widely employed in Roblox experiences.

## 4. False Urgency Cues

In contrast, false urgency cues are those where the urgency cue is not true, such as a ‘going out of business sale’ that lasts for multiple years, or is otherwise misleading.

One game in our sample that extensively employs false urgency cues is Grow a Garden, a farming simulator game in which players purchase seeds using virtual currency or Robux; plant seeds in their garden; harvest the crops after a real-time elapses (or they pay Robux to skip waiting); and then sell these crops in order to purchase new seeds (which grow crops that can be sold for ever increasing amounts).

Every 5 minutes the shop restocks with a different selection of seeds for purchase (using either Robux or the game’s virtual currency), and occasionally a special kind of ‘travelling merchant’ shop appears to sell rare items for a limited amount of time. Essentially, every purchase in Grow a Garden is framed with an urgency cue, creating the impression of a limited-time promotion and generating pressure for immediate purchases (see Figure 7).

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<sup>13</sup> Roblox Corporation. (n.d.). *LiveOps essentials*. Roblox Creator Hub.

<https://create.roblox.com/docs/production/game-design/liveops-essentials#content-cadence>



Figure 7 - Urgency cues in the game 'Grow-a-Garden', which misrepresents how long the player has access to the starter pack.

In the example of the starter pack, the countdown is misleading because it operates on in-game session time rather than real-world time. The timer progresses only while an individual player is actively in session; when the player logs out, it pauses and later resumes from the same point upon re-entry, even after several days. It ultimately expires only once the total session time has reached the stated countdown duration. This is not explained to the player, creating the impression that the offer is governed by a continuous real-time limit when it is not.

On the other hand, in the 'Safari Shop', the false urgency is derived from a **Misleading Omission**. The game provides no information about how frequently the shop appears, despite there being a constant chance of it returning, which makes the suggestion that it is "leaving" misleading, nor does it explain how item availability works: some items are consistently obtainable, while others appear only with a low probability.

Without this context, players are unable to judge whether the urgency is genuine. To understand how the shop actually functions, they must seek information outside the game, such as on subreddits, Discord servers, or wikis. This lack of transparency encourages a perception of scarcity, heightens fear of missing out, and increases the likelihood of impulse purchases made under perceived time pressure.

False urgency cues such as the ones listed above are outright banned in many jurisdictions. In Canada, for example, the Competition Act prohibits representations that create a false impression about the duration or availability of an offer. This can include limited-time promotions or countdown clocks that are reset, extended, or repeatedly reintroduced after the stated deadline, as they manufacture artificial scarcity and pressure consumers into making faster purchasing decisions than they otherwise would. By presenting an offer as fleeting when it is in fact routinely available, these tactics distort consumer choice and are therefore considered misleading and unlawful.<sup>14</sup>

<sup>14</sup> Competition Bureau Canada. (n.d.). *Deceptive marketing practices digest*. Government of Canada. <https://competition-bureau.canada.ca/deceptive-marketing-practices-digest>

## 5. Direct Exhortations to Make Purchases

A direct exhortation to purchase is a design element or message that explicitly urges a user to spend money at a specific moment rather than merely making a paid option available to them. Under the Unfair Commercial Practices Directive (2005/29/EC), “direct exhortations to children to buy advertised products” are automatically illegal in the EU.<sup>15</sup> Classic examples include: “Buy now!”, “Get this item now!”, “Click here to unlock!”, “Don’t miss out — purchase now!” or “Ask your parents to buy this for you!”.

In Roblox games, direct exhortations to purchase are frequently used to pressure players into pay-to-win (P2W) or pay-to-skip (P2S) transactions by presenting paid options as necessary to access features or avoid loss of progress or competitive disadvantage. Figure 8 depicts such an example in *Adopt Me!*, advertising the ‘Ride-a-Pet’ microtransaction with the direct exhortation ‘Get it now!’.

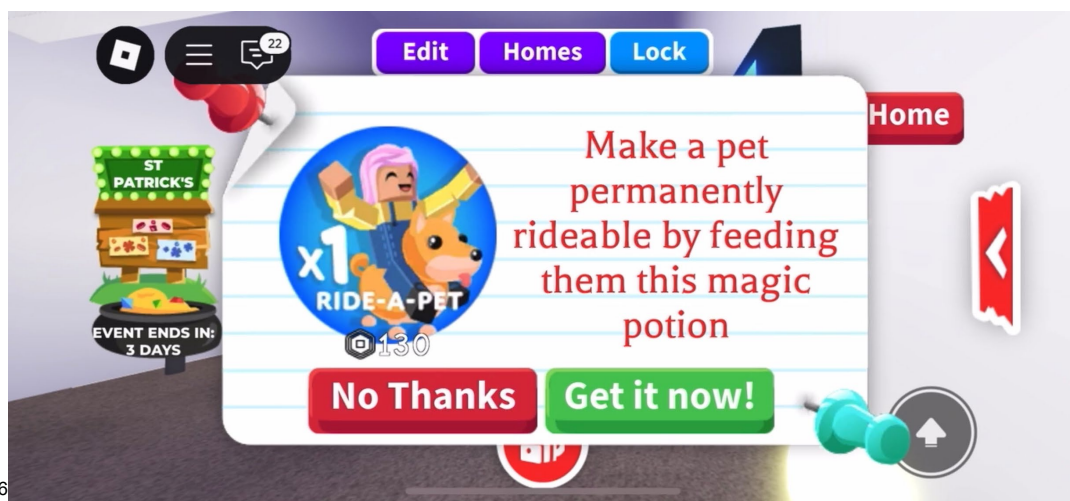


Figure 8 – A direct exhortation to make a purchase for the in-game ability to ride your pet, a highly coveted function in the game ‘Adopt Me!’

Adopt Me! is a role-play and collection-based game in which players raise, trade, and care for virtual pets within a shared social world. The core gameplay loop revolves around acquiring specific pets via feed such as seeds, treats, or other animal feed that function as lootboxes, leveling up their pets, houses, or other cosmetics, and trading rare pets with other players, making pet ownership and rarity central to player status and progression. The game also utilises ‘Unlock’ as a common purchasing label, implying the item is already owned or as the next transaction in gameplay, which we would similarly argue is a problematic form of direct exhortation.

Direct exhortations were identified in 4 of the 15 games reviewed. Like urgency cues, Roblox also encourages developers to employ both **Direct Exhortations to Make Purchases** and **Ludic Exhortations to Make Purchases** through what they call “surfacing” and “popup opportunities”: “A popup modal dialog advertising the bundle. Some players feel that popups are aggressive, however, so use sparingly. Potential

<sup>15</sup> European Parliament & Council of the European Union, *Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market*, Official Journal of the European Union, L 149, 22–39 (2005), <https://eur-lex.europa.eu/eli/dir/2005/29/oj>

<sup>16</sup> Roblox Corporation. (n.d.). *Starter pack design*. Roblox Creator Hub. <https://create.roblox.com/docs/production/game-design/starter-pack-design>

popup opportunities include when the player spawns into the experience the last day the offer is available to them, when they level up, or when they lose a match in which the starter pack's items might have been helpful.”<sup>17</sup>

Often, direct exhortations are also combined with other misleading design patterns, such as **Misleading Claim** or **Misleading Omission**. For example, in War Tycoon, a popular Roblox military-themed progression game in which players unlock vehicles, weapons, and upgrades through gameplay or paid purchases. In this case, the prompt appears as part of a game update announcement (Figure 9), blending promotional content with patch notes and new feature information. Within this update framing, a “New Limited” item is highlighted alongside a prominent call-to-action “Get it Now!”, but the price is not disclosed at the point of initial presentation. By embedding the promotion within an update and emphasising novelty and scarcity without immediately showing cost, the design draws attention to desirability and urgency before players are able to make an informed purchasing decision.

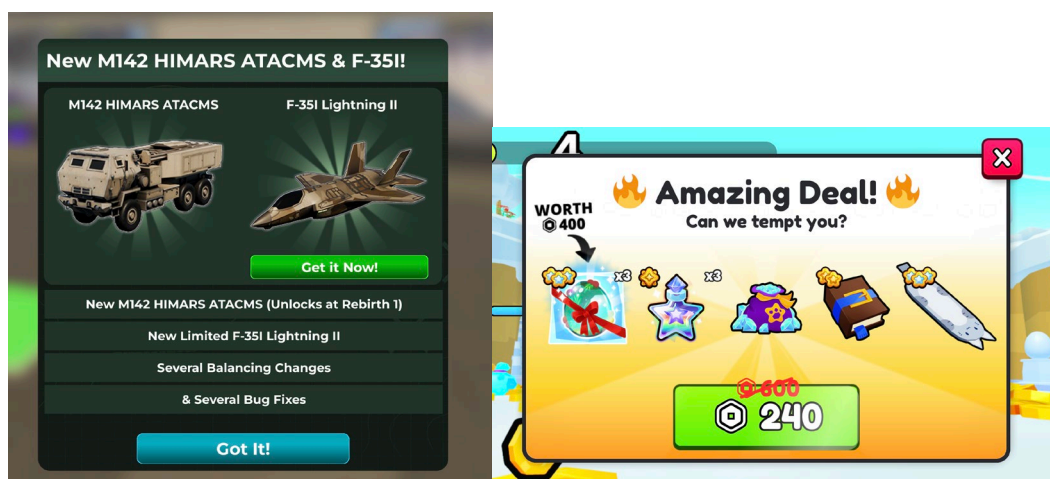


Figure 9 - Phrases such as “Amazing deal! Can we tempt you?” and “Get it Now!” constitute explicit persuasive appeals that go beyond presenting a purchase option and function as direct exhortations, particularly when directed at child users.

## 6. Ludic Exhortations to Make Purchases

We also identified what we term ‘Ludic Exhortations’, where purchases are embedded in the gameplay loop in a way that places contextual or timed pressure on players to make a purchase. In these examples, urgency is not conveyed through text-based exhortation (e.g. ‘Buy Now!’) but how the purchase and purchase prompt is triggered by the gameplay.

For example, 99 Nights in the Forest is one of the most popular games on Roblox (23.4B+ visits, with a peak player count of 14.1m concurrent players). 99 Nights is a cooperative survival experience in which players gather resources, build defences, and work together to survive repeated attacks from monsters and environmental threats. Progress is measured by the number of nights a player successfully survives, making survival time the core indicator of advancement. When a player dies, their progress is fully reset to Day 0, all collected resources are lost, and they

<sup>17</sup> Roblox Corporation. (n.d.). *Starter pack design*. Roblox Creator Hub. <https://create.roblox.com/docs/production/game-design/starter-pack-design>

must begin again from scratch. The game is recommended for players aged five and above and classified with a minimal maturity requirement rating by Roblox. A player's maximum number of days lived is shown over their avatar's head, and on a leaderboard of players with the highest number of days lived, which socially reinforces maximising days survived as a goal (see Figure 10).



Figure 10 - How 99 Nights in the Forest establishes 'Days Survived' as a key form of social status.

In this context, 99 Nights employs a coercive monetisation mechanic that appears immediately after a player dies. This takes the form of a Self-Revive purchase prompt, which is displayed alongside a 25-second countdown timer that begins the moment death occurs (see Figure 11). A prominently displayed green button invites the player to revive, and selecting it prompts a charge of 45 Robux (~AUD\$0.81).

When the timer expires, the self-rotate option disappears and the player permanently loses their progress for that session, unless another player in the server revives them.

We argue that this constitutes a highly persuasive form of direct exhortation, which we term *ludic exhortation* because the urgency and pressure is situated in gameplay. The self-rotate option appears as a call to action with manufactured urgency at the very moment a player is likely to be most frustrated at their sudden loss of progress and capitalises on their vulnerability to sell the self-rotate to them to retain their social status in the game. It is not immediately clear that this is not a gameplay function, but a financial purchase. Although players technically have the option to wait for another player to revive them, the self-rotate button is given visual prominence and framed as the most reliable and immediate means of restoring lost progress. It is also not clear in the first instance that it is a purchase.



Figure 11 – When killed in 99 Nights in the Forest, players are prompted to 'Self-Revive' by making a purchase worth 45 Robux (AUD\$0.81). We term this a 'Ludic Exhortation' as the urgency and pressure is situated in gameplay.

There are also games in which direct exhortations to purchase are embedded within the game's progression structure and appear strategically at certain levels of progress to encourage context-relevant spending.

An example of this is in Pet Simulator 99. Pet Simulator 99 is a game that involves collecting various soft currencies to hatch pets, which in turn help you unlock more soft currencies. The game progression is highly complex and tiered, with unlocking new ranks, rebirths, and areas within worlds, and eventually new worlds after every 100 areas are unlocked. Unlocking areas becomes more expensive as players progress, and currencies reset in each world, making the game highly time-consuming and repetitive.

Ludic exhortations in Pet Simulator 99 are not timed as much as they are triggered by context. As new players start to collect currencies and progress through more areas (note that every area gets progressively more expensive to enter), they start to see popups on their screen that are labelled 'Zone X Boost'. Then they are presented with two paid options: a bundle that involves a combination of pets, boosts, enchants and potions, tickets, eggs, and more, or a subscription offer that promises monthly items on top of the bundled items. This layout of the popup remains the same across various popups in each area, but what is noticeable is that the price of the bundle increases along with the area's numbering (See Figure 12).



Figure 12 – Players are shown increasingly higher bundle prices in each exhortation as their zone progression continues, with the second-to-last zone (Zone 99) at 249 Robux

This placement of purchase prompts ties them directly to moments of heightened impatience within gameplay. As players reach new areas and encounter higher entry costs or slower progression, the 'Zone X Boost' popups appear at points where additional resources feel most necessary to continue advancing. Since each successive zone requires more currency and effort to access, the escalating bundle prices mirror the player's increasing investment in the game, while the items included in these bundles also become progressively rarer or more exclusive as players advance. Together, this reinforces the sense that spending is a natural and expected part of progression (see Table 1).

Notably, these exhortations are only shown to players in World 1 and World 2, indicating that they are specifically targeted at early-stage players as they first encounter progression friction. In this way, the exhortations are embedded within the structure of advancement itself: rather than interrupting play at arbitrary moments,

they are presented precisely when players are most likely to feel friction, making the paid option appear as a practical solution to continue progressing.

	World 1	World 2
<b>Zone Boosts</b>	Zone 15: 4 Robux	Zone 120: 49 Robux
	Zone 24: 9 Robux	Zone 140: 69 Robux
	Zone 35: 12 Robux	Zone 160: 89 Robux
	Zone 45: 15 Robux	Zone 180: 121 Robux
	Zone 55: 18 Robux	Zone 199: 199 Robux
	Zone 65: 21 Robux	
	Zone 75: 25 Robux	
	Zone 85: 29 Robux	
	Zone 95: 35 Robux	
	Zone 99: 249 Robux	

Table 1 - Escalating 'Zone Boost' bundle prices across World 1 and World 2 in Pet Simulator 99.

In total, we identified 5 examples of ludic exhortations across our sample, 3 of which rely on timed prompts post player death, 1 which enables progression, and 1 of which is context-dependent for new players.

## 7. Random Reward Mechanics (RRMs)

Random Reward Mechanics (RRMs) are game design features that dispense in-game items, bonuses, or advantages based on chance rather than player skill or effort.<sup>18</sup> These mechanics commonly take the form of spin wheels, loot boxes, crates, or mystery items, and are designed to encourage repeated engagement and spending through probabilistic outcomes.<sup>19</sup> RRMs are closely associated with gambling-like psychological effects, particularly variable-ratio reinforcement, whereby unpredictable rewards significantly increase the likelihood of repetitive behaviour.<sup>20</sup> Loot box mechanisms drive compulsive engagement similar to slot machines, risking financial harm, gambling-like behaviours, and emotional distress, particularly among children who struggle to assess probabilities or set spending limits.<sup>21</sup>

14 of the 15 games featured RRMs either via lootboxes, spin wheels, or other miscellaneous forms of what Roblox terms “chance-based merchandising”. Similar to **Urgency Cues**, this is a method of monetisation that Roblox explicitly recommends to developers in their official monetisation guidelines.<sup>22</sup>

<sup>18</sup> Yin, M., & Xiao, R. (2022). *The reward for luck: Understanding the effect of random reward mechanisms in video games on player experience*. In Proceedings of the CHI Conference on Human Factors in Computing Systems. <https://doi.org/10.1145/3491102.3517642>

<sup>19</sup> Drummond, A., Sauer, J. D., Ferguson, C. J., & Hall, L. C. (2020). *The relationship between problem gambling, excessive gaming, psychological distress and spending on loot boxes in Aotearoa New Zealand, Australia, and the United States—A cross-national survey*. *PLOS ONE*, 15(3). <https://doi.org/10.1371/journal.pone.0230378>

<sup>20</sup> Clark, L., & Zack, M. (2023). *Engineered highs: Reward variability and frequency as potential prerequisites of behavioural addiction*. *Addictive Behaviors*, 140, 107626. <https://doi.org/10.1016/j.addbeh.2023.107626>

<sup>21</sup> Xiao, L. Y. (2020). Which Implementations of Loot Boxes Constitute Gambling? A UK Legal Perspective on the Potential Harms of Random Reward Mechanisms. *International Journal of Mental Health and Addiction*, 20, 437–454. <https://doi.org/10.1007/s11469-020-00372-3>

<sup>22</sup> Roblox Corporation. (n.d.). *Monetization foundations*. Roblox Creator Documentation. <https://create.roblox.com/docs/production/game-design/monetization-foundations>

Worldwide, emerging regulatory expectations emphasise the disclosure of ‘drop rates’ or probabilities, so that players can make informed decisions about purchases involving randomised rewards. Roblox’s terms of use further supports this restriction by requiring that:

*“If a creator provides the opportunity for a User to receive a Random Virtual Item, Creator must let Users know all odds of acquiring each type of Random Virtual Item available before a User engages in the transaction to acquire a Random Virtual Item”.*<sup>23</sup>

In Australia, games containing chance-based purchases (including through virtual currency that can be purchased using real money) should be classified as rated M (recommended for users aged 15 or older). 6 games with RRM for global users were compliant through circumvention approaches (such as not monetising RRM, or disclosing a non-random reward sequence). 7 were non-compliant, with RRM available to Australian players.

## 8. Opaque and Manipulatable RRM

An opaque and manipulatable RRM is a design system in which the probabilities governing rewards are not transparently disclosed or subject to dynamic modification through in-game variables, including paid boosts, player attributes, or contextual factors. Rather than allowing users to make informed decisions, such systems obscure the true likelihood of outcomes and can mislead players about the value or effectiveness of participation, making players more likely to spend than to refrain. 3 out of 15 games we studied had this RRM.

RRMs are widely regulated now via the function of disclosed probabilities,<sup>24</sup> but we argue that this configuration of RRM undermines this approach. Under EU consumer protection law, particularly the Unfair Commercial Practices Directive (2005/29/EC), practices that materially distort a consumer’s economic behaviour through a lack of transparency or misleading presentation are prohibited.

Fisch is a good example of a popular game on Roblox in which core game progression centres around an opaque RRM. As a fishing simulator, all gameplay is effectively an RRM: you cast your rod, and catch a random item (typically, a fish). The actual probability experienced by a player varies dynamically based on a combination of personal luck stats, purchasable equipment and enchantments, server-wide luck multipliers, temporary paid boosts, and location- or event-specific abundance zones. When accounting for all possible add-ons in the game, the number of possible probability combinations runs into the millions for all fish. The Fisch Community Wiki maintains a complex calculator that community members have created to keep up with the convoluted system.<sup>25</sup>

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<sup>23</sup> Roblox Terms of Use. (2025). Roblox Support. <https://en.help.roblox.com/hc/en-us/articles/115004647846-Roblox-Terms-of-Use#creator-economics>

<sup>24</sup> Xiao, L. Y., & Newall, P. (2022). Probability disclosures are not enough: Reducing loot box reward complexity as a part of ethical video game design. *Journal of Gambling Issues*, 50, 145-162.

<sup>25</sup> Fischipedia contributors, *Tools: Fishing Chances Calculator*, *Fischipedia*, [https://fischipedia.org/wiki/Tools:Fishing\\_Chances\\_Calculator#](https://fischipedia.org/wiki/Tools:Fishing_Chances_Calculator#).

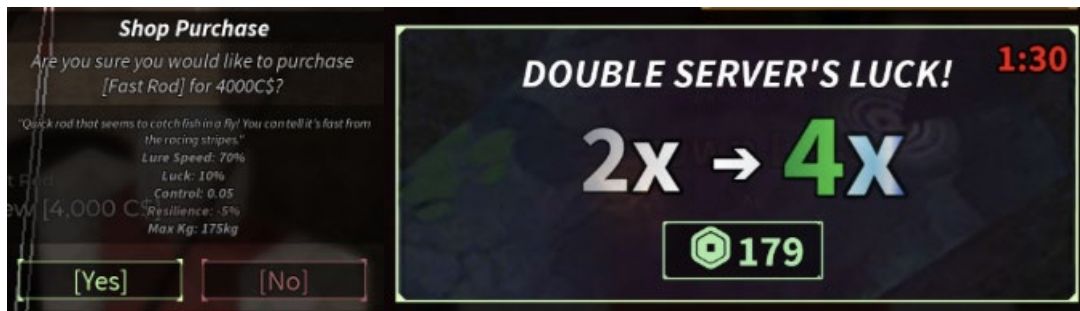


Figure 12 - Examples of Microtransactions that affect 'Luck', and thus the outcomes of random-reward mechanics in the game.

A multitude of interacting multipliers affect catch outcomes, and many of them invite the players to make a purchase of either Robux or Fisch's currency 'Coins' (which can be bought by Robux). Through it all, players are never informed how every modifier interacts with the others, what concrete change in probability a purchase delivers, or how their "luck" translates into real chances of success (see Figure 12).

In summary, Fisch gameplay is a highly opaque RRM alongside paid "solutions" that are repeatedly presented as a means of resolving uncertainty or strategically improving player chances. This design biases players toward purchasing paid add-ons in the belief that doing so may improve their chances of obtaining a desired or rare fish. However, because the underlying probabilities (which are often as extreme as 1 in 16,000) remain largely incomprehensible to child players, this uncertainty is never genuinely resolved and reinforces a self-perpetuating cycle of continued spending.

Another example appears in Pet Simulator 99's "Forever Pack" system, which functions as the central feature of the game's Exclusive Shop and is immediately presented to players on entry. Rather than a single purchase, it operates as an ongoing spending loop built around sequential rewards, escalating price tiers, and uncertain outcomes. The system begins with a low-cost entry point (50 Robux) and the promise of extremely rare items, then progressively increases the cost required to continue advancing along the reward path (from 50 to 100, then 240, all the way to 2400 Robux<sup>26</sup>, ~AUD\$40). Since the full cost and range of all the items in a particular sequence is kept opaque to players upfront, and the rarest rewards (in this case, Gargantuan or Huge pets) are promised further along the sequence, the structure obscures the total cost of acquiring the rarest items, making it a form of drip pricing.<sup>27</sup>



<sup>26</sup> Pet Simulator Wiki contributors, *The Forever Pack (Pet Simulator 99)*, Pet Simulator Wiki (Fandom), [https://pet-simulator.fandom.com/wiki/The\\_Forever\\_Pack\\_\(Pet\\_Simulator\\_99\)#Items\\_Gallery](https://pet-simulator.fandom.com/wiki/The_Forever_Pack_(Pet_Simulator_99)#Items_Gallery).

<sup>27</sup> Competition Bureau Canada, *Drip Pricing*, Government of Canada, <https://competition-bureau.canada.ca/en/deceptive-marketing-practices/drip-pricing>.



Figure 13 - The “Forever Pack” purchase chain in Pet Simulator 99, showing a sequential reward ladder where players must buy access to new tiers of items after every few free rewards. Beneath the ladder is a preview bar displaying possible rewards further along the sequence, and below that a weekly progress tracker indicating how many additional pack purchases are required to unlock bonus rewards.

Progress made along the price ladder resets approximately every two days, replacing the order and set of rewards with a new randomised sequence for each individual player. These sequences are not guaranteed to contain the rarest pets promised, particularly as some are described as existing in limited global quantities (e.g., “Gargantuan Doge” is shown to have only 57 in existence). This creates pressure for players to continue spending in order to reach higher tiers before the sequence refreshes. Players who do not progress far enough within the time window lose access to higher-tier items from the previous chain and must begin again from the lowest-cost tier, while those who completed a ladder without obtaining a rare reward may be encouraged to restart in hopes of achieving a better outcome.

This reset structure operates alongside the Weekly Pack Rewards tracker beneath the ladder, which accumulates progress across purchases and remains active for several days. Even if the ladder itself refreshes, the weekly tracker preserves evidence of prior spending, reinforcing sunk-cost continuation by encouraging players to keep purchasing to capitalise on existing progress.

In this way, the Forever Pack mechanic operates less as a one-time transaction and more as an indefinitely extending purchase funnel built around anticipation, progression, and uncertainty. It is not only an RRM but a structured escalation system that incrementally increases financial commitment while sustaining engagement through alternating rewards and perceived proximity to higher-value outcomes. Similar to Fisch’s opaque and manipulatable RRM, this system encourages continued spending in hopes of achieving better results under conditions of limited transparency.

## 9. RRMs and Distorted Perception

Roblox games also have RRMs that are transparent in their underlying but misleading in their visual presentation. Many Roblox loot boxes are accessed through spins, rolls, or similar animated sequences that cycle through all possible rewards, including extremely rare items, before ultimately landing at a common outcome for the player. Visually, these mechanics resemble a child-friendly adaptation of slot machines used in gambling. By presenting more rare items as “near-miss” outcomes (similar to a “secondary decision” in slot machine design),

these mechanics encourage repeated purchases by fostering the false impression that a rare reward is likely, despite the actual odds remaining extremely low.<sup>28</sup>

Under the UK’s Unfair Commercial Practices framework, a commercial practice is considered unfair where it is likely to materially influence the transactional decision of the average consumer, which includes misleading actions – in this case, the action being the spins, rolls, and other animated sequences that occur before a RRM is unlocked.<sup>29</sup> In the 15 games in our sample, we identified 5 games in which the visual presentation of an RRM distorts the perceived chance of obtaining the rarest items.

In Adopt Me!, players can purchase consumable treats that randomly award pets of varying rarity, with the underlying probabilities disclosed. However, the reward is delivered through a “rolling”, in which the rarest pets appear on screen far more frequently than their actual odds would suggest. This visual framing creates a misleading impression of proximity to a rare outcome, encouraging repeated purchases in an effort to overcome a perceived near-miss.

Below is an example of one of the treats in the game, The Golden Seed Ball, which gives players a chance at getting an Owl as a pet. Even though the actual probability of obtaining the rarest Pineapple Owl is shown to the player (1-in-40) the actual proportion of Pineapple Owls that jump around you in the pre-outcome sequence suggests a 1-in-8 chance, thereby distorting how close a player thinks they are to obtaining the Pineapple Owl, and encouraging them to buy more Golden Seed Balls in hopes of achieving that (see **Random Reward Mechanics (RRMs)**, Table 2).



Figure 14 - Distorted perceptions of chance in the 'Golden Seed Ball' RRM in Adopt Me!

	Actual Probabilities	Perceived Probabilities
<b>Golden Seed Ball</b>	Clementine Owl: 77.5%	Clementine Owl: 62.5%
	Apple Owl: 10%	Apple Owl: 12.5%
	Peach Owl: 10%	Peach Owl: 12.5%
	Pineapple Owl: 2.5%	Pineapple Owl: 12.5%

Table 2 - Actual versus perceived probabilities of the 'Golden Seed Ball' RRM in Adopt Me!. The rarest item (2.5%, or 1 in 40) is deceptively depicted as 12.5%, or 1-in-8.

Another instance of distorted perception via a rolling animation can be observed in Steal a Brainrot. In this game, players purchase Mythic Boxes (175 Robux), which

<sup>28</sup> Clark, L., Crooks, B., Clarke, R., Aitken, M. R. F., & Dunn, B. D., “Physiological and Subjective Arousal in Response to Near-Miss Outcomes in Simulated Gambling,” *Journal of Gambling Studies* 28, no. 4 (2012): 593–604, <https://doi.org/10.1007/s10899-011-9283-7>

<sup>29</sup> UK Government, *Consumer Protection from Unfair Trading Regulations 2008* (SI 2008/1277, regs. 3–5), <https://www.legislation.gov.uk/uksi/2008/1277/contents>

randomly award one of several limited-edition “brainrot” characters. Although the true probabilities for each character are disclosed at the point of purchase, the visual design of the opening sequence contradicts this information.



Figure 15 – The five different characters available in a ‘Mythic Box’, visually depicted at the same rate despite ranging from 37% to 3% in odds.

When a box is opened, the animation cycles through each of the five possible characters once in repeated cycles before stopping on the final result (Figure 15). This repeated, even presentation visually signals a 1-in-5 chance for each character, regardless of the actual odds. For example, one character may have a 20% drop rate, while another has a probability as low as 3%. This mismatch between displayed frequency and true probability inflates players’ expectations of rarer rewards. Resultingly, players are encouraged to keep purchasing boxes under the mistaken belief that success was nearly missed in the previous roll.

	Actual Probabilities	Perceived Probabilities
<b>Mythic Box</b>	Spioniro Golubiro: 37% Tigrilini Watermelini: 30% Zibra Zubra Zibralini: 20% Carrotini Brainini: 10% Bananito Bandito: 3%	Spioniro Golubiro: 20% Tigrilini Watermelini: 20% Zibra Zubra Zibralini: 20% Carrotini Brainini: 20% Bananito Bandito: 20%

Table 3 - Actual versus perceived probabilities of the ‘Mythic Box’ RRM in Steal a Brainrot. The rarest item (3%, around 1-in-33) is deceptively depicted as 20%, or 1-in-5.

Another RRM in which perception is frequently distorted is the spinning wheel, a common mechanic observed across several of the games analysed (e.g., Steal a Brainrot, War Tycoon, Pet Simulator 99, and Blade Ball). A consistent feature of these wheels is that each potential reward is given equal visual space on the circle, despite having vastly different underlying probabilities.

As the wheel spins past each item in uniform segments, it creates the impression that all outcomes have a similar chance of being selected. In reality, the probabilities vary significantly, but the equal-sized slices visually suggest fairness and equivalence, which can mislead players into overestimating their chances of obtaining rarer rewards.

Blade Ball’s spinning wheel provides a clear example of this effect. Blade Ball is a fast-paced competitive combat game where cosmetic items, spins, and currency rewards act as progression incentives, with the spinning wheel offering players a chance-based method of obtaining these items. As shown in Figure 16 the wheel is divided into six equal segments, with each reward occupying the same space in the wheel (and thus, likelihood if it were a ‘real’ spinning wheel). In reality, the probabilities differ substantially.

The Nebula Shard, the rarest item with only a 1% drop rate, is given the same visual weight as the 250 Coins reward, which has a 29% chance. This equal visual

presentation masks the large differences in probability and can lead players to perceive the outcomes as more evenly attainable than they actually are.



Figure 16 - Blade Ball's spinning wheel, where six rewards are shown in equal-sized segments despite large differences in probability (e.g., Nebula Shard at 1% versus 250 Coins at 29%), creating a visual impression that all outcomes are similarly likely.

## 10. Distorting Consumer Perception

Animation sequences preceding RRM are one way in which consumer perception or probabilities and risk/reward is distorted in Roblox games. Another, more socially mediated form of perception distortion arises through the selective amplification of player outcomes. Through server announcements, notifications, leaderboards, and other communal communication methods, games often broadcast exceptional wins while omitting the majority of ordinary outcomes that players achieve. Whether measured by the number of days survived, the rarity of an animal caught, or the value of a reward obtained, this selective visibility skews players' perceptions of what outcomes are typical or likely.

Under EU consumer protection law, particularly the Unfair Commercial Practices Directive (2005/29/EC), practices that materially distort a consumer's economic behaviour through a lack of transparency or misleading presentation are prohibited.<sup>30</sup>

There are 2 games we studied that exhibited this. In Fisch, this distortion of perception is done via the 'Catches' feed that can be accessed via the chat, see Figure 17). The feed selectively announces and highlights exceptionally rare catches in the server while omitting the overwhelming majority of ordinary and unsuccessful catches that constitute most player experiences, making the former seem more common than they really are. These examples include 1 in 25,000 chance, or 0.004%. A typical fishing cast in Fisch takes approximately 30 seconds, so this outcome (without manipulating the odds via purchases) would take over a week of continuous play.

<sup>30</sup> European Parliament & Council of the European Union, *Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market*, Official Journal of the European Union, L 149, 22–39 (2005), <https://eur-lex.europa.eu/eli/dir/2005/29/oj>



Figure 17 - Global 'Catches' feed, which promotes rare catches made by concurrent players.

By repeatedly broadcasting extremely rare catches and near-misses without contextualising their true rarity, the game materially distorts players' perceptions, creating the impression that highly valuable fish are commonly obtained. Since rods, enchantments, and other performance "boosts" are monetised in this game, the "Catches" feed implicitly influences players to purchase more of them, fostering the false impression that rare fish are more attainable than they actually are.

In Pet Simulator 99, every pet is hatched from an egg. Every series of egg is purchased either by soft in-game currencies like Coins or Robux, and has a chance of hatching into one of a few types of pets involved in that series. Aside from this core mechanism of egg hatching, there are other paid pathways the game has designed to allow players to pay for a chance to receive the rarest class of pets. One of these pathways is the Exclusive Raffle. The raffle is recurring in-game lottery system where players spend tickets for as bids to win specific high-value pets or items every 30 minutes. (refer to Figure 18).

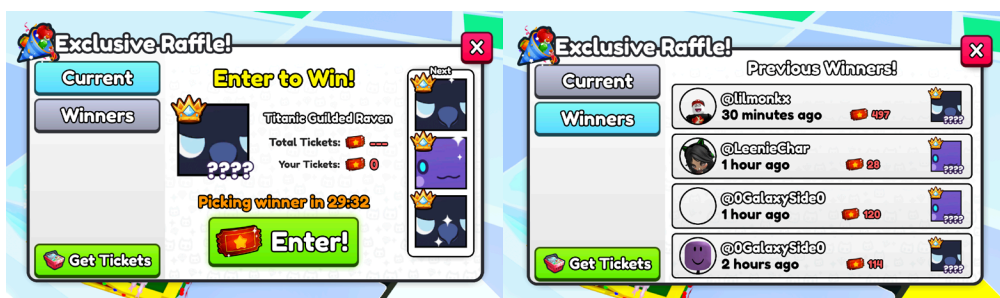


Figure 18 - Exclusive Raffle, players can enter as many tickets as they want into each raffle

Similar to the 'Catches' feed in Fisch, the General chat in Pet Simulator 99 announces the winner every thirty minutes, along with the number of tickets they entered and the pet won (see Figure 19). By repeatedly highlighting winners who submitted large numbers of tickets, the system creates the impression that greater participation leads to success. This serves two functions: it encourages engagement by making victory appear more attainable and predictable than it is, and it incentivises players to purchase Robux-linked items that grant raffle tickets in bulk.

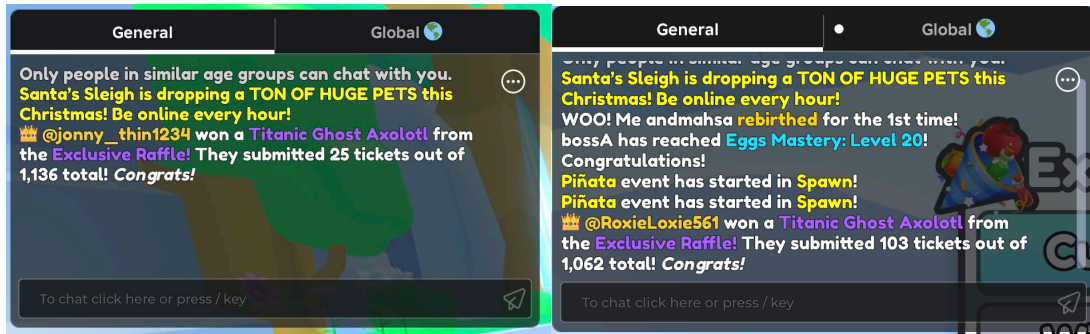


Figure 19 - General Chat displaying the winner, the number of tickets they submitted and the pet they won every thirty minutes.

Over time, selective visibility of winners in complex or random systems can reshape players' perceptions of likelihood, value, and progress, making rare outcomes seem normal and attainable. In environments where boosts, tickets, or other advantages are tied to Robux purchases, this can encourage continued engagement and spending by implying that success comes from greater participation, even though outcomes remain largely random. In this way, perception distortion subtly influences decision-making and reinforces monetisation systems without relying on direct pressure or explicit prompts.

## 11. Virtual Currencies and Obscured Pricing

Obscured pricing occurs when the structure or presentation of prices prevents consumers from accurately understanding what they are paying for or when purchased items can be meaningfully used. In Roblox games, this is commonly achieved through the use of *multiple* in-game currencies that have different means of acquisition, functions, availabilities and restrictions, making it difficult for players to determine the value of each currency and assess what their purchases are actually worth. Only one game (Brookhaven) did not utilize a separate virtual currency in addition to Robux.

8 out of the 15 games we analysed featured 3+ game-specific currencies that are either purchased with Robux (that was purchased with real money) or earned within the game via quests and experience (XP), or both, creating layers of complexity that make it difficult for players to assess the value of individual currencies, particularly when they are sold in bundles. For currencies that can be earned via XP or Robux, the latter option often allows players to acquire bulk amounts of that currency rather than spending long amounts of time in game to earn smaller amounts of it. Often these are coupled with other techniques, resulting in a cumulative effect that amplifies harm.

The EU consumer protection cooperation network has recently published its Key Principles on In-Game Virtual Currencies,<sup>31</sup> a list of recommendations grounded in European consumer protection legislation for the design of virtual currencies. Here, virtual currencies are understood as digital representations of real-world value, subject to EU consumer protection laws just like purchases with real-world

<sup>31</sup> The Consumer Protection Cooperation Network, "Key Principles on In-Game Virtual Currencies", Ref. Ares(2025)2303808, 21/03/2025. [https://commission.europa.eu/document/8af13e88-6540-436c-b137-9853e7fe866a\\_en](https://commission.europa.eu/document/8af13e88-6540-436c-b137-9853e7fe866a_en)

currencies. Their recommendations include always displaying the real-world price alongside virtual currency price; avoiding requiring several exchanges of in-game virtual currencies before making any in-game purchase;<sup>32</sup> and denying consumers the possibility to choose the specific amount of in-game virtual currency to be purchased.<sup>33</sup> None of the games we studied were fully compliant with the EU CPC key principles.



Figure 20 – The ‘Starter Pack’ in Anime Simulator includes three forms of virtual currencies in addition to in-game boosts and a companion character (Nezu).

In Anime Simulator, this lack of price transparency is illustrated by selling multiple currencies as part of bundles, yet the functions, restrictions, and points of usability of each of them are not clearly disclosed at the point of purchase. This is particularly evident in the game’s “Starter Pack,” which is presented as an entry-level purchase but bundles together a companion character (Nezu), Gems, Coins, a temporary training boost, and Reroll Tokens (see Figure 20).

While Gems and Coins can be used and spent immediately upon purchase, Reroll Tokens operate under a hidden constraint: they cannot be used until the player reaches the Reaper rank, a significantly later stage of progression. This restriction is not disclosed at the point of purchase. Consequently, players are likely to assume that all items included in the Starter Pack are immediately usable, especially given the “starter” framing (implying it’s for immediate use by inexperienced players) and the lack of any differentiating information between the value and use of each currency.

By bundling a locked currency together with immediately usable resources, the game obscures the practical value of what is being sold. Discovering later in gameplay that the Reroll Tokens cannot be used does not remedy the failure to disclose this restriction at the point of purchase. Due to this, players are unable to accurately assess what they are paying for, when each currency can be used, or whether the bundle meaningfully supports early gameplay. They are therefore structurally prevented from making an informed transactional decision.

On top of differing currencies, an additional layer of confusion is created through the use of seasonal currencies. These are typically earned or purchased with Robux for a limited themed period (e.g., Halloween or Christmas), after which any remaining balance becomes redundant as the items they unlock are removed or no longer obtainable. This further complicates players’ ability to assess value at the point of purchase. In our sample, 6 of the 15 games analysed featured some form of seasonal currency.

<sup>32</sup> The legal basis for this principle is Articles 6 (1) (d) and 7 of the UCPD, and Article 6 (1) (e) of the CRD.

<sup>33</sup> The legal basis for this principle is Articles 5, 8 and 9 of the UCPD.

Seasonal currencies are actively encouraged within Roblox’s monetisation guidance<sup>34</sup> as part of managing virtual economies during limited-time events. Roblox recommends introducing event-specific currencies that function as temporary “resource sinks,” allowing developers to contain spending within a separate event economy and prevent inflation in the main in-game currency. While this approach helps maintain economic balance and sustain engagement, it also contributes to price obscurity in practice.

As illustrated in Rivals (see Figure 21), the shop displays multiple currencies side by side, each tied to different products and pricing scales, making value comparisons difficult. This is compounded by the way currencies are sold: 50 Crystals and 10 Keys both cost 49 Robux<sup>35</sup> but have completely different purchasing powers. On the depicted shopping page, skins priced in Crystals range from 1,000–3,000, while Robux-priced skins range from 25–250, leaving no clear price anchor. The limited-time nature of Crystals and Crystal-exclusive items inflates their perceived value despite the weaker nature of their purchasing power.

More broadly, the presence of multiple virtual currencies with unclear exchangeability, differing purchasing power, and time-limited usability makes it difficult for players to compare value across currencies and items, or translate in-game prices into real-world cost. Layering permanent currencies alongside seasonal ones further weakens any stable price anchor, as players must account not only for how much a currency buys, but also how long it will remain usable, particularly in seasonal currencies or currency bundles framed as high-value.<sup>36</sup>



Figure 21 - Christmas-themed seasonal currency in Rivals, Crystals, that buys event-specific accessories, separate from the items that can be purchased via Robux or Keys (the core currency)

<sup>34</sup> Roblox Corporation, *Balance Virtual Economies*, Roblox Creator Documentation, <https://create.roblox.com/docs/production/game-design/balance-virtual-economies>.

<sup>35</sup> Rivals Wiki contributors, *Currencies*, *Roblox Rivals Wiki* (Fandom), <https://robloxrivals.fandom.com/wiki/Currencies>.

<sup>36</sup> Hardwick, T., Carter, M., Harkin, S., Zhangshao, T., & Egliston, B. (2025, April). "They're Scamming Me": How Children Experience and Conceptualize Harm in Game Monetization. In *Proc. CHI 2025*.

## 12. Misleading Claim

A misleading claim refers to a representation or implication that creates a false or exaggerated expectation about what a purchase will deliver. 4 out of 15 games we analysed have misleading claims which often operate by presenting paid offers as *completely* resolving a specific goal or uncertainty at the point of purchase, even though the outcome remains probabilistic or contingent. Product descriptions are neither detailed nor accurate, instead relying on superlative language that exaggerates the effectiveness or certainty of the purchase.

According to Canadian law under the Competition Act, it is unlawful to make materially misleading representations for the purpose of promoting a product, service, or business interest. A representation is considered “material” where the general impression it conveys is capable of influencing a consumer’s conduct, including decisions to buy or use a product or service.<sup>37</sup>

Adopt Me! is one of many Roblox games that materially misleads its players at points of purchases. Claims are often vague and exaggerated to make a product or service seem more beneficial than it really is. For example, at the point of purchase screen for its monthly subscription, “Legendary Treat” is one of the benefits listed (see Figure 22). Not only does this imply the treat as a reward in itself, it also implies that the outcome *is* “Legendary”.



Figure 22 - The purchase screen for the monthly subscription to Adopt Me!.

In reality, the legendary treat - Golden Petunia - is actually an RRM, that only gives players a *chance* of rolling a Legendary pets (in this case, the Diamond Hummingbird, a 2.5% rarity). The “Legendary Treat” has no inherent value of its own, just an expendable item in service of something else, it also only grants you a small chance of really getting the Legendary outcome. With an 87.5% probability, the most likely outcome of using a Golden Petunia is the Ultra-Rare Hummingbird, not a legendary one. Furthermore, the visual design of the Golden Petunia RRM is another example of a **RRMs and Distorted Perception**, as 9 hummingbirds are depicted (including 3 ‘Diamond Hummingbirds’, suggesting a 1-in-3 chance of a legendary result, rather than 1-in-40, see Figure 23).

<sup>37</sup> Competition Bureau Canada, *Competition Act* (R.S.C., 1985, c. C-34), ss. 52(1) & 74.01(1)(a), <https://laws-lois.justice.gc.ca/eng/acts/C-34/>



Figure 23 - The 'Golden Petunia' RRM, advertised in the starter pack as a 'Legendary Treat' but in reality only offering the player a 1-in-40 chance at an item of 'Legendary' rarity. Visually, it appears that the legendary item has a 1-in-3 chance, further misleading players.

Consequently, players do not meaningfully purchase a "Legendary Treat" at all. Instead, they purchase access to an RRM that incentivizes subscription retention and repeated spending over time. The framing of the benefit as "Legendary" prompts players to maintain their subscription in the hope that a future attempt will finally yield a legendary outcome, despite the underlying probabilities remaining unchanged. This transforms the purported benefit into an incentive for ongoing monetisation rather than a concrete or reliably delivered reward, making "Legendary Treat" a misleading claim.

## 13. Misleading Omission

Misleading Omission refers to when important information is withheld, obscured, or disclosed too late for consumers to make an informed decision. 8 of 15 games demonstrated misleading omissions by withholding critical purchase details from players at the point of transaction.

One example was found in Adopt Me!, which, during the Christmas period, sold 'Gingerbread', a seasonal currency purchasable with Robux, and promoted it at a discounted price to encourage sales. Although the currency was temporary and removed after the event without conversion to the game's permanent currency ('Bucks'), no warning was displayed at the point of purchase to indicate its expiry.

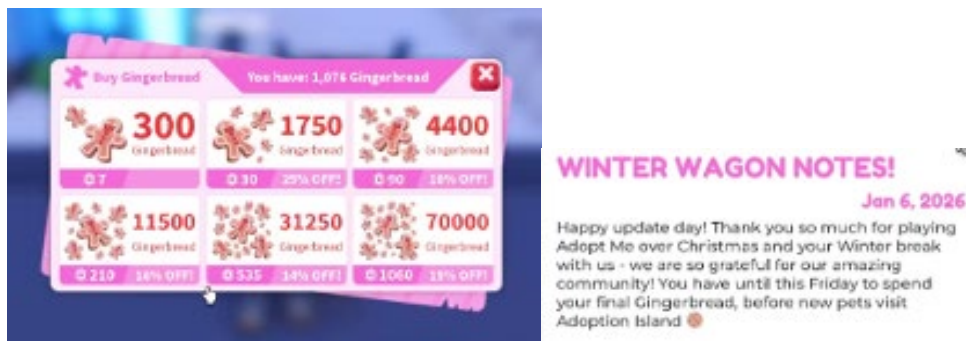


Figure 24 - Gingerbread, a seasonal virtual currency in Adopt Me! which expired. No warning was displayed at the point of purchase to indicate its expiry.

While a message was later shown in the notes log upon login explaining that Gingerbread would expire, this notice appeared only four days before the currency was removed, despite it having been available for purchase for a longer period. This meant players who had already bought Gingerbread were not informed of the currency's expiration until after their purchases. The lack of clear and timely disclosure misrepresented the lasting value of the currency, as players were not adequately warned that their purchase would lose all value once the event concluded.

Another example in Steal a Brainrot, the 'VIP' gamepass vaguely advertises "many benefits" without listing or describing them. Similarly, the 'Admin Panel' gamepass promises access to "Admin Commands" but provides no details prior to purchase. Players are instructed to type ";cmds" in chat to view the full list of commands, an action that can only be completed after making the 7,499 Robux (\$100-120AUD) purchase and is otherwise inaccessible.



Figure 25 - In Steal a Brainrot, very limited information is displayed about what an 'Admin Panel' includes (a \$100+ purchase) or what is in the VIP pack.

This post-purchase disclosure limits players' ability to understand what they are buying and conceals the specific features included in each gamepass. By withholding essential details about functionality and value until after payment, the design creates uncertainty about what is being purchased and encourages players to spend Robux based on vague expectations of competitive advantage. As noted in **No Refunds**, refunds for Robux purchases are extremely difficult to obtain.<sup>38</sup>

A similar concern has also been raised in our research examining broader Roblox monetisation controversies. In Blox Fruits, players could purchase "Permanent" fruits with Robux, items marketed as permanent upgrades. However, following a major update in December 2024, the developers replaced one item, the 'Permanent Dragon Fruit' with a 'Dragon Token' redeemable for other items. This change sparked community backlash, as many players felt a paid permanent item had been retroactively downgraded or altered without adequate compensation.

7 of 15 games we investigated exhibited misleading omission. Dress to Impress omitted that missed days on its advent calendar require Robux payment to claim the reward, Grow a Garden made purchases available from the start of the game when the guide explaining the effect of these purchases was unavailable (risking new players making uninformed purchases), Rivals and Anime Simulator did not disclose expiry dates for discounts. Finally, Fisch provided no information about the odds and what rewards could be obtained from bait crates.

<sup>38</sup> We also note that the Robux gift cards that we purchased from a physical retailer were sold in increments (\$10, \$25, \$50) that did not align with the Robux bundles we could purchase. Practically, this meant that a \$25 voucher could only buy 1,000 Robux (\$16.99) and 500 Robux (\$8.49) with 48c credit remaining, which was unusable unless we loaded more money to the account.

## 14. No Refunds

A factor exacerbating the harms of many of this misleading and deceptive designs is how difficult it is to get refunds for purchases made in Roblox games. In a previous study we ran,<sup>39</sup> multiple parents described frustration with how unresponsive Roblox was to their attempts to get refunds for transactions that were made by mistake, without permission, or because a child misunderstood what the purchase would entitle them to.

In Australia, consumers are entitled to a refund, repair, or replacement if a product is faulty, broken, or not as described, covered by automatic consumer guarantees. We did not find this to be the case in our research.

In our research, we created a Roblox account for a user with a birthdate nominating the user as being 12 years old. We joined the game 'Adopt Me!' on iOS and were advertised a 'Starter Pack' alongside an **Urgency Cues** – this would only be available for 3 days. The 'Starter Pack' cost 89 Robux (or AUD\$1.87) and included a family house, starter bike, 200 bucks (Adopt Me!'s virtual currency) and a 'Royal Egg': a **Random Reward Mechanics (RRMs)**. The text also read, "GUARANTEED UNCOMMON OR BETTER PET."

The 'Royal Egg' hatched into a 'rare' Orangutan pet.

We immediately attempted to request a refund for this purchase, given that random reward mechanics like the 'Royal Egg' are not permitted in games, unless classified M. Roblox is distributed PG, and Adopt Me! Is classified for 'Ages 5+'. Our request for a refund from Apple was declined. We subsequently requested a refund from Roblox customer support but were advised that we should "contact the creator to let them know about any issue" and can only contact Roblox again after 15 days. This email also noted that "developers are not able to provide refunds of Robux for purchases", placing an unnecessary 2-week delay on receiving support from Roblox.

In the interim, we contacted Adopt Me! Support, but this required the creation of a parent Roblox account, linked to the child account I had created earlier: children are not able to contact support. This required age verification, using a biometric system and Passport ID. At this point, an additional delay was presented:



**Sorry, your account is too new for Support. Please try again later.**

*Figure 26 - New users are unable to contact Adopt Me! support.*

11 days later we were able to contact Adopt Me! Support, but only within limited hours. As an Australian user, this meant logging in at 9pm. This time-zone restriction was entirely artificial, as I was only ever able to interact with a chat bot which was unable to respond to request for a refund, or requests to talk to a person.

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<sup>39</sup> Hardwick, T., Carter, M., Harkin, S., Zhangshao, T., & Egliston, B. (2025, April). "They're Scamming Me": How Children Experience and Conceptualize Harm in Game Monetization. In *Proc. CHI 2025*.

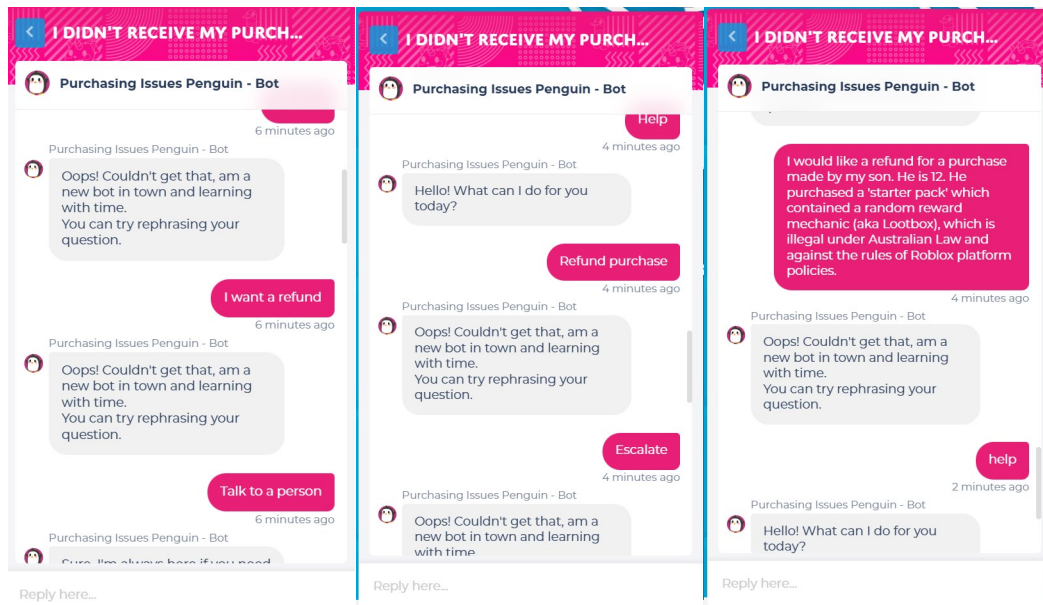


Figure 27 - Our attempts to interact with the Adopt Me! support, to request a refund for a purchase of a random reward mechanic which should not have been available to Australian users under 15, per the Australian Classification Act.

As such, we re-contacted Roblox support after 15 days, outlining our attempts to contact Adopt Me! (a game with a peak concurrent player count of 1.8m players, and one of Roblox's highest grossing titles), requesting a refund for this purchase because in-game purchases with an element of chance should not be available for users age 12 because, as of 22 September 2024, the Australian Government has changed the way games are classified so that video games with in-game purchases with an element of chance such as paid loot boxes are classified as M (not recommended for children under 15 years of age). As Roblox is classified 12+ on the Apple App Store, users aged 12 should not be able to access paid loot boxes.

Ken from Roblox quickly replied,

*Hello there,*

*We're sorry but we're unable to provide you with any further information or response regarding this inquiry. We encourage you to review the previous information sent to you as we have provided you with all that we can at this time.*

*Sincerely,  
Ken  
Customer Support*

Despite repeated follow up emails, this was the last reply we received from Roblox. Our point with this case study is that Roblox and Roblox games provide little to no support or access to refunds for purchases made in Roblox, despite access to such refunds being required under Australian consumer law. Not only did the platforms involved provide no support, but various dark design patterns were employed to make formally requesting a refund significantly more difficult than it needed to be. In this context, the absence of meaningful refund mechanisms amplifies the consumer harm caused by the deceptive designs outlined in this report, leaving children and parents with little practical recourse once a transaction has occurred.

# About the Authors

## **Professor Marcus Carter, PhD**

Professor Marcus Carter is a researcher in human-computer interaction at The University of Sydney, focusing on virtual reality, games and emerging technologies. He is currently leading an ARC Future Fellowship project on *The Monetisation of Children in the Digital Games Industry*. His books include *Treacherous Play* (2022), *Fantasies of Virtual Reality* (2024) and *Game Studies: A Critical Introduction to the Field* (2026).

Contact Information [marcus.carter@sydney.edu.au](mailto:marcus.carter@sydney.edu.au)

## **Sanika Vekhande**

Sanika Vekhande is a fourth-year Bachelor of Design (Honours) student at the University of Sydney. She is a research assistant for this study.

Contact Information: [sanika.vekhande@sydney.edu.au](mailto:sanika.vekhande@sydney.edu.au)

## **Alisa-Jean Fifita**

Alisa-Jean Fifita is a third-year Bachelor of Design/Bachelor of Advanced Studies (Interaction Design) student, majoring in music, at the University of Sydney. She is a research assistant for this study.

Contact Information [alisa-jean.fifita@sydney.edu.au](mailto:alisa-jean.fifita@sydney.edu.au)

# 15. Summary of Results

	Total	Dress to Impress	Grow a Garden	99 Nights in the Forest	Steal A Brainrot	Brookhaven	Blox Fruits	Fisch	Asylum Life	Adopt Me	Rivals	War Tycoon	Jail Break	Anime Simulator	Pet Simulator 99	Blade Ball
Misleading and/or Deceptive Designs	5	5	4	8	1	4	9	2	7	5	6	4	6	9	6	
Timed False Reference Pricing	3	N	N	Y	N	N	N	N	N	N	N	N	Y	N	Y	
False Value Reference Pricing	5	N	N	Y	N	N	Y	N	N	Y	N	N	N	Y	Y	
Urgency Cues	13	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	
False Urgency Cues	1	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	
Direct Exhortations to Make Purchases	4	N	N	N	N	N	N	N	Y	N	Y	Y	N	Y	N	
Ludic Exhortations to Make Purchases	5	Y	N	Y	N	N	Y	N	N	N	Y	N	N	Y	N	
Random Reward Mechanics (RRMs)	14	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Opaque and Manipulatable RRMs	3	N	N	N	Y	N	Y	N	N	N	N	N	Y	N	N	
RRMs and Distorted Perception	5	N	N	N	Y	N	N	N	Y	N	Y	N	N	Y	Y	
Distorting Consumer Perception	2	N	N	N	N	N	Y	N	N	N	N	N	N	Y	N	
Virtual Currencies (Robux)	1	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	
2 Virtual Currencies (Including Robux)	6	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	Y	
3+ Virtual Currencies (Including Robux)	8	Y	N	Y	N	N	Y	N	Y	Y	Y	N	Y	Y	N	
Misleading Claims	4	N	N	N	N	N	Y	Y	N	Y	N	N	N	Y	N	
Misleading Omissions	7	Y	Y	N	Y	N	N	Y	N	Y	Y	N	N	Y	N	

Table 4 – Occurrence of the misleading or deceptive monetisation features in the games studied.