Why microtransactions may not necessarily be bad: a criticism of the consequentialist evaluation of video game monetisation

Elena Petrovskaya
University of York,
Department of Computer Science,
Deramore Lane, Heslington,
YO10 5GH
elena.petrovskaya@york.ac.uk

ABSTRACT
Microtransactions in video games have drawn the attention of researchers and regulators alike. Broadly, there have been calls for regulation of in-game purchases because of their potentially negative consequences for players. As such, microtransactions are currently being evaluated through a consequentialist perspective, with effects on players being prioritised in decision-making. We argue that consequentialism may not be the optimal framework in this domain, considering the multiple stakeholders in the conversation and their intentions, as well as the way evaluation is carried out in other public health areas. Understanding the many points of view in this issue is essential if we are to create an environment through which good is truly maximised for both those who create games and those who play them.

Keywords
microtransactions, consequentialism, loot boxes, deontology, regulation.

INTRODUCTION
The way in which video games are being monetised is evolving from payment which guarantees content (*games as a product*) to uncapped, repeated in-game payment for content and assets during the actual gameplay (*games as a service*). Such in-game purchases are often referred to as microtransactions. Microtransactions can broadly be divided into decorative, which affect purely in-game appearance, for example, cosmetics and skins, and functional, which affect gameplay (Oh and Ryu 2007). Their increasing incorporation into the gaming market has come with implications for those who design, play, and regulate games.

Microtransactions are a highly profitable mechanism of revenue generation for the industry (e.g., the company Electronic Arts made over $1 billion from microtransactions in one quartile of 2019 (Narayan 2020)). Yet they have been accompanied by a host of conversations regarding whether they are ethically acceptable or problematic.

While we are still a while away from having a holistic picture of what microtransactions are being used in games - with some remaining relatively obscure - considerable attention has been placed particularly on so-called loot-boxes: virtual items redeemed to receive 'a randomised selection of further virtual items' (McCaffrey 2019) and other *randomised* in-game content. Such in-game transactions have garnered particular

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attention because of their structural similarities to problem gambling (Drummond and Sauer 2018), as well as proven links between the two in studies of players (Zendle and Cairns 2018). This has even led to loot boxes being regulated or banned in some countries (e.g Gerken 2018).

Although currently the most considered in regulatory conversation, loot boxes are by far not the only potentially problematic type of microtransaction present in video games. While the effects of other microtransactions on player wellbeing are less clear, they have been studied largely through the lens of design elements and ethical evaluations. Illustrations of the former include the work of King et al. (2019) who conducted an examination of patents, and the work of Zagal et al. (2013) into 'dark design patterns'. On a lesser scale, the lens of player perception has also been considered: for example, Petrovskaya and Zendle (2021) created a taxonomy of microtransactions across mobile and desktop games which were perceived by a large sample of players as being unfair, misleading, or aggressive, and found 35 types of such transactions across 8 domains.

All the above are united in their findings regarding certain types of microtransactions that need further attention because of their possible psychological effects on players and ethical implications. Core examples of this are ways in which game dynamics may be manipulated - or perceived by players as having been manipulated - to drive player spending rather than prioritize purely the gameplay experience; ways in which payment may confer an advantage over non-payment, and deceit about what a transaction involves.

Although the above types of microtransactions all come with ethical implications including issues of fairness, social division, and player agency, the examination of their moral quality in literature and regulatory discourse is currently being disproportionately weighted through assessment of their consequences: largely their effects, both psychological and otherwise, on the players who encounter and interact with them in games. This is primarily seen in the conversation around loot boxes, which have gathered attention based on their links to problem gambling and the possible harm to players which may stem from this. Intuitively, they are being perceived through the ethical framework of consequentialism; the belief that the consequences of an act should be the primary basis by which it is classed as being right or wrong.

However, in any situation the consequences of an act or a product are not the sole category by which the moral merit of it can be judged. In this work, we critically assess microtransactions within the ethical framework of consequentialism, discussing the arguments for and against the application of this framework in the case of in-game monetisation. We argue that consequentialism may not be the most appropriate way to approach this field: judging the moral quality of things purely according to their consequences may be inaccurate and restrictive. Even though microtransactions may have negative consequences on players, this does not immediately make them morally bad, as there is another side to the conversation - that of the designers and developers - and the intent with which microtransactions are implemented may not be wrong. In the conversation surrounding microtransactions, it is important to weigh various aspects and points of view in a complex issue like this to ensure we come to a fair and just conclusion.

Understanding how microtransactions are being intuitively evaluated and how this subsequently contributes to public perception and the discourse around regulating games and game design is crucial. By considering what ethical norms are shaping this perception, and whether they are the right ones to use, we can become more mindful of

the possible harms of microtransactions and shape regulation around them more consciously. Such work is therefore important in bringing together the worlds of game design and business by moving towards an understanding of how games can be created in a way which is both effective for maximising revenue and ethically fair.

EXISTING ETHICAL COMMENTARY ON GAME MONETISATION

This work is an addition to a growing body of literature which has attempted to scrutinise the business logic of games from an ethical point of view.

Heimo et al. (2018) take an Aristotelian virtue ethics perspective to game monetisation, their primary argument being that the most important characteristic of one's pursuit is whether one is engaging in said pursuit with the aim of bettering one's character. According to this framework, creating unethical games is problematic to both the character of the developer and the character of the players, who may be pulled into vices by the design of the game. Heimo et al. further argue that choosing to prioritise revenue over game design can lead to "the destruction of the narrative, enjoyment, fairness or experience of the game, or at the worst to cheating" (p. 8).

Harviainen, Paavilainen, and Koskinen (2020) continue the line of application of ethical theory to game business models by choosing the lens of Ayn Rand's objectivist ethics, justifying this as a philosophy which has had an effect on the thinking of certain political subgroups. The main premise of objectivism is that rational self-interest is the greatest virtue, as it is the most likely to lead to survival. Although this philosophy is more lenient towards various types of game monetisation, Harviainen et al. conclude that games which engage in psychological manipulation techniques, such as false advertising, are unethical even through objectivism.

A more general overview of game monetisation models is provided by Neely (2021). Neely concludes that random rewards which are purchased with real money (e.g., loot boxes) are fundamentally unethical because they are not able to rationally evaluate whether the purchase is worth it, and so are changes to the gameplay experience in multiplayer games, as they reduce winning primarily to whoever is spending more money (also tapping into other societal issues, such as economic discrepancy). However, both functional and cosmetic items may not be necessarily unethical, if they are not essential to gameplay, and, particularly in the case of functional items, can be obtained through methods besides spending money (e.g., continuous gameplay).

The work most closely related to the current piece is that of Kimppa, Heimo, and Harviainen (2016). Kimppa et al. approach the field from a Moorean just-consequentialist perspective. Moor (1999) calls for a unified theory, built on consequentialism, which aims to achieve justice above all (and as such, may sometimes prioritise intent) in the case of computing policies. Kimppa et al. assess a variety of game monetisation methods according to just consequentialism and conclude that several types of microtransactions could be considered suspect - although they admit it is difficult to come to any clear-cut conclusions in the domain.

Based on the above literature, all currently studied ethical perspectives agree at least to the extent that certain implementations of game monetisation are not ethically sound. However, although this may not be in principle the best approach, it is in practice the one most commonly currently being applied in the conversation around microtransactions. We discuss why this is not optimal within the game monetisation field and offer alternative perspectives which may help develop understanding of microtransactions and their effects. Our line of argument builds on that of Moor (1999),

who believed pure consequentialism is not the only answer when considering what is and is not ethically right in the computing domain, and on more recent work specifically in the domain of ethics and technology by scholars such as Heimo and Kimppa (2020), who discuss the addition of virtue ethics into Moor's framework to account for more nuanced structures in information technology.

A PLAYER-CENTRIC PERSPECTIVE: CONSEQUENTIALISM

Broadly, consequentialism is the doctrine that actions should be judged as right or wrong based on their consequences (Sinnott-Armstrong 2003).

Utilitarianism: how it applies

The prototypical example of consequentialism is classical utilitarianism, which claims that an act is right only if it maximizes the net good in the world (Mill and Bentham 1987). In this way, classic utilitarianism denies that an act can be assessed through anything besides its effects and consequences. Outside of the classic view where good is the maximization of utility, human welfare or well-being, definitions of good within this theory are often viewed through the lens of hedonism, which defines pleasure as being the only true good, and pain as being the only true bad.

According to utility principles, microtransactions would be bad if they are shown to reduce the welfare/wellbeing of players who interact with them. The example in the domain with the most evidence to suggest that this might be the case is that of lootboxes: as mentioned above, links between lootboxes and problem gambling have been demonstrated to be clear and consistent (e.g., Drummond et al. 2020; Zendle and Cairns 2019; Zendle, Meyer, and Over 2019). It would be difficult to conceptualise problem gambling as an activity beneficial to the welfare of an individual (although the emphasis here is on *problem*; other types of gambling may well be). Moreover, a certain proportion of individuals regularly spends highly on lootboxes (Wardle, Petrovskaya, and Zendle 2020) which in some people's financial contexts might have detrimental effects on their circumstances outside of the game. Thus, it feels acceptable to denounce lootboxes because of their negative consequences.

The same principles can be applied in a similar way to pay-to-win microtransactions - in-game payments which confer players some advantage over other players - another genre of microtransactions on which we have a certain body of evidence. The main established concerns in this domain are of regular, very involved and high payments (Lelonek-Kuleta, Bartczuk, and Wiechetek 2021), which, as mentioned above could have dire effects on someone's circumstances if they are not financially well-endowed enough to actually comfortably afford such payments. This is a negative effect to someone who participates in a pay-to-win transaction, and so categorising them as morally wrong according to consequentialism also at first glance seems easy. By the same logic, any game design elements which employ psychological manipulation tactics to drive players towards spending have the potential to negatively affect players.

However, at this point we must acknowledge an issue in conceptualising the above microtransactions as morally wrong according to consequentialism. While both are linked to negative effects on players, this link has not ever been demonstrated to be causal - the transaction might occur in tandem with a negative effect, but as of right now there is no evidence to suggest that one causes the other: the relationship may be purely correlational. With that in mind, are the negative parallels, such as in the case of problem gambling and lootboxes, enough to apply consequentialism and categorise these microtransactions as wrong?

While a fair body of work has been carried out on lootboxes, and to a lesser extent on pay-to-win transactions, there also exists a further, unknown amount of microtransactions whose effects are largely unexplored. These could take any format and have any number of consequences on the player - and it would be incorrect to approach their assessment with a consequentialist bias which is based on the research which already is available.

Hedonism: how it applies

Furthermore, rather than approaching the consequences of microtransactions from a utilitarian perspective, one can also take a hedonistic approach. Hedonism views pleasure as good, and pain as bad (Moore 2004). Applying once again the example of lootboxes, logically, some people engage in purchasing behaviours because they derive pleasure from both the act of opening the loot box - in the same way that people might enjoy the risk-taking mechanisms of gambling (Lee et al. 2007) - and the outcome product, when it is what they wanted. Similarly, in the case of pay-to-win transactions, pleasure can be gained from moving towards the player's goal of winning the game, whereas choosing to not engage in the transaction, and performing unsatisfactorily might cause pain. The same applies to other microtransactions: people might enjoy the outcome of the transaction - or indeed enjoy being treated in certain ways which from an external perspective appear to be unfair.

Relatedly, a subset of utilitarianism, known as *preference utilitarianism*, holds the position that what is good is desire satisfaction or the fulfilment of preferences; and what is bad is the frustration of desires or preferences. The argument then becomes that an agent should act in a way which allows them to maximise their desires and preferences. Ultimately, microtransactions do bring in revenue, and so, many people do engage and spend money on such design techniques in games. It is then not illogical to assume that people do so because the process of doing it is in some way aligned with their desires - in a similar way as some people engage with gambling, for example, because they enjoy that process. A sceptic may argue that this approach is weak, because sometimes preferences may appear bizarre to an external observer. However, a response to such criticism might be that preferences can be limited for the purposes of the framework. In the current context, even in the case of limited preferences, it would be difficult to say that across every single case the desire to purchase something in a game, even if perhaps at a slight nudge from the developers, is obscene.

When formulating the concepts of 'good' and 'bad' in this way, even though we are still considering the moral character of microtransactions through consequentialism, it becomes harder to draw the conclusion that lootboxes and pay-to-win mechanics are inherently bad. At this point one may raise a relevant criticism of hedonism itself: not all pleasures are valuable, and so cannot be viewed equally. However, this can be countered with the idea that these pleasures, although perhaps not valuable to the outside observer, serve the purpose of desire satisfaction, and thus are still inherently valuable to the individual engaging in the transaction. Thus, from a hedonistic perspective, in-game microtransactions do not easily fit into a morally negative or positive classification.

The above arguments hopefully integrate at least a seed of doubt into the opinion that microtransactions are morally bad, given that from a hedonistic perspective they can be seen as quite the opposite. There is not yet enough evidence to suggest they are bad from a utilitarian perspective also. Both perspectives consider microtransactions through the lens of their consequences for the player. However, there is another side involved in microtransactions: that of the developer and the games industry. For these actors, video game monetisation also has consequences, and it would be improper to

suggest that their role is less important than that of the players. Yet this perspective is often overlooked, and the consequences of the business models for those who produce them are brushed off or ignored. For an accurate perspective of microtransactions and their effects, this side must also be considered.

THE OTHER SIDE: CONSIDERING THE INDUSTRY

Who are the people that are responsible for creating microtransactions? Very little is known about these professionals, and how this task is distributed across roles, which in part could be due to the games industry attempting to maintain a level of secrecy around their business model (O'Donnell 2014). It could also be because no single role or person is directly responsible for their creation; indeed, van Roessel and Svelch (2021) found that monetisation responsibilities are often integrated into various existing roles, or even outsourced to external monetisation experts. Thus, microtransaction production is more so distributed across other roles and indeed the whole company, rather than centered on specific individuals. It is likely to be of consequence to multiple people's work and lives in some way.

Primarily, these would be positive consequences: first and foremost, microtransactions are integrated into games to bring revenue. Successfully obtained revenue would bring positive consequences to specific games companies, the employees, and the industry as a whole by providing resources for the products to be developed further. It would keep people in funded roles and in positions which allow them to self-actualise - if these are jobs they enjoy. Moreover, ultimately this would even have positive consequences for the players which engage in microtransactions, as their money would be fed back into making the game an improved experience. In this way, we can see that the effects of microtransactions are by far not linear nor straightforward and might be a blend of positive and negative.

Even if applying classical utilitarian perspectives to this dilemma, creating microtransactions which maximise revenue, which in turn brings money and jobs to the people employed by the game developers can only be perceived as positive. Furthermore, the design and implementation of microtransactions into games can also be viewed positively from a hedonic perspective, if the creative elements involved in such a process are enjoyed by the designers involved.

A subsequent question then arises as to whether the developers are worth more or less than the players in this context - if microtransactions are beneficial to one side and yet potentially harmful to another, is it possible to assess the welfare of each side ultimately is worth more? One might be inclined to argue that it is not. Indeed, some consequentialists agree that certain values cannot be compared (Chang 1997; Griffin 1986) and as such, consequentialism holds several unresolvable dilemmas. However, as mentioned above, current discourse around microtransactions still largely prioritises the player.

Additionally, consequentialism does not account well for personal choice. There are some situations in which a person may wish to choose something with negative consequences. Reasons for doing so may range for learning gained from the process, curiosity, and so on. By looking purely at the negative effects rather than the full picture, we discount the nuance which came from the agent making an informed decision to consciously accept these consequences. Choice is an important factor in this line of thought: proponents of microtransactions, such as libertarians, might argue that any regulation around microtransactions is restrictive, because no matter what the consequences, the ability to make the choice to engage with microtransactions and the games that include them is an essential human right.

In this way, consequentialism is also alienating: Bernard Williams (Smart and Williams 1973) argues that rational agents will often have decisive reasons to act in ways which may be viewed by the consequentialist as wrong. As such, consequentialism is wrong as it supposes too much distance between the agent and their actions, which is never true - all human decisions are contextual.

With the above in mind, we can ask whether considering microtransactions through a consequentialist perspective is even appropriate. Intuitively, this may feel like a logical option: most media are designed for consumers, judged by its effects on consumers, and microtransactions are a feature of a genre of games which are an exact example of such media. Yet on closer examination, this approach is reductionist, and a more complex perspective is necessary to account for the complexity of human involvement in game monetisation.

Intent matters

Consequentialism has been traditionally contrasted with deontology (Hallgarth 1998). While consequentialism judges the effects of choices, deontology judges the choices themselves. Agent-based deontology focuses on the intention of the person engaging in the choice and uses their beliefs about its nature to morally align the intention: what makes an agent's choice right is its conformity with moral norms. Patient-based deontology uses the effects of choices on others to make such classifications. An example which might illustrate both is a variation of the trolley problem, in which five workers are trapped on the rail tracks in front of an incoming trolley and one has the option of pushing one person onto the tracks to save the five. Agent-based deontology would be more lenient towards considering the intention as good if one was to opt to kill one person with the intent of saving five; patient-based deontology would focus more on the welfare of the one person who was used to achieve the final goal.

Ultimately, however, deontology prioritizes a person's intent and whether it is in accordance with a set of societally accepted moral rules.

With that in mind, one can postulate that if the developer's intent in designing a game which contains microtransactions - regardless of how they are perceived by the players - is in accordance with moral norms, then this monetisation model should not be condemned. A contextual example of this can be taken from (Alha et al. 2014), who conducted interviews with members of the game industry to understand developer perceptions of the microtransaction-based model. One finding includes the fact that some developers perceive games with microtransactions as less bad than games with upfront payment, given the freedom of choice to pay or not pay based on how much players engage with and enjoy the game content. In this way, if a developer with this belief was given the choice between creating a buy-to-play and a microtransaction based game, they might opt for the latter, genuinely believing this was ultimately the right choice.

Furthermore, Alha (2020) highlights the distinction between unintentionally clumsy and deliberately malicious unethical game design. While both may lead to spending, intentional malicious design is more likely to be specifically targeting players (Kimppa, Heimo, and Harviainen 2016), and as such might have very different consequences for their wellbeing.

The above is an illustration of the way in which developer perceptions and player perceptions of what is and is not right in game design might differ, and the intent might

not match the consequences. It is important to note for a nuanced perspective on the subject that sometimes although developers may believe microtransactions are not a morally good way of monetising games, they may still do this. The need to generate revenue may exceed the moral compass, whether through personal choice or through lack of agency by being a smaller cog in a big wheel. Some developers may in fact not have a developed enough character to think against adding morally problematic design features to games (Heimo et al. 2018). But without understanding both points of view, how could we ever bring in effective regulation that is mutually beneficial to both the games industry and the players?

There is then also the player intent behind engaging with microtransactions. Hamari et al. (2017) conducted a study of player purchase intentions in video games. Their findings showed that one player's motivation behind spending money on game monetisation techniques was to support the developers; other reasons involved indulging children and social interaction (which included being able to play with friends, express one's social identity, and give gifts). An example which may help highlight the discrepancy between intent and consequences would be of someone who wants to gift their friend a skin in a game which might be found in a loot box only. In doing so, they purchase several loot boxes - this hypothetical person is affluent, and so this is not an issue for them - until they find the desired skin. To an external observer, this could appear like problematic behaviour. However, the intent behind the purchases is not such. This is just one reason as to why even when taking the player perspective, we must try to assess the impact of microtransactions in a process-focused way, accounting for what occurs from intent to consequence - not solely the consequences.

SITUATING MICROTRANSACTIONS IN PUBLIC HEALTH

Given that the body of research on microtransactions and their effects is so far limited, and we cannot say with confidence what the actual consequences of player in-game spending might be, that raises an additional question concerning the extent to which it might make sense to pass judgement via consequentialism. How do you consider the consequences of something when you are not fully sure what the consequences are?

Consequentialism does address this, drawing a distinction between *actualism* - which is only concerned with actual consequences - and *probabilism*, which accounts for possible consequences. Probabilism can therefore differentiate between options with potentially high-calibre catastrophic outcomes and relatively safe bets. While in practice we do not know with certainty what the consequences of our actions will be, especially in the longer term, we are objectively not in a state of total ignorance and can generally conclude that doing something which is aimed at helping people is likely to do more good than trying to harm them (de Lazari-Radek and Singer 2017).

Basically, regardless of the actual consequences, an individual should act in a way which they have reason to believe will produce the best consequences (Kagan 2018). Therefore, in the context of microtransactions it would be justifiable to maximise regulation with the intent of protecting players, even if it is unconfirmed that in-app purchases have negative effects.

However, in answer to the above, we can frame game monetisation and its potential relationship with player wellbeing to other public health domains which have been researched and regulated in more depth. One such example is of tobacco harm reduction. Thomas, Parker and Schiffman (2021) consider this example, and conclude that consequentialist perspectives do not provide an optimal framework for policy making in this domain. Although a lot of tobacco-related approaches advocate maximisation of harm reduction by presenting the message 'there is no safe tobacco

product', Thomas et al. argue that the individual's decision and autonomy needs to be considered, and perhaps providing more detailed information about the relative harm of different tobacco-based products, such as e-cigarettes and giving over some responsibility to the public would in fact lead to better consequences.

This is generally in alignment with ethical discussions around public health approaches. It is important to acknowledge that such regulation is rooted in utilitarianism, because "it seeks to preserve the health status (something that contributes to the wellbeing of persons) of the maximum number of individuals possible, ideally the entire population" (Royo-Bordonada and Román-Maestre 2015, 3.). However, as discussed above, in practice utilitarianism becomes too restrictive. Furthermore, health is not the only good that can have moral value (Cribb 2009), and maximising health in the utilitarian way ignores other principles, such as equality and justice, which may be overlooked by the creation of health inequalities. Because of this, in practice, evaluation of public health effectiveness is rarely limited to the consideration of effects (National Centre for Healthy Public Policy 2016).

Relatedly, medical law also does not rely purely on consequentialism to draw conclusions. Although a lot of medical law is consequentialist in nature, it is seen as permissible to act in a way which brings about harm, provided the harm is foreseen and not intended (Savulescu and Wilkinson 2019). As such, the intent of the individual carrying out the act is considered highly important, and many acts are even treated on a case-by-case basis. Much like in the tobacco example above, modern medicine also aims to respect the autonomy of the patient.

From this, we can see that even if considering game microtransactions specifically in the context of their impacts on player wellbeing and situating them alongside other relevant domains, consequentialism is acknowledged as not the optimal framework of evaluation, given that it is too restrictive in its evaluation mechanisms and does not allow much scope for player autonomy. Agent choice and autonomy is an important factor, and as discussed above, consequentialism does not do well in accounting for this individual choice. Failing to account for the role of the player would likely garner a less than positive response from many players, and as such, blanket regulation does not seem to be an optimal solution.

DIFFERENT LEVELS OF CONSEQUENCES

Supposing, even having considered the above issues, one remains convinced that consequentialism is the most appropriate way to assess and regulate microtransactions. With that in mind, we must also consider the varying levels and types of consequences which may be transpiring.

A critic of the research into the domain may argue that the consequences themselves of microtransactions are not significant, and that there is enough player choice involved in games to negate such consequences. Petrovskaya & Zendle (2021) discuss this in more detail in the context of how to make the distinction between truly problematic and merely frustrating consequences. They outline three axes across which this distinction can be established: tangibility, measurable consequences, and choice. According to Petrovskaya & Zendle (2021), problematic microtransactions which should be judged as such according to their consequences are those which can be clearly identified as design elements within a game; which have observable and empirically measurable consequences for players, and which are non-avoidable by players - forced rather than optional. Examples of such forced microtransactions include limited inventory space without paying, parts of the game being locked behind paywalls, and unfair matchups:

basically any elements of play which make real progression impossible without payment.

These selection criteria highlight the difficulty in establishing whether consequences have the potential to be actually harmful in this context, as the line into problematic consequences is rather fine.

Furthermore, perception of problematicity in this context is influenced by bias, and traditionally established societal norms around what is acceptable in monetisation of gaming. Given that player demographics of games which were monetised through onetime payments - as products - were primarily male and it is largely still males who are in positions of power regarding game criticisms, but free-to-play mobile games attract more of a female base, it is not unlikely that a certain proportion of negative attitudes around such games stem from male critique because they do not meet their expected criteria (Paul 2020). As such, defining what 'problematic' consequences truly mean in this context is in itself a challenge fraught with subjectivity.

CONCLUSIONS

We have outlined the way in which microtransactions in public discourse and regulatory conversation are currently being primarily judged via their consequences, and the player is being viewed as the most important stakeholder. These judgements are largely centered around public health perspectives, such as in the case of the relationship between loot boxes and problem gambling, and psychological impacts on players, in the case of microtransactions which are perceived as tapping into psychological manipulation to drive player spending. Some consequences are easier than others to delineate and regulate.

We believe this approach is ultimately reductionist, as it overlooks many alternative viewpoints, for example, the hedonistic aspect of microtransactions. Furthermore, by centering the player and their experience in the conversation, one overlooks the other stakeholders involved, such as the creators of the games, and the intent behind the design of microtransactions. By reducing ethical evaluation to consequentialism and one perspective, one ignores huge parts of the games industry ecosystem.

We must note that we are aware that some forms of microtransactions have the potential to be predatory and should be further studied and regulated; indeed, a proportion of our previous work is directed towards exactly this. However, regulation should not be applied lightly, and in-depth understanding of everyone affected is necessary when making such decisions. Our main argument is to consider with more nuance what makes a microtransaction bad: although there is a temptation to perceive the issue of microtransactions as purely binary, it is far from such. By assuming a holistic view, we can reach a point in which the games industry can co-exist with players in a symbiotic way that consistently brings both revenue and a pleasurable gameplay experience.

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