Cops and Modders: Videogame Modification and Cybercrime

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Abstract

Videogames are hugely popular, generating more than twice the revenue of global movie and music industries combined. Whilst technically illegal and often carrying negative connotations, modding constitutes a moral grey-area that is commonly accepted; often encouraged by proprietary owners and forum-centred gaming communities. Literature reflects a disparity between outsider and insider perceptions of modding, with a paucity of studies reflecting insider perspectives. Using Reddit forum data, this study contributes insight into perceptions of modding held by gamers and 'modders', as described in their words and their territory. Thematic analysis revealed four main themes relating to: unfairness in the vendor community, modders as antagonists, differences between modders, and modding as forms of self-defence. Conclusions include that modding appears to have both pro- and anti-social applications, but many people and organisations demonise modders as a homogenous group, which may encourage anti-social behaviours.

Background

Videogames are forecast to feature 2.7bn players and generate revenues of $179.7bn US dollars in 2020 (MarketWatch, 2021; Newzoo, 2020). The high value of the industry, its corporations, their products, and the sensitive account data of each player, presents clear security concerns. Videogame modification ('modding') contributes to these security concerns; defined as the act of editing an existing videogame or gaming console to change elements or produce new material. As such, there exists great diversity in potential modifications ('mods') with both anti- and pro-social goals, which occupy a social and moral grey-area despite technically breaking laws.

Proficient modders must be capable coders, able to write, pack and protect their codes in such a way that the security defences of the game do not recognise the inserted or edited code as abnormal and potentially malicious (Palmer, 2020). The parallels with cybercrime have not gone unnoticed; the UK's National Crime Agency (NCA) have stated that modding is an important step on a pathway to cybercrime (CREST, 2015).
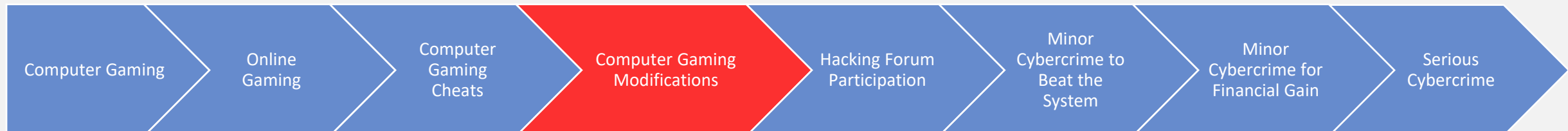

Figure 1. Proposed pathway to Cybercrime. Modified from CREST (2015), emphasis added.

However, modding is reportedly motivated by enjoyment, as an artistic endeavour, learning opportunity, and a way to contribute to the online community - by improving the gaming experience, and often working as a team to do so (e.g. Postigo, 2007; Ryu & Jeong, 2019; Sotamaa, 2010). Postigo (2007) refers to modders as 'fan-programmers' and highlights the economic benefits provided to vendors when modders and their communities add to, test, and elevate the online presence of a game at no cost to the company. Many vendors recognise this contribution, and directly encourage modding for pro-social purposes, while others condemn modding in all forms.

Current Study

This study aims to contribute valuable insights into perceptions of modding held by gamers and modders themselves, as described in their own words and in their own territory. It is intended to provide an understanding of modding in context, and the extent to which it is encouraged (or discouraged). It also examines the relationships between modders and game vendors and the rules or laws that they represent, shedding light on the NCA assertion that videogame modification represents a 'gateway' to cybercrime.

Data Used

Data were retrieved in 2019 from Reddit, a large discussion and aggregation website forming a social network system of topic-specific 'sub-reddit' forums. Data also included one post from a blog hosted on Nexus Mods (NexusMods.com), which was then discussed on Reddit. Posts were taken from a variety of sub-reddits associated with videogames. 19 English-language threads were examined, including stand-alone posts and those with up to 18 comments. There were 136 entries overall; 19 initial posts and 117 comments.

Design and Procedure

Data were subjected to Thematic Analysis (TA) according to methods promoted by Braun and Clarke (2006). Following familiarisation with, and immersion in, the data, phrases were given initial codes based on content. These were then grouped together according to association, following which, themes and sub-themes emerged.

Results of Thematic Analysis

Theme 1: The Unfair Vendor

Regarding both the justification and condemnation of modding, the perception of corporations (who produce a specific game, own the rights, profits, and manage end-users) as unfair, emerged clearly from the data.

- **Grind Payoff:** Games described in our data feature an 'in-game economy' which can be subverted using game modification to award money, items, or upgrades to users without having to 'grind' excessively.
- **Bans and Lack of Support:** Users reported a marked absence of support, even if corporations were directly contacted. This vendor inaction was compounded by a fear of vendor action, with players concerned about their complaints being ignored, but still being banned for receiving modded cash without their consent.
- **Reliance on Playbour to Fix/Improve the Game:** The data reflects an acknowledgement of the creative work that modding can entail, and this sub-theme refers to the perception that modders are fulfilling the responsibilities of the vendor in terms of fixing or improving the game.

Theme 2: The Modder as an Antagonist

Modding motivations and behaviours were often described as purely malicious or antagonistic, and the terms 'cheaters' or 'hackers' were commonly used interchangeably to describe modders.

- **Griefing or Trolling:** The destruction or theft of property, damage to characters and the game environment, and prevention of gameplay by containment of characters, ejection of players, and denial of entry to games.
- **Harassment and Control:** Harassment, stalking and spying, self-exposure and control of other players. Respondents discussed invasion of privacy, invisibility, perversion, and manipulation of offending modders.
- **Fear and Avoidance:** Players reported employing strategies to avoid modders entirely, including private gameplay, leaving games with modders, deleting friends, and limiting exposure through platform choice.

Theme 3: Depends on the Modder

This theme concentrates on the important differences in behaviours, motivations, and perception of modders.

- **The Modder as a Creator/Problem Solver:** Users acknowledged the beneficial potential and the artistry of modders, including helping others, improving gameplay, and customising games to the desires of players.
- **Perceived Differences or All The Same:** Some users described considerable differences between modders' characters and behaviours, while others claimed that modders were a homogenous group of antagonists.
- **Supportive Community:** Participants post requests for help with modifications and suggest creating a cooperative community, this was not as well-received as the literature might suggest, perhaps due to sampling.
- **Reputation:** Status and reputation are important in modding communities and one thread in the data was started by a modder explicitly asking users to explain the reasons behind the negative reputation of modders generally. Data suggested that modders act in defence of their reputation.

Theme 4: Modding in Self-Defence

Modders are victimised in ways other than attacks on reputation, including being griefed and harassed themselves. In fact, the data suggests that being a modder both attracts, and defends from, these unwelcome behaviours.

- **Being Harassed for Money:** Modders reported being harassed for their ability to assist players, with demands being made of them. This presents security risks in itself, as a modder may ask for user information, but also provokes retaliatory action.
- **Protection from Other Players/Modders:** Modifications being used as retaliation or defence was discussed further in relation to griefing or being kicked out of games for either unfair or legitimate reasons.

Discussion

While some participants in the current study noted a difference between pro- and anti-social modders, and some modders defended their actions as benevolent, the main vendor in the data apparently made no such distinction. Any player associated with modding was subject to strict measures, yet this lacked consistency in execution. This appeared to foster negative feeling toward the vendors themselves, but, more prominently, toward modders. One reason may be the lack of distinction between 'modders' and 'cheaters', terms used interchangeably in some of the data, but which carry very different implications.

The under-recognised differences between modders mirror those found between hackers - recent literature suggests that modern hackers may be classified according to a combination of four categories: (i) their expertise; (ii) their values and moral principles; (iii) the modus operandi, and; (iv) the tools and information they have at their disposal (Jaquet-Chiffelle & Loi, 2020). Corporate use of sanctions and bans without satisfactory reason or explanation created friction between modders and other players who recognised that the presence of modders increased the chance of these events, and thus demonised and ostracised them. The risk of losing accounts and characters that may represent a player's online identity, their ability to play, and sometimes years of hard work, causes players to invest time and energy into avoiding virtual proximity to modders.

Modders are avoided as a direct result of antagonistic behaviours, leading to generalisations that all modders are griefers or trolls. Modders who alter in-game economies change the pace and sense of achievement provided by gameplay, but this is often supported by players who criticise the increasing labour-intensity of games. The presence of modifications, even aimed at improving gaming experiences, can overwhelm processing capabilities, causing the online gaming sessions and even personal computers to crash. In avoiding modders, players' experience of the game is altered – often for the worse.

Whilst presenting an overall negative view of modding, the data demonstrates the variety of relationships that exist between gaming corporations, players and modders. Vendors may have different relationships with players and modders based on their attitude towards modding and the level of grind payoff in games. Non-modding players may insult and ostracise modders, harass them and demand in-game money or other modding work, and damage their reputation by criticising that work. Alternatively, players may encourage, show gratitude, and support modders and their contributions, blaming corporations for failing customers.

Conclusion

From the data analysed in this study, modding simply appears far too diverse to consider unspecified modding a reliable gateway to equally unspecified cybercrime. It is possible that by learning to modify and hack, those with malicious intent may harass, 'grief', and steal through their modding, and that this may be an indicator of future malicious cybercrime. Demonising modders as a homogenous group and condemning any creative and collaborative outlets by banning and shunning modders may even develop that malicious intent in otherwise benign modders through rejection, alienation, and perceived injustice. Similarly, benevolent, creative, and vigilante modders may later become engaged in more altruistic online activities of varying legality. That said, nowhere in the data did a participant allude to cybercrime or illegal activity outside of videogame modification, and it is therefore difficult to draw any reliable conclusion on the legitimacy of the NCA (2017) claim that modding is a crucial step on the pathway to cybercrime. The data itself is not longitudinal, and it is therefore difficult to conclude that modding predicts any future activity whatsoever, but the artistic, social, and collaborative nature of many mods and modding communities should not be overlooked due to an alleged general relationship to cybercrime.

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