СЕКЦІЯ 4 ІНФОРМАЦІЙНІ ТЕХНОЛОГІЇ В АВТОМАТИЦІ, ЕЛЕКТРОНІЦІ, ВИМІРЮВАЛЬНІЙ ТЕХНІЦІ ТА ЕКОНОМІЦІ

UDC 004

CRUNCH CULTURE: IS THE GAME WORTH THE CANDLE?

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Introduction. Game development stands out among many other sectors in IT when it comes to working overtime. The necessity to stay long hours is to some extent inevitable for any job. Game industry, however, during the last decades has been among the leaders in both the number of overtime hours and their consistency. The 2021 report "State of the Game Industry" by GDC¹ showed that on average 45% of game developers worked more than 40 hours a week. Furthermore, maximum hours worked per week stayed at 40 hours for only 21% percent of the respondents [1]. In game development, overtime work is not occasional, it is almost a standard. This practice was even marked with a word "crunch", which became a sign for deadlines and budget struggles.

Why does crunch happen? First and foremost, it should be noted that the "crunch dilemma" in the game industry has been an issue since at least the early 2000s. In the famous "Blood, Sweat and Pixels" Jason Schreier unveiled plenty of inside information that showed what it takes for game developers to keep up to deadlines and requirements, with each case having its own background [2]. Thus, we will not try to reassess what has already been disclosed. Instead, we will take a look at crunch as an intentional instrument, a tool that teams of both Triple-A² and small indie games use to make ends meet. Likewise, we will not address records where a crunch was generated by enthusiasm and desire to over-perform³. One thing we will try to

³ There is a considerable volume of stories regarding individualists who face crunch because of the passion.

¹ Stands for Game Developers Conference, an annual event for game industry professionals.

² Games developed with high budgets and prominent publishers, further referred as AAA.

understand, though, is whether it is really worth it for game studios to use crunch on a regular basis, forcing their employees to stay late as a choice meant to cut down development costs.

Secondly, before moving on let us delve a little into reasons that can lead to a situation during production that we call crunch. Game project is an extremely fast-paced and amenable to change environment. Here plans get canceled, ideas appear from thin air, reshaping the entire development process, setting new goals that contradict everything planned beforehand. Reasons for that can vary. Generally, it is either the money, the time, or the passion, often combined, resulting in the most challenging and unusual situations. Oxford Dictionary defines crunch as an important and often unpleasant point, situation or piece of information [3]. Looking at what has been said above, we can clearly see why this word has consolidated in the game industry.

Whether we are talking about outsource or product projects⁴ the deadlines and budgets, in contrast to objectives and circumstances, are not so flexible. In fact, with the expansion of the project scope budget obligations often remain the same. When there is a limited amount of resources, the team has a choice, in which there are no pleasant options: freezing the project with a lot of work and time put into, reporting about the missing functionality to the investors, or disappointing the fans patiently waiting for the game⁵. Once these are discarded, the only other solution available becomes the panacea, and that solution is crunch.

Crunch effectiveness. While it is obvious that "crunching" is a bad practice, we cannot ignore the fact that the development process of many successfully released games was accompanied with huge deadline breakdowns. To determine whether the game was successful or not, we will look at the scores on the Metacritic platform. Metacritic aggregates the reviews from both fans and professional critics around the world for many products, and especially video games.

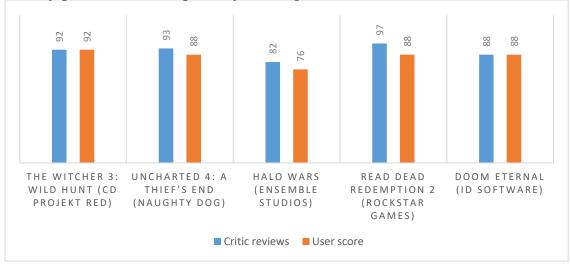


Figure 1 – AAA projects ratings on Metacritic platform, out of 100 points

⁴ Outsource companies provide services, while product companies work on their own idea)

⁵ It is not unusual for the fans to be also the main source of investments in projects. Many studios released games that were developed with the help of fundraising on Kickstarter platform.

The bar chart (Fig.1) depicts the scores of different AAA projects, reportedly involved in enormous crunch periods, that are still warmly received by the community. All of the demonstrated games were huge success at the time of their release. Their development process, however, was not that smooth. For instance, producing "Halo Wars" required repetitive crunches that lasted for months [4]. Highly acclaimed games of recent years, "Doom Eternal" and "Red Dead Redemption 2" both cost their teams many months of constant overtime work. Creations of notorious CD Projekt Red and Naughty Dog studios are two examples that need to be examined even more thoroughly, for they can shed a little light on weighty arguments why companies tend to use crunch intentionally.

Crunch culture. "The Witcher 3: Wild Hunt" is considered by many to be one of the best games ever made. Still such glory always comes with a certain cost. Development process of the game was followed by anonymous leaks claiming a huge crunch that lasted more than a year. Interestingly, the information about overtime work problems in game studios almost always comes from anonymous sources. That happens due to a lot of reasons: non-disclosure agreements, reluctance to discredit other team members, etc. That is what makes this sensible data in relation to a particular project or company so hard to find and even harder to confirm.

Another reason why members of development teams hesitate to talk more openly about crunch issues can be illustrated on the example of "Uncharted 4: A Thief's End" development. It was one of those situations where crunch happened not only for the sake of deadlines, but because it was a working culture inside the team. Those who participated in "Blood, Sweat and Pixels" interviews said they had felt obliged to stay late because everyone else in the team did. Developers start to feel guilty for leaving their desks at the end of the working day, for their colleagues are trying to finish all the mechanics in the nick of time. Even though it is probably inhumane, both big product companies and small outsource studios deliberately prolong the effect of crunch culture and spirit of commitment, because it seems to get the job done faster and cheaper, despite the fact that it can absolutely devastate individual workers. But is crunch really that effective?

Crunch cost. The picture of all the successful stories can be deceiving. There were, certainly, projects where overtime work made a big deal on the stage of release. If we glance a little further in the timeline, we will see that a game studio should not rely on the approach of constant development crunch. Remarkably, we can confirm this point while looking at the same companies as before.

After the resounding success of "The Witcher 3" the community was anxiously waiting for the next release from CD Projekt Red – "Cyberpunk 2077". In longing to learn from their mistakes, or maybe just gain in popularity, the company publicly announced that they would avoid a crunch on their new project. Nevertheless, "Cyberpunk 2077" was delayed three times, reportedly leading to mandatory six-day

⁶ Further referred as "The Witcher 3"

⁷ Further referred as "Uncharted 4"

working weeks and in general more than a year of crunch development. That was one of the rare occasions when the upper management openly admitted they needed to put into crunch hours of their employees, and that they were doing that intentionally [4]. It did not save the game in the end. We cannot predict what would happen to "Cyberpunk 2077" without delays and overtime work. Nonetheless, even after its release the game was full of problems that completely ruined user reviews, and it was not until 2023 when the game was fully fixed and gained recognition.

"Uncharted 4" has also left a scar on its development team. The co-director of the development team left the studio after the release because of the complete burnout. Along with him went a major amount of the team that worked on the game. "The Last of Us Part II", the next great release by Naughty Dog, could not break the generation curse in the context of crunch game development, thus ratifying the conscious culture of overwork inside the studio even more [5].

Conclusion. Crunch is definitely the most expensive way a company can choose to develop a game. It may give short-term results, but in the creation of any more or less complex game, crunch benefits will be outweighed by significant drawbacks. Relying on overtime work can lead to mass-media leaks and public disclosure, resulting in a tarnished image and uproar in the community. Consumers can start consciously refusing to buy publisher's games. Moreover, bad reputation of a company also foreshadows problems with hiring new employees. Staff turnover is also a considerable challenge. Is it really more beneficial to release the game a month or two earlier, while losing half of the team afterwards, rather than to postpone the release and prevent a series of layoffs? That is the rhetorical question, just like the one in the headline.

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