## THE CHALLENGES, PERSPECTIVES AND TRENDS FACING GAME DEVELOPERS IN 2019

Vinnitsa National Technical University

## Анотація

У статті зроблено огляд галузі розробки ігор на сьогоднішній день. Детально розглянуті та описані перспективи, проблеми та тренди галузі, зроблено важливі висновки про найбільш вдалі підходи для інді-розробників та великих компаній.

**Ключові слова:** ігри, тренд, парадигма, монетизація, індустрія, Steam.

## Abstract

The article shows an overview of the game development industry nowadays. The perspectives, challenges and trends of the industry are considered and described in detail, and important conclusions were drawn about the most successful approaches for both indie developers and large companies.

Keywords: games, trend, paradigm, monetization, industry, Steam.

Game development has reached its apogee nowadays and changed a lot since the early 1980s. As modern technologies, sciences and engineering have been growing and developing, an enormous number of new problems, issues and challenges should be solved by game companies and indie developers today. So, it is useful to make some general predictions about the most significant challenges and perspectives facing game development industry this year.

"The barrier to entry is lower than ever, but the barrier to success is higher than ever before." – this statement of Jason Della Rocca, the former executive director of the International Game Developers Association, describes exactly the current position of the game development industry in this moment.

The main problem and also perspective for independent developers is that labour, knowledge and software tools for game creation have never been so accessible in quantity, quality and price. Simultaneously, devices and platforms to publish with have never been so abundant. Anyone can create games nowadays, free of legal as well as creative control from big publishers, and catering to niche audiences who have been neglected.

To describe more efficiently second challenge of modern game development we should remind about the development process itself. As you know, it consists of devising some game idea or concept, preparing game design document, producing one or more prototypes, developing the project, its beta testing/alpha testing, release and support. The described process was beginning to stagger under its own weight recently. Ploughing significant resources into a game months before you could be fully confident that the game design was not fundamentally flawed was risky. As teams grew and development budgets rose from millions to tens of millions, publishers became wary of backing projects that took creative risks. It was safest to make games with

the kind of mechanics that they already knew worked—the engines had been used in other games. Innovation, many observed, is suffering as a result.

Thirdly, make-and-test design paradigm (or so-called test-driven development) has become formalised into a powerful design tool, as part of the iterate-and-test formula now generally accepted as best practice in game design but it is quite a great challenge for huge game companies and for indie developers as well. So everyone involved in game creation, especially programmers and designers, should be prepared for the endless pursuit of the product's perfection formed not only of the bugs' fixing but also of users' whims and fantasies. This is nowhere more apparent than in techniques used in 'data-driven design'—design based on analysing the behaviour of players using data they generate as they play.

Data-driven design is native to 'freemium' games (games like Clash of Clans, League of Legends) that use a 'games-as-a-service' model. The design of these games is not static, as boxed games used to be. The game is designed as a continuously evolving entertainment service that gathers live data from its users, driven by a design process that continues indefinitely after the game has been launched. Because players pay via inapp purchases rather than buying the game up-front, the designer's task is to maximise both the money (monetisation) and time (retention) that players spend in the game. This data-driven approach to game design is no longer confined to a small section of the industry. As online play becomes the norm, and as free-to-play monetisation gains wider traction across more gaming markets, genres and platforms, working with player metrics data is being increasingly integrated into our game design process and become maybe one of the greatest advantages and perspectives of the game business.

Another trend that integrates live user testing into the heart of our process is the practice of 'open alpha', which is currently popular in indie game development. Players pay to access to an alpha-stage (playable, but not finished) build of a game, which in turn helps developers fund the game's completion. An open alpha also acts as a live testing platform, similar to games-as-a-service. A large part of the design success of games like Minecraft, For Honor or Gwent can be attributed to the adjustments to its design made based on feedback from the community during its lengthy open-alpha period. Making testing a more central part of our design process has bolstered our crafts-based approach.

To continue the theme of the game market, mobile game developers today find themselves frustrated by a winner-takes-all market, in which big companies maintain near-total dominance of App Store and Google Play charts. Meanwhile, Steam usage stats reveal that the market for new games is only a tiny minority of the PC gaming audience. The vast majority of games released do not break even. Making money from games is as creatively and commercially risky a business as it ever was. The difference between then and now is in who bears the costs of these risks. Increasingly, it is developers themselves. Those publishers and investors who would previously have stumped up millions in production funding on the strength of a pitch and the quality of a development team are increasingly demanding that some form of the game already be produced and proven in the market. For example, interest generated in the game via a crowdfunding campaign, player metrics from a soft launch or release on a single platform—before they will agree to publish or invest.

You must also admit one more challenge that maybe hasn't a substantial influence on the industry itself but has an enormous one on developers who in turn influence the industry. In 2004 game development careers lasted an average of five years or less. A major reason for this was that game developers burn out: salaried employees were expected to work excessively long hours for relatively low pay, and were frequently laid off

at the end of projects. The industry today still shows few signs of offering long, sustainable careers, in which its creatives can expect to spend decades deepening and maturing their design practice. We are expected to reach our full creative potential early and fast. While this makes us relatively cheap and disposable, the downside for the industry is a problem of supply. Our numbers need to be regularly replenished in order to enable and maintain the industry's heightened activity. So, we have the rhetorical question: how has this been achieved today?

Firstly, it has been achieved by making game development a highly visible, highly desirable activity. A career in game development, previously a niche activity for nerds and computer science drop-outs, has undergone a remarkable image change. As Hasbro will tell you, based on a 2015 survey they did to update the careers featured in their popular family board game The Game of Life, the number-one career preferred by kids is 'videogame designer'.

There is another way in which the industry benefits from this wave of interest in game design careers. The game design dream has helped ensure the rise of a new industry that enables and serves the expanded productive capacity of the game industry. Before entering the industry properly, the dream's young adherents are chaperoned into a feeder industry with enormous productive capacity of its own: the games education sector. Degrees in game development are relatively new. Until a decade or so ago, game-specific qualifications were only offered by a rare few universities. The first decade of the century saw an explosion of game development courses offering graduates a shot at a (likely as not, very short) career in game development.

Besides, game industry is still developing by making different events for its popularization, Game Developer's Conference is the most famous one as a yearly conference for video game developers. The event includes an expo, networking events, and awards shows like the Game Developers Choice Awards and Independent Games Festival, a variety of tutorials, lectures, roundtables by industry professionals on game-related topics covering programming, design, audio, production, business and management, and visual arts.

In conclusion, it would be useful to talk about the main strategy and trends should a game developer follow. In the marketing context of the ever-changing gaming industry there are highlighted the following five points:

- 1. Creativity is still key; game developers don't need to abide by traditional marketing methods, rather they should think outside the box and consider alternatives in how to share your work and find your community.
- 2. Find ways to avoid competition with the giants. You probably won't be featured on the Steam landing page and don't have the brand recognition to throw elaborate release parties. However, seek out your core players where they meet and give them some ownership in the development process. They are your best organic marketing tool.
- 3. Get inspiration and feedback from outside the industry. Experts and non-gamers can provide perspectives that shine a light on problems you haven't noticed or can enhance the immersive quality and richness of your product.
- 4. Use influencers to promote your games in the vast social media landscape. Famous channels on video streaming sites like twitch.tv and YouTube cannot guarantee you a long-term visibility among potential audiences but inject you with enough relevance to boost your campaigns.

5. Play any games. You should constantly play and observe new (and especially) old games. Even if they seem unsuccessful to you, always try to go through the games to the end - this way you can see some non-standard techniques and moves from the developers and better understand what the future user of your future game will be interested in, and what's not.

It is exciting to see what 2019 will offer in the gaming world, in business development and entertainment. If the predictions are correct gamers, game developers and fans will soon meet each other in Virtual Reality spaces. See you there!

## LIST OF REFERENCES

- 1. <a href="https://medium.com/@haikus\_by\_KN/how-we-design-games-now-and-why-bcbc1deb7559">https://medium.com/@haikus\_by\_KN/how-we-design-games-now-and-why-bcbc1deb7559</a>
- 2. <a href="https://codeburst.io/the-2018-game-developer-roadmap-e07e45b3c423?gi=37461c949d72">https://codeburst.io/the-2018-game-developer-roadmap-e07e45b3c423?gi=37461c949d72</a>
- 3. <a href="https://www.polygon.com/2018/9/28/17911372/there-are-too-many-video-games-what-now-indiepocalypse">https://www.polygon.com/2018/9/28/17911372/there-are-too-many-video-games-what-now-indiepocalypse</a>

**Zelinska Dariia** – student of the 2KN-16b group, Faculty of Information Technologies and Computer Engineering, Vinnytsa National Technical University, Vinnytsa, e-mail: dariia050500@gmail.com.

**Зелінська Дарія Олегівна** — студент групи 2КН-16б, Факультет інформаційних технологій та комп'ютерної інженерії, Вінницький національний технічний університет, м.Вінниця, e-mail: dariia050500@gmail.com.

Prysyazhna Olesya Dmitrievna – Candidate of Linguistics' Department, Senior Lecturer of Foreign Languages Department in Vinnitsa National Technical Universety, Vinnytsa, e-mail: prysyazhnalesya@gmail.com.

**Присяжна Олеся** Дмитрівна – кандидат філологічних наук, старший викладач кафедри іноземних мов Вінницького національного технічного університету, м.Вінниця, e-mail: prysyazhnalesya@gmail.com.