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Kyiv National University of Technologies and Design (Kyiv) Scientific supervisor – senior lecturer Inna Makhovych GAMIFICATION'S GOLDEN AGE: HOW GAMING PRINCIPLES ARE RESHAPING THE WORLD

Video games have become a ubiquitous form of entertainment in contemporary society, captivating a wide range of demographics. The surging popularity of video games, often compared to traditional forms of entertainment, has fuelled the industry's remarkable growth. Tracing the evolutionary trajectory of gaming from its inception to its current prominence reveals a fascinating narrative of transformation within the entertainment landscape. The video game industry's revenue has experienced exceptional growth, increasing from a small base in 1970 to an astounding \$180 billion in 2022, highlighting its evolution into a dominant force in the media landscape (as illustrated in *Figure 1*).

This evolution extends beyond mere entertainment consumption; it has also spurred the emergence of gamification, a phenomenon wherein game elements are integrated into non-game contexts to enhance engagement and motivation. In this article, we aim to elucidate this evolution by examining the trajectory of gaming revenue, elucidating its transition from a precarious niche market to a foundational pillar of the modern entertainment industry, and exploring its implications for the proliferation of gamification strategies.

While the first prototypes of video games were developed on old post-war mainframes, the first commercially successful video games were introduced in the form of arcades, developed by an American company Atari, and they immediately garnered attention as a new form of interactive entertainment. The first home console

(Magnavox Odyssey) was released not long after, which was also a big success due to its novelty.

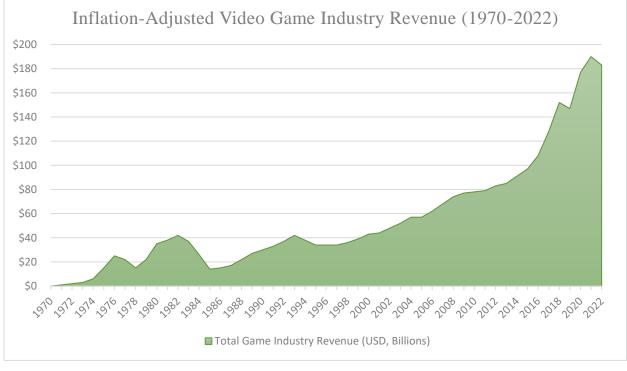


Figure 1 Inflation-Adjusted Video Game Industry Revenue (1970-2022) Source : https://www.visualcapitalist.com/video-game-industry-revenues-by-platform/

However, novelty alone is not enough to sustain a product forever, and due to the general simplicity and low quality of games, consumer's interest started to dwindle just after a few years. This was partially remedied by the release of Space Invaders in 1978, which reinvigorated people's interest in arcade games, with the Cult Classic Pacman releasing soon after and becoming the most profitable Arcade video game in history.

Though the problem with there being an influx of low-quality games remained, and it only became worse in the following years, As more and more bad games flooded the console market, things culminated in an event known as "video game crash of 1983", which caused the entire American gaming market to collapse, with console revenue dropping a whopping 90% in just 2 years (as illustrated in *Figure 2*). Due to that, most American gaming companies had to either close down or be sold off, and Atari was among them.

Збірник тез доповідей IX Всеукраїнської науково-практичної конференції «Інноваційні тенденції підготовки фахівців в умовах полікультурного та мультилінгвального глобалізованого світу»

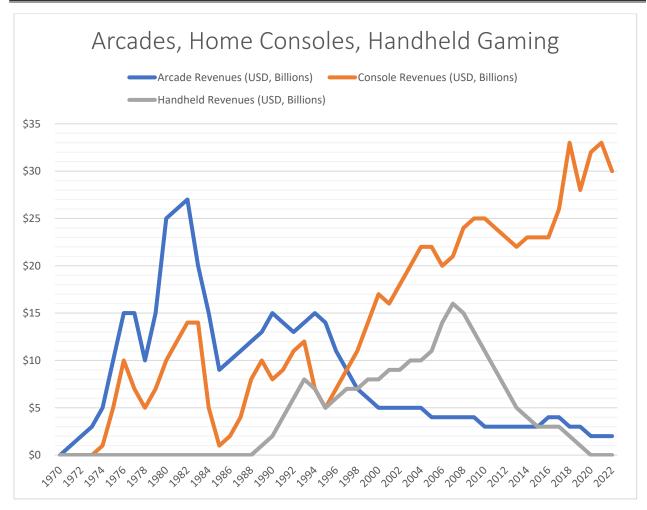


Figure 2 Growth of Video Game Industry Revenue (1970-2022) Source : https://www.visualcapitalist.com/video-game-industry-revenues-by-platform/

It was not until 1985 when a Japanese company Nintendo released their console called Nintendo Entertainment System (NES) to the global market that the industry started regaining its footing. With their console, Nintendo introduced a form of quality-control, where all games must first be approved by the console manufacturer before they can be released on the market. And after releasing several great titles, people started slowly regaining interest in video games, as they steadily gained more revenue with each year. Shortly after, Nintendo also released the first handheld console by the name of Gameboy, which also attracted a sizable market.

The console market's recovery proved slow and steady, taking nearly two decades to reach its pre-crash heights by 1999.

Roughly at that time, in 1997 the world got introduced to a new video game market in the form of mobile games. At first, it was considered as a mere afterthought - a small timewaster that you could play if there was nothing else to do. It would take companies many years to realize just how much potential there is in monetizing that market, after which mobile game revenue started rising exponentially.

Shortly after the release of the first iPhone, the market which was considered a cheap substitute to handheld games already managed to overtake them in revenue in 2009, then as in-app purchases became more and more widespread, it became the most profitable standalone gaming market in 2011, and by 2018, its earnings alone exceeded all other gaming markets combined (as illustrated in *Figure 3*).

Such incredible growth could be attributed to mobile games being the most accessible to everyone, while also being the least regulated in terms of monetization. They are especially popular in the Eastern countries, such as China and Japan, where the average person is much more likely to spend money on mobile games. This shift towards mobile gaming exemplifies the intersection of technological innovation, changing consumer behaviours, and the integration of gaming principles into everyday experiences, underscoring the profound impact of gamification on contemporary entertainment trends.

As the mobile gaming market experienced exponential growth, the PC and console markets also demonstrated resilience, maintaining their positions in the gaming industry landscape. While the mobile market flourished, the PC and console markets continued to thrive, albeit at a slower pace, engaging in a competitive rivalry. In 2014, the PC market surpassed consoles in revenue, marking a significant milestone in gaming history.

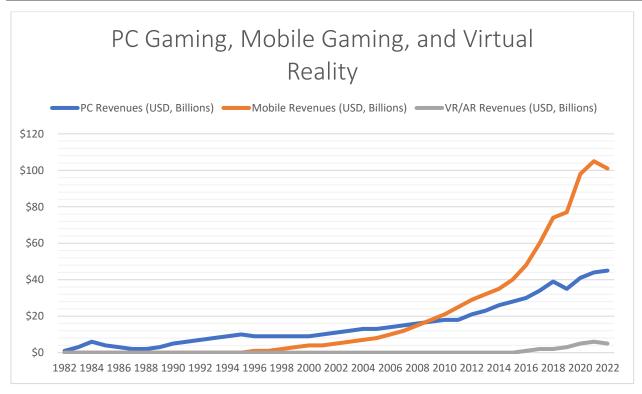


Figure 3 A Battleground of Revenue: Comparing PC, Mobile, and VR Gaming Markets Source : https://www.visualcapitalist.com/video-game-industry-revenues-by-platform/

However, a notable decline in revenue across both platforms occurred from 2018 to 2019, attributed primarily to the Chinese government's decision to block the release of new games in their country. This regulatory action had a discernible impact on global gaming revenues. Nonetheless, this setback paled in comparison to historical challenges faced by the industry.

The outbreak of the Covid-19 pandemic in 2020 ushered in a new era of challenges and opportunities for the gaming industry. With people worldwide compelled to stay at home due to lockdown measures, gaming experienced a resurgence in popularity. This surge in demand for interactive entertainment underscored the intrinsic value of gaming as a versatile and accessible form of escapism and social interaction during times of adversity.

Throughout these fluctuations, the concept of gamification has remained a driving force shaping the evolution of the gaming industry. Gamification principles,

once confined to traditional gaming experiences, have permeated diverse sectors, including education, healthcare, and business. By integrating game mechanics and design elements into non-game contexts, gamification enhances user engagement, motivation, and overall experience. The success of mobile gaming, in particular, exemplifies how gamification principles, such as reward systems and social interaction, can transform everyday activities into immersive and rewarding experiences.

In the subsequent sections of this article we explore the enduring influence of gamification on industry trends and its implications for future innovation and growth.

In the current landscape of 2024, although the overall growth of gaming revenue has moderated, it remains the undisputed powerhouse within the entertainment industry by a significant margin. Despite fluctuations in revenue growth rates, gaming continues to outpace other forms of entertainment, reaffirming its status as a dominant cultural and economic force. This enduring appeal can be attributed to several factors, including the widespread accessibility of gaming platforms, the proliferation of online communities, and the continuous innovation in game design and technology.

Moreover, the convergence of gaming with other sectors, facilitated by gamification principles, has opened new avenues for innovation and growth. From education and healthcare to marketing and employee engagement, gamification strategies are being employed to enhance user experiences and drive desired outcomes. By harnessing the inherent motivational elements of games, organizations are able to foster greater engagement, loyalty, and productivity among their target audience.

Looking ahead, the trajectory of gaming's evolution appears poised for further expansion and diversification. As advancements in technology, such as virtual reality (VR), augmented reality (AR), and cloud gaming, continue to reshape the gaming landscape, new opportunities for immersive and interactive experiences emerge. Additionally, the growing integration of gaming into social and cultural spheres, coupled with the increasing globalization of gaming markets, heralds a future of unprecedented growth and innovation.

In conclusion, the journey of gaming from niche pastime to global phenomenon reflects a dynamic interplay of technological innovation, regulatory dynamics, and evolving consumer preferences. At its core, the enduring influence of gamification serves as a catalyst for industry-wide transformation, driving innovation, engagement, and growth. As we navigate the ever-evolving landscape of gaming, one thing remains abundantly clear: gaming's prominence within the entertainment industry is here to stay, shaping the cultural zeitgeist and inspiring generations to come.

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