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The Impact of Remote Work on Interdisciplinary Collaboration in Game Development Projects

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Bachelor's thesis
September 2024
Business Information Technology

jamk | Jyväskylän ammattikorkeakoulu
University of Applied Sciences

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Description

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Jyväskylä: Jamk University of Applied Sciences, September 2024, 47 pages

Degree Programme in Business Information Technology. Bachelor's thesis.

Permission for open access publication: Yes

Language of publication: English

Abstract

This thesis investigates the impact of remote, hybrid, and on-site work models on interdisciplinary collaboration, productivity, and mental health within the game development industry. By combining a review of existing literature with survey data from professionals across disciplines such as programming, design, and art, the research aims to uncover how different work models influence team dynamics and individual well-being.

The findings highlight a strong preference for hybrid work, which is perceived as the most effective model for balancing flexibility and collaboration. While remote work provides autonomy and focused productivity, it often leads to challenges such as isolation and communication barriers. Conversely, on-site work fosters interpersonal connections and immediate feedback but lacks the flexibility many professionals desire. Hybrid work emerged as the preferred solution, combining the advantages of both remote and on-site setups while addressing their respective drawbacks.

The research also identifies the importance of leadership, organizational culture, and collaboration tools in mitigating challenges associated with flexible work models. Digital tools were found to be effective for maintaining communication but insufficient for replicating the social and creative benefits of in-person interactions. Additionally, the study emphasizes the need to address mental health challenges, such as isolation and burnout, particularly in remote and hybrid environments.

This thesis contributes to the understanding of how evolving work models influence creative industries and provides actionable insights for organizations aiming to foster effective collaboration and support their teams' well-being. Future research could explore the long-term effects of these models and investigate specific strategies for optimizing interdisciplinary collaboration in the game development sector.

Keywords/tags (subjects)

Game Industry, Remote Work, Work Models, Mental Health and Well-being, Collaboration, Game Development, Hybrid Work

Contents

1 How Remote Work Affects Interdisiplinary Collaboration

Since the spread of Covid-19 pandemic in early 2020, there has been a significant rise in the adoption of remote and hybrid work models across a wide range of industries. While at the beginning it was for health precautions to combat the spread of the virus and an urgent need for social distancing it very quickly became apparent that many businesses could continue effectively in this new mode. Over time businesses began to notice the benefits of remote work and as a result many of them started to take on different tools and practices to support long term remote collaboration. This has been especially true for technology based companies and businesses, because they already were equipped with the necessary software and hardware to work from any location. The game industry is one of many sectors that have been especially quick to switch to remote work as digital tools are essential for many of the disciplines. As these practices became more mainstream and the benefits are more evident, remote work has became from temporary solution to a more permanent aspect to many companies.

It is difficult to say whether remote, hybrid or on-site work is best because they all have their benefits and their disadvantages.

On-site work is the traditional way of working where there is a physical location where employees perform their duties like the company's office or workplace. This work model puts a lot of emphasis on face-to-face collaboration, direct supervision and real time interactions with other colleges. On-site work is mostly valued for it ensuring consistent communication and providing access to resources and facilities that could not be available remotely. On the other hand it comes with the downsides of commuting, fixed schedules and less flexibility compared to other work models. This way of working suits people who like to have immediate oversight or hands on involvement from other colleagues, like interns or people new to the job.

Remote work as previously mentioned was adapted mainly during 2020 and I revolves around the physical workplace not existing. An employee could do their work from wherever they please as long as it doesn't clash with the companies rules. This model relies heavily on digital tool like video meetings, emails/chats and project management software to make up for the lost communication. It gives flexibility for the location and the working hours which give the employees a preferential work life balance. Remote work suits deep focus. independent work and not necessarily much

communication. However it also presents us with a couple of challenges such as communication barriers and a difficulty to maintain clear boundaries between work and personal life. This also requires huge self-discipline and reliable technology.

Hybrid work has been emerging of late which aims to be a bridge between these two models where the company allows the employee to split their time between working at a designated office and working from home. It is designed to have the benefits of both work environments such as the in-person collaboration and access to resources and facilities, along with the flexibility and balance of remote work. Hybrid work is great to adapt to individuals where they can choose to do some tasks at the office and some from home. Yet hybrid work also can have scheduling, coordination and communication problems, and could divide people who prefer one model over the other. It requires thoughtful planning and effective and reliable technology.

The game industry is quite unique when it comes to entertainment fields such as the film and music because of its rapid evolution and distinctive characteristics. As Goh et al. (2023) point out, the video game industry is fast changing and highly adaptable and it is driven by the technological advancements of our world. The industry's rapid adaptation to new technologies sets it apart from other industries, because it requires to evolve with changing hardware capabilities and the demand of consumers. The film and music industry have not been this transformative in how their products are consumed or experienced.

Furthermore video games are way more interactive and immersive than the passive entertainment forms of movies and music. Video games allow players to actively engage with their content, making choices and directly influence the outcome of their experience. Games also create a unique space for their users for social interaction where they can connect with players all around the world in a virtual environment. (Goh et al., 2023)

The game industry is also very closely correlated to the tech industry because they both sell software, but as Murphy-Hill et al. (2014) points out there are many differences between the two. He highlights that unlike many tech fields that focus mainly on functionality and utility, the video game industry revolves around creating entertaining experiences. Video games are not only about delivering a product, they are there to engage players through interactive storytelling, immersive

worlds and great mechanics which makes the essentially different from products of tech companies.

Murphy-Hill et al. (2014) also stresses that there are unique creative challenges when it comes to video games. While other tech fields prioritize efficiency and problem solving, the game industry has to have a balance between technical innovation and artistic expression. Game designers have to consistently push the boundaries of technology and innovation while also delivering a fun, engaging and memorable experience.

Because of these differences in creation and focus for the game industry is reflected somehow on their work models. I intend to see if the same difficulties of remote, on-site and hybrid work apply the same way it applies to other industries and which of these would be the best for workers by interviewing different industry professionals who have took part in different game projects or have been a part of game companies using different types of work models. What worked, what did not and why.

1.1 The Increase of Remote and Hybrid Work

The game industry is very wide with so many different roles and jobs and each and every one of them require different skills. All of these roles operate differently and have different needs to be successful so the game project itself could be well made and executed. This is why it is very interesting to ask the question how can these drastically different teams collaborate together and create magnificent games, especially considering the downsides of all the work models the paper mentions previously. The people or teams working on these game projects depending on the company or group can be larger or smaller, but they mostly have at least designers, artists, programmers, producers and some sort of management. There are obviously many more jobs working on games such as testers, composers, sound designers, writers and much more, but most groups making video games have the aforementioned titles at least. If we dive deeper into the roles and what their role is we can clearly see the similarities drawn between the production team of a TV show or a movie as Scott Rogers (2014) points out.

Designers are usually the ones who come up with the idea for the game, who create the world and understand how this specific games physics work. They design the levels, the encounters, enemies, environments and more.

Artists are the ones who bring these alive by creating the background, character and User Interface art either 2D or 3D and doing their animations and textures.

The programmers are the ones who give functionality to what the designers have thought out and the artists have created. They are crucial to create the mechanics and make the game work how the designers dreamt it.

Composers and sound designers are responsible for any audio that goes into the game. The composers create the music that they can create in many different way, such as using a keyboard or orchestrating a live orchestra. The sound designer is the one who makes the sound effects for the game.

Writers are working on the story of the game, which can be the main feature of the game or just in the background. Massively Multiplayer Online games (MMOs) and visual novels are story driven while First Person Shooters (FPS) and Battle Royale games usually only have a more basic story to explain how the characters got into the situation they are in.

Testers are important to make sure the game works as intended and has no faults to it. This is extremely important for a game, because if there are any bugs or issues with the game on release, the game usually doesn't do well.

Producers are the ones who oversee the process and make sure they are meeting the requirements and needs of the team, investors and the consumers. They are usually held responsible for the team and who represents the team to the higher management.

The different disciplines and the eccentricity of the game industry makes it difficult to know which work model works for it.

1.2 Work Model

The motivation for this study lies in the growing recognition that no single work model—remote, hybrid, or in-person—universally suits every discipline or project. Game development is inherently collaborative, requiring designers, programmers, artists, and producers to work together closely to create cohesive products. However, each work model presents its own set of challenges. While remote work provides flexibility and autonomy, it may also create communication barriers and reduce the synergy often found in face-to-face collaboration. On the other hand, in-person work fosters direct, real-time interaction but may be restrictive for teams that benefit from flexible schedules. By conducting interviews with industry professionals who have worked under different models, this I aim to highlight what worked, what didn't, and why, ultimately offering insights into which models best support the creative and technical demands of game development.

1.3 Definition

The main aim for writing this thesis is to contribute to understanding the different work models affect on specifically game development and which works best in a highly creative industry. By analyzing real-world experiences and gathering insights from industry professionals, the I aim to offer practical recommendations for game development teams and organizations to optimize their work models for better collaboration.

I will focus on investigating the following aspects of the topic:

- How the remote, hybrid, and on-site work models impact collaboration between different disciplines (e.g., designers, programmers, artists, producers) within a game development team.
- The challenges and advantages each work model presents for maintaining effective communication and coordination among team members.
- The influence of each work model on creativity, innovation, and problem-solving in game development projects.
- How each work model affects the productivity and overall success of game development projects in terms of meeting deadlines, achieving quality standards, and maintaining team morale.

I will be guided by the following questions:

How does remote work impact interdisciplinary collaboration between designers, artists, and

programmers in game development, and what are the key challenges and benefits specific to this dynamic and which work model works best?

1.4 Hypotheses

When I chose this topic originally I have already had some experience working in small groups on a game project and for me personally it was always a bit of a nuisance to work with people remotely or in a hybrid work model and I was an advocate for being together and have a free flow of communication between our team members. This lead me to believe that remote work doesn't work. This was a very initial and biased hypothesis and I only considered my opinion and experience. We need to realize that this was a whole year school project and as much as you want everyone to have the same dedication to the project as you would, it is still not a demanding environment compared to an actual workplace.

After a bit of research and more experience in the actual industry I can now see it in a different light. People are grateful to be able to work in the way they prefer to and not being pushed to do one over the other. Taking some of these initial research and experience my hypothesis is that a very trustful hybrid work model would work best for game projects and the game industry.

2 Knowledge Base

For this paper I used Google search engine and Google Scholar with the search words or combinations of them as follows: Collaboration tools, remote work, work models, personality affecting remote work, best work model for game development, mental health affecting creativity, crunch time games industry, burnout affecting collaboration, generational differences in preferences towards remote work, how micro management affects remote work, leaders responsibilities for remote workers, state of remote work, social isolation, loneliness affected by remote work.

2.1 What Impacts an Employee

A crucial determinant of whether a work model succeeds or fails is the extent to which individuals feel comfortable and productive within that model. Employee satisfaction often hinges on personal preferences, which can be shaped by factors such as personality, the work environment, and

the perceived benefits of either remote or on-site work. These preferences are not uniform, as individual differences, particularly in personality types, play a substantial role. For example, personality theory suggests that extroverts, who gain energy from social interactions, might struggle with the isolation of remote work environments, while introverts, who prefer solitude and fewer social interactions, could find remote work highly advantageous. As Karolina Wilczyński (2023) highlights, the defining trait of extroversion is the need for frequent social engagement, making traditional, in-person work environments more suitable for extroverted individuals. In contrast, introverts may flourish in remote settings that allow for fewer interruptions and more focused, independent work.

This correlation between personality type and work model preference has been explored extensively in organizational psychology. For instance, research by Sturdee et al. (2022) reveals that even within specific fields like software engineering, different personality profiles exist. Their study indicates that programmers tend to exhibit more introverted characteristics compared to roles within design or management, which often require greater collaboration and social interaction. This observation reinforces the idea that a "one-size-fits-all" approach to work models is impractical. In a multidisciplinary field like game development, where teams are composed of programmers, designers, writers, and artists, the diversity of roles naturally leads to varying work preferences. As a result, flexibility in work models—whether hybrid, fully remote, or on-site—becomes essential for optimizing team performance.

Beyond personality differences, the physical environment also significantly impacts an employee's ability to work effectively. Research consistently shows that a well-structured office environment can enhance productivity, creativity, and collaboration. Sarode and Shirsath's (2012) study highlights that employees spend a substantial amount of their time in office environments, which can affect their mood, focus, and overall output. This concept applies equally to remote work. The assumption that remote work is always more flexible and comfortable is only true when employees have a conducive home environment. If a remote worker lacks a dedicated workspace, has excessive noise distractions, or faces other challenges such as inadequate technology or internet connections, their productivity and satisfaction may decline sharply. Therefore, the quality of the remote workspace becomes a critical factor in determining the success of the remote work model.

Another critical factor in the success of remote work is self-reliance. As Torki (2021) explains, self-reliance involves a person's ability to make independent decisions, act upon them, and take full responsibility for the outcomes. This trait is especially important in remote work environments, where employees are often required to manage their tasks without the immediate oversight or assistance that comes naturally in a shared office space. Without self-reliance, an employee may struggle with time management, prioritization, and the ability to stay focused on tasks. Mouna Torki (2021) points out that in e-learning environments, students must develop self-regulation skills in the absence of face-to-face guidance, a process that is also relevant for remote workers. Self-reliant employees are generally more successful in remote work settings because they are better equipped to manage their own workloads, establish routines, and meet deadlines without the direct involvement of supervisors.

2.2 Collaboration Tools

2.2.1 Introduction to Tools and Trends

Collaboration tools have become indispensable in modern workplaces, especially as remote and hybrid work models have gained prominence. These tools are designed to facilitate communication, task management, and project tracking in environments where team members are not physically co-located. According to Statista (2023), the use of collaboration tools increased by nearly 25% between 2019 and 2021, with 4 out of 5 companies now relying on them. This growth reflects the shift in how organizations operate, with digital platforms replacing traditional office interactions.

The adoption of collaboration tools is particularly crucial in creative and technical fields, such as game development, where multidisciplinary teams (comprising designers, programmers, sound engineers, and artists) need to work in coordination. The ability to share files, communicate in real-time, and track project progress has become fundamental to the productivity and success of remote teams. These tools not only optimize day-to-day operations but also ensure that projects remain on schedule and that all team members are aligned, regardless of location. According to Vorecol Editorial Team (2024) the collaboration tools used by organizations reported a 20-25% increase in efficiency when implementing these systems.

2.2.2 Categories of Collaboration Tools

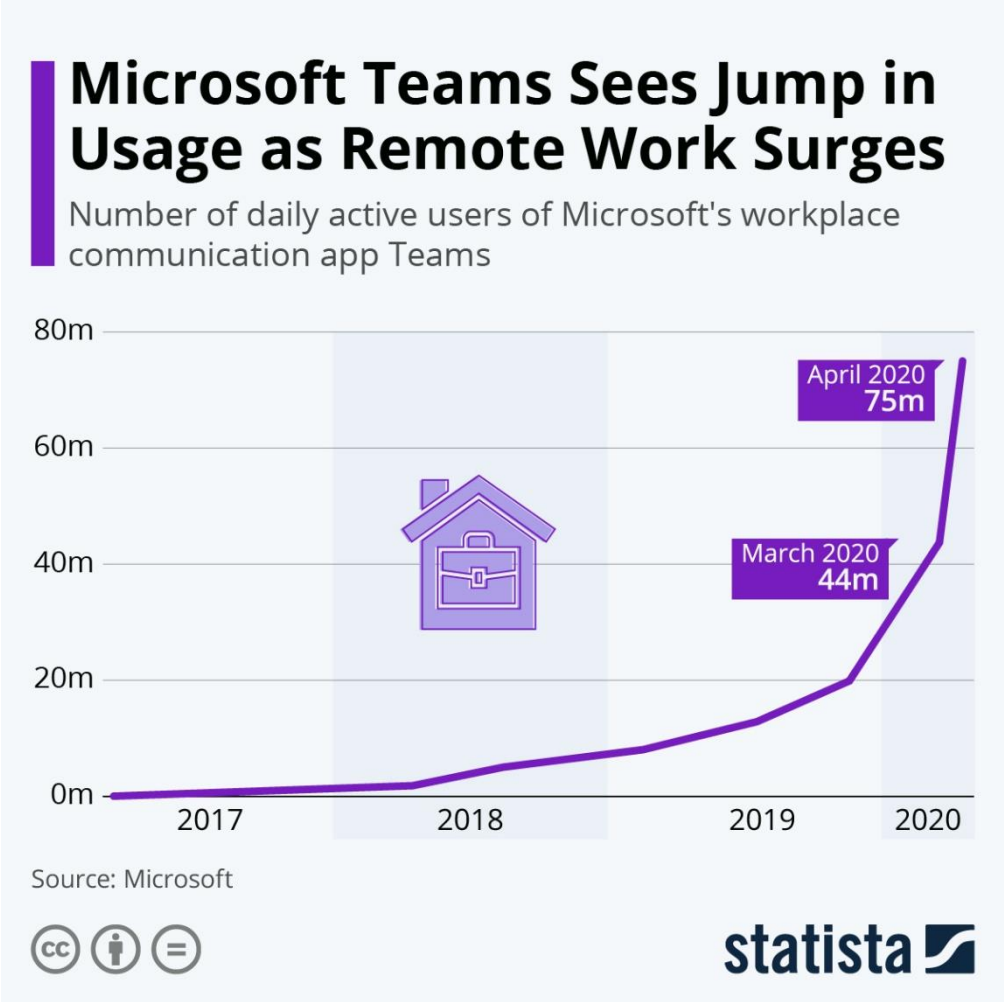
There are many different collaboration tools that can be useful in many different industries, however I will focus on ones that I think are mostly needed when developing a video game. These are real-time messaging, video conference, storage and file sharing, documentation and knowledge management and project management tools.

Real-Time Messaging Tools

Real-time messaging tools are essential for day-to-day communication, allowing teams to stay connected regardless of their physical location. Popular platforms include Slack, Microsoft Teams, and Trello, each offering features that facilitate quick communication, file sharing, and integration with other tools. These platforms enable both synchronous and asynchronous communication, a necessity in remote teams working across different time zones. Nimmo (2024) states that these real-time messaging tools allow employees to communicate instatnly regardless of location. It enhances swift decision-making with instant feedback which helps maintaining a momentum in remote work, unlike email which can often get delays. Slack, for instance, offers channel-based messaging, where conversations can be organized by project or topic, streamlining communication within game development teams. Microsoft Teams, on the other hand, integrates deeply with other Microsoft products, allowing for seamless document collaboration and video calls within the same platform. In game development, where rapid iteration and constant feedback are critical, these tools help ensure that developers, designers, and artists are always in sync.

Figure 1

Number of Daily Active Microsoft Teams Users



Note. Microsoft Teams Sees Jump in Usage as Remote Work Surges (Graph) By Felix Richter, 2024, Statista (https://www.statista.com/chart/21191/daily-active-users-of-microsoft-teams/) CC BY-ND

In Figure one we can see that there has been a massive groth in daily active users for Microsoft Teams which indicates the rapid groth of need for a tool like it.

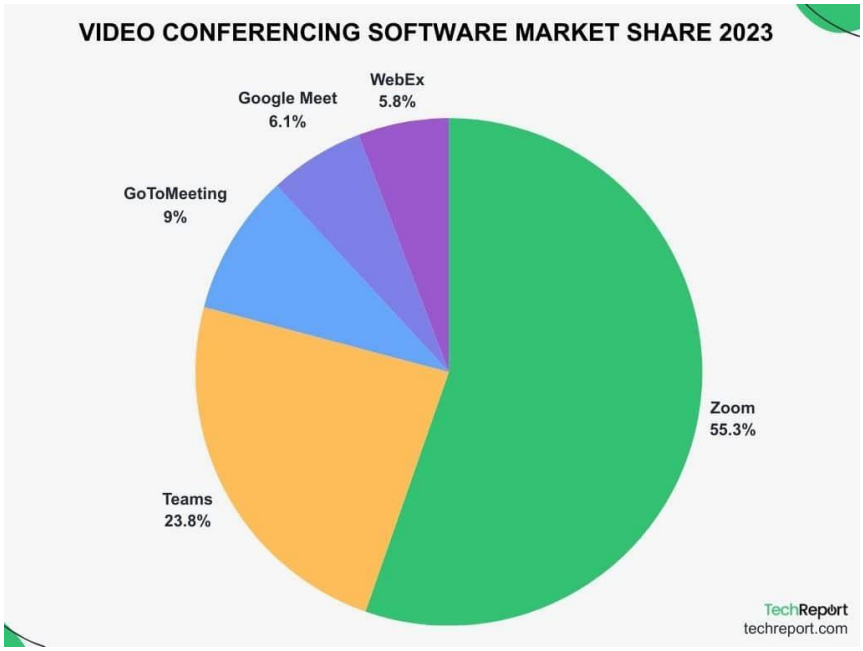
Video Conferencing Tools

Video conferencing tools such as Microsoft Teams, Zoom, and Jitsi have become indispensable for virtual meetings, brainstorming sessions, and collaborative decision-making. These tools support face-to-face communication, which is crucial for maintaining a personal connection in remote work environments. ”When you meet face-to-face, you can make a personal connection, pick up on verbal and non-verbal cues, and begin to build trust.” (Microsoft 365 Team, 2022). Video calls foster stronger relationships between team members and help mitigate the sense of isolation that

can occur in remote work. In game development, where visual and auditory elements are essential, video conferencing allows for real-time feedback on design elements, animations, or soundtracks, making the creative process more fluid and dynamic.

Figure 2

Video conferencing software market Share 2023



Note. *Video conferencing software market Share 2023* (Infographic) By Kate Sukhanova, 2024, Techreport (https://techreport.com/statistics/software-web/video-conferencing-market-statistics/) CC BY

As Figure 2 shows us Zoom have been outperforming all other video conference tools in 2023.

Storage and File Sharing Tools

Efficient storage and file-sharing solutions are critical for game development, where large files such as 3D models, textures, and code repositories need to be accessed by multiple team members. Google Drive, Dropbox, and Microsoft Teams are widely used platforms that allow for easy sharing and version control. These platforms ensure that all team members have access to the most recent versions of files, reducing the risk of outdated assets being used in the game's development. Moreover, tools like GitHub are essential for managing version control in coding projects, enabling developers to track changes, collaborate on code, and roll back errors if necessary. As Charlene Brown (2024) points out, "By eliminating time and location constraints, file sharing enables teams to achieve exceptional synergy and productivity.".

Documentation and Knowledge Management Tools

Documentation is vital in game development, as it ensures that ideas, workflows, and project updates are clearly communicated and accessible to all team members (Chavez Alvarez, S. 2024). In complex game projects, having well-documented processes for design, programming, and art assets is crucial for maintaining consistency and reducing errors. Tools like Confluence, Microsoft Teams, and GitHub serve as centralized hubs for documenting key information, such as game mechanics, design choices, and coding standards. Additionally, these platforms allow for collaborative editing ensuring that all changes to documentation are properly recorded and traceable. For example, GitHub is often used to document code updates and workflows, while Confluence can serve as a repository for design documents, meeting notes, and task assignments.

Project Management Tools

Project management tools like Trello, Jira, and Asana are essential for organizing tasks, timelines, and resources in game development, particularly in remote or hybrid work models. These platforms break down complex projects into manageable tasks, allowing teams to track progress, assign responsibilities, and meet deadlines. Trello offers a visual, card-based system for task management, while Jira is favored for its detailed tracking of bugs and features, making it ideal for software development. Project management tools are highly important in helping to increase productivity because it ensures a structure and a means of organization for managing projects states VirtualSpace (2023).

Integration Across Tools

It's also important to note that many of these tools integrate with one another, enhancing their overall effectiveness. For instance, Slack can be integrated with Trello for project management, while GitHub can be connected to Microsoft Teams for real-time notifications of code changes. These integrations reduce the need to switch between platforms, thereby increasing efficiency and helping teams stay focused on their core tasks.

2.3 Mental Health and Well-being

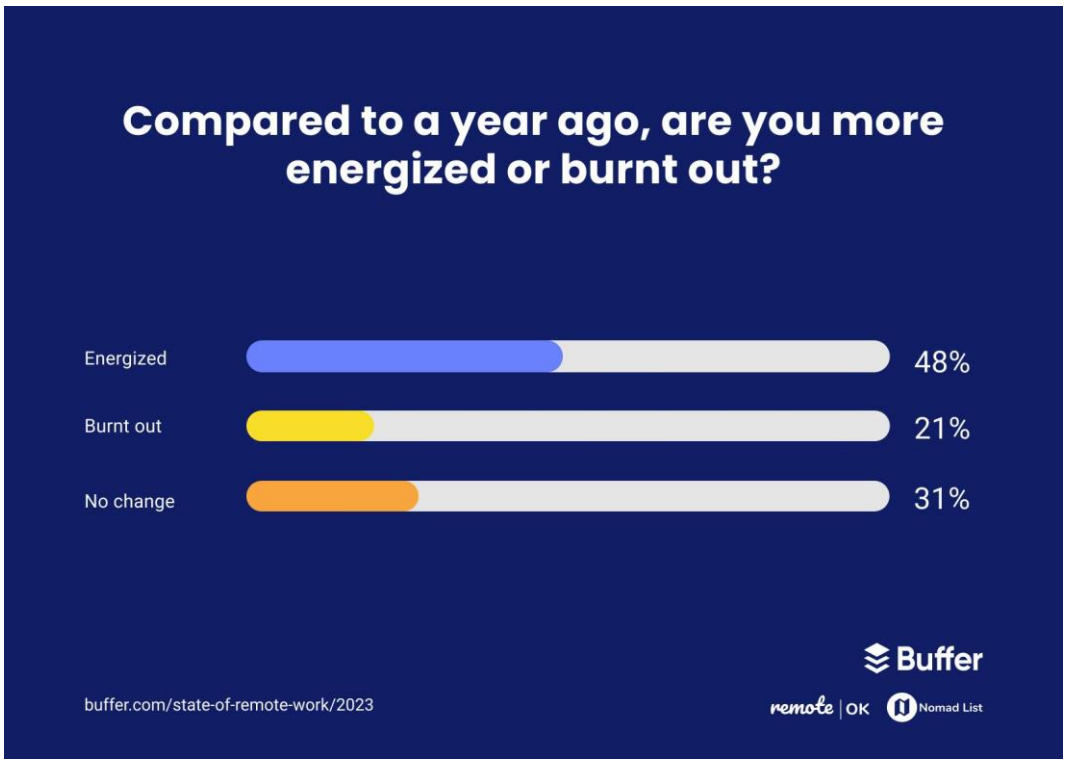
Remote work has changed the way creative industries function, offering flexibility that many people appreciate. But along with these benefits come some serious challenges, especially when it comes to mental health. In fields like game development, where teamwork, creativity, and deadlines are essential, the impact of remote work on well-being is significant. While working from home can reduce the stress of commuting and give more control over one's schedule, it also blurs the line between work and personal life. This lack of clear boundaries can lead to mental fatigue, increasing feelings of stress, isolation, and even burnout. In remote work, it's harder to disconnect from work, and that constant connection can take a toll on mental health. Since creativity and productivity are closely tied to a person's well-being, it's crucial to understand how the shift to remote work is affecting the mental health of professionals in creative fields, where the pressures are already high. As Henriksen et al. (2020) points out, creativity and wellbeing is affected a lot by distractions, stress and distress.

Burnout

Burnout can seriously affect how teams collaborate, especially in remote game development. As Cross and Carboni (2021) emphasizes, there are wide ranging consequences to burnout. When people are overworked or mentally drained, their ability to communicate and contribute effectively drops. They might be slower to respond, make decisions, or provide creative input, all of which are crucial in a team-based environment. In remote work, these problems can be harder to spot since there's no physical presence to gauge how someone is doing. This can lead to miscommunication, delays, or even lower-quality work, as burnt-out team members struggle to keep up.

Figure 3

How burnt out people felt in 2023 compared to a year ago working remotely



Note. *Burnout* [Chart] By Buffer, 2023, Buffer (https://buffer.com/state-of-remote-work/2023). CC BY

In Figure 3 it is clearly visible that 1 in 5 remote workers are feeling more burnt out than a year ago.

In game development, burnout can slow down the entire project. The intense "crunch time" (Niemelä, 2021) culture that already exists in the industry only gets worse in remote settings, where people feel the pressure to work longer hours without clear boundaries. If mental health isn't addressed, it can throw off team dynamics, affect productivity, and ultimately delay the project. Keeping an eye on burnout and promoting a healthy work-life balance is essential to making sure collaboration stays smooth and the project stays on track.

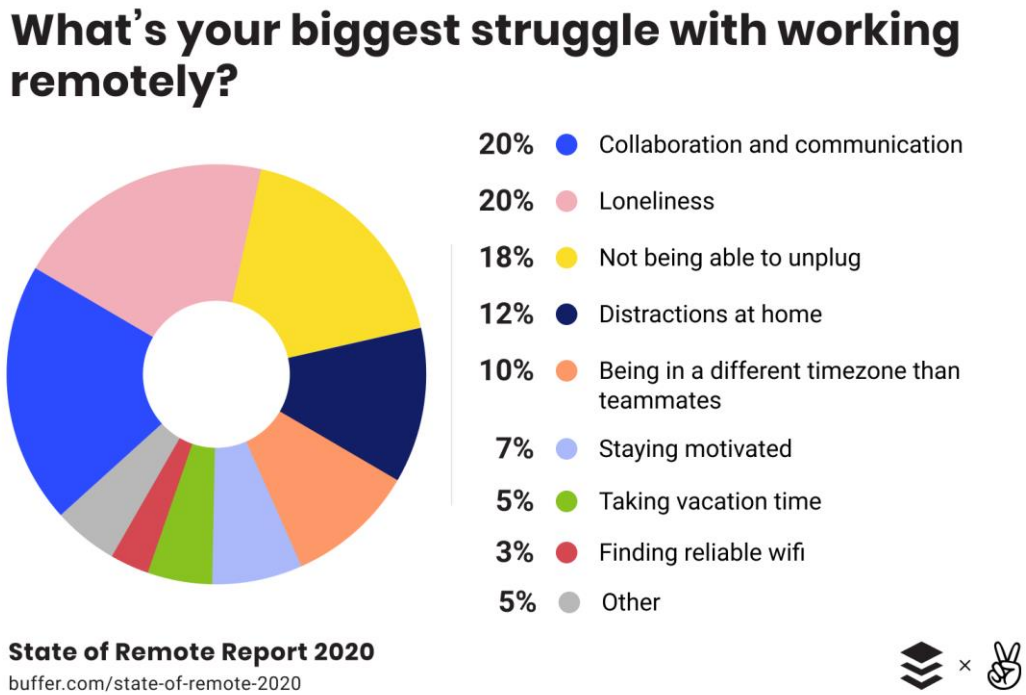
Isolation and Reduced Social Interaction

Remote work can lead to feelings of isolation which can easily lead to loneliness (Montañez, 2024). Especially in creative industries like game development, where collaboration and team dynamics are crucial. Without the regular in-person interactions that happen in an office, remote workers may miss out on casual conversations and spontaneous brainstorming sessions that can spark creativity. Over time, the lack of social connection can contribute to loneliness, which negatively impacts mental well-being and productivity. For team members who thrive on group interaction or bouncing ideas off one another, this isolation can make it harder to stay motivated and engaged with the project.

Loneliness and isolation can have profound effects on mental and emotional well-being. As Novotney (2019) points out, prolonged isolation often leads to feelings of disconnection, which can contribute to anxiety, depression, a reduced sense of purpose and poor sleep quality. Social interactions, even casual ones, play a crucial role in maintaining mental health by providing emotional support, a sense of belonging, and opportunities for cognitive stimulation. When people lack these regular connections, they may experience heightened stress and find it harder to stay motivated or engaged in their daily tasks. Over time, isolation can erode self-esteem, making it more difficult to cope with challenges or seek help when needed.

Figure 4

Biggest strugle of people working remotely



Note. Chart6 [Chart] By Buffer & AngelList 2020, Buffer (https://buffer.com/state-of-remote-work/2020) CC BY 2.0

As seen in Figure 4 Loneliness is one of the biggest reasons why people are struggling working remotely.

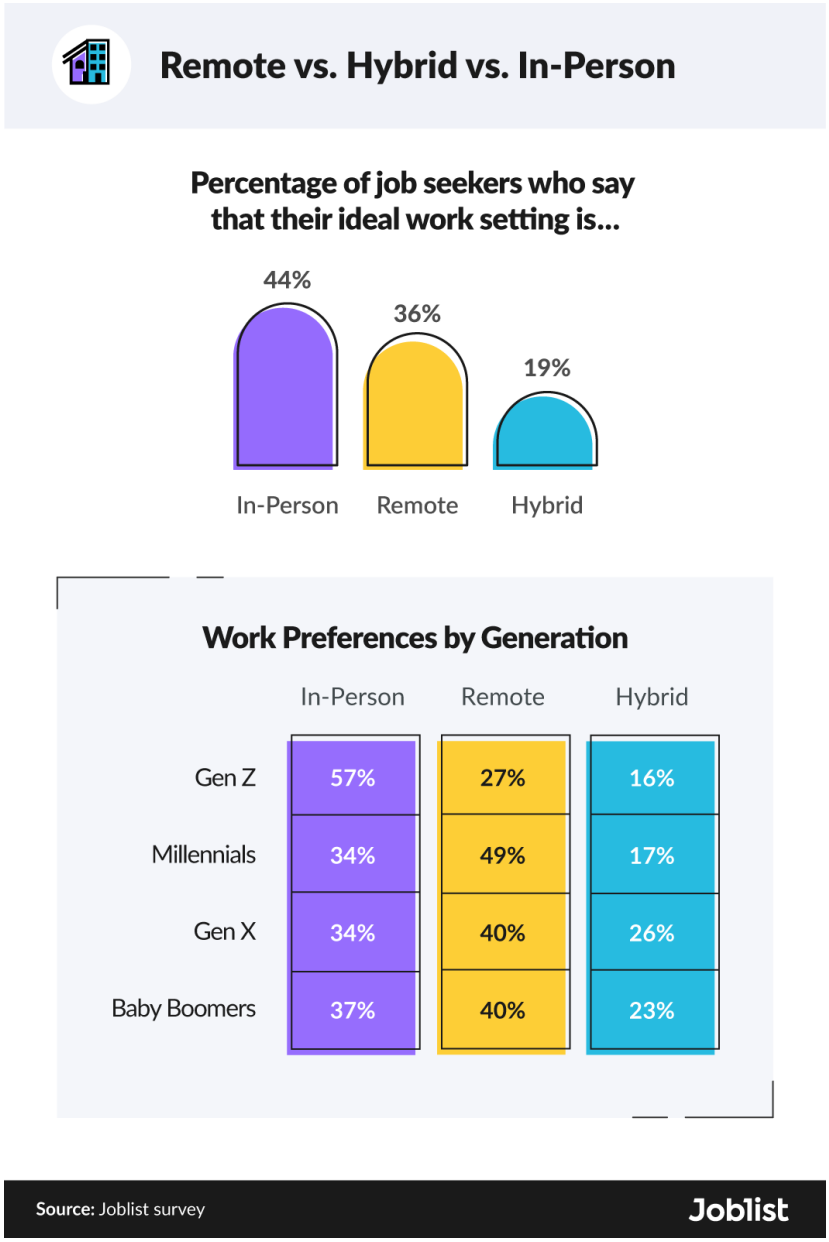
2.4 Generational Differences

There is a notable generational divide in attitudes toward remote work, particularly between Millennials and Generation Z. As ACCLiiVE (2024) highlights, millennials, now in their 30s and 40s, often prioritize work-life balance and flexibility, leading to a stronger preference for remote work. Many in this age group are juggling family responsibilities and value the ability to manage their time and environment, making fully remote work arrangements highly appealing. In contrast, Generation Z, who are just starting their careers, tend to prefer in-person collaboration and the social dynamics of a traditional office setting. They often seek opportunities for learning through direct

interaction with colleagues and mentors, which may explain their greater interest in hybrid or fully in-office models.

Figure 5

Remote vs. Hybrid vs. In-Person



Note. *Image7* [Graph] By Joblist 2023, Joblist (https://www.joblist.com/jobs-reports/2023-trends-united-states-job-market-report) CC BY

In Figure 5 we can clearly see that Gen Z prefers and seeks In-Person jobs while other generations, Especially Millennials want fully remote or hybrid.

Despite these differences, both generations recognize that remote work policies are increasingly important in the modern job market states ACCLiiVE (2024). Flexibility in work arrangements can be a key factor in attracting and retaining top talent. Many candidates, regardless of age, now consider the availability of remote work when deciding on job offers. For employers, offering a mix of remote, in-office, and hybrid work options may provide the best solution to accommodate the diverse preferences of a multi-generational workforce. Balancing these different needs can help ensure that organizations remain competitive in attracting a wide range of talent while fostering productivity and job satisfaction.

2.5 Leadership and Management in Remote and Hybrid Teams

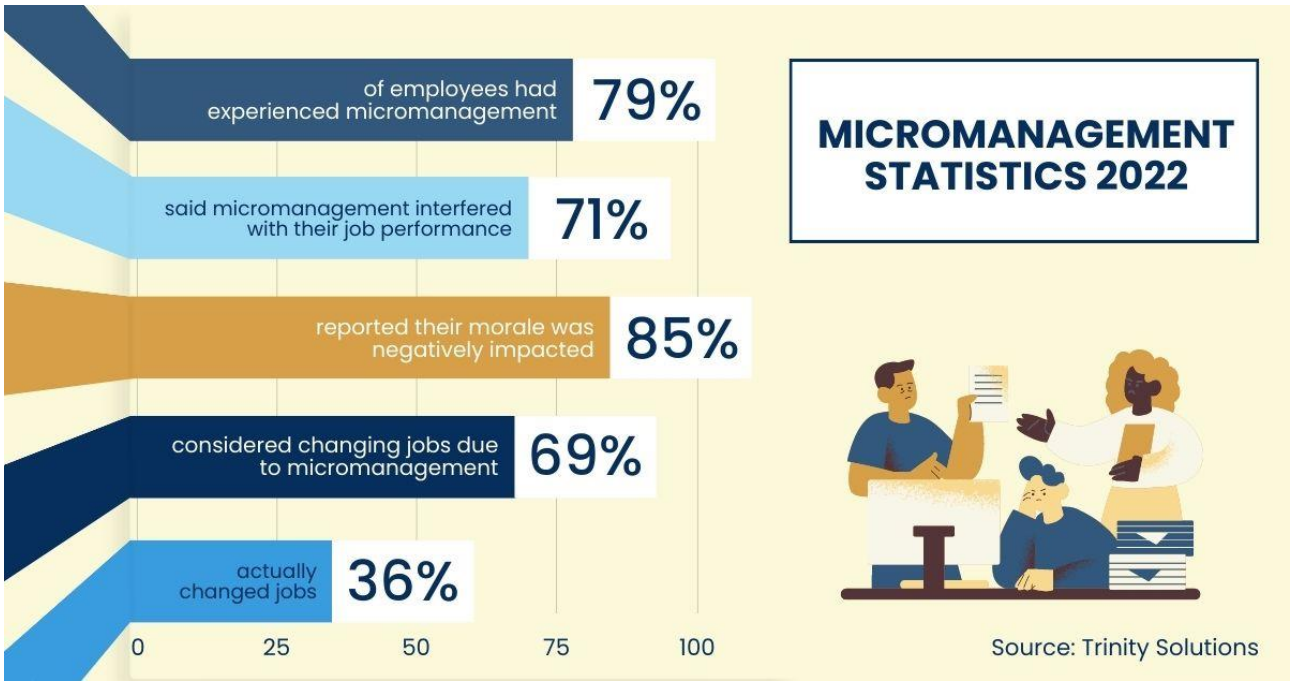
Leading and managing remote or hybrid teams presents unique challenges compared to traditional on-site teams. One of the most significant hurdles is maintaining effective communication. As a study done by Buffer (2020) shows, 1 out of 5 remote worker thinks communication and collaboration is their biggest difficulty. In a distributed work environment, the absence of face-to-face interactions can create barriers to clear and efficient communication points out ActivTrak (2023). Leaders must adopt communication strategies that ensure transparency and regularity, such as holding frequent check-ins, utilizing collaboration tools, and setting clear expectations. They also need to foster open channels of communication where team members feel comfortable voicing concerns, providing updates, or seeking guidance. This not only helps maintain productivity but also builds trust across the team.

Another critical factor in managing remote teams is ensuring that team members stay engaged and motivated despite the physical distance. Leaders must be proactive in recognizing individual contributions and ensuring that team members feel valued and included, regardless of their location. Creating opportunities for virtual team bonding, setting aside time for informal conversations, and encouraging a culture of recognition can help maintain morale and prevent feelings of isolation. Psico-smart Editorial Team (2024) also emphasizes, that regular feedback and clear goal-setting are crucial in keeping remote employees aligned with the team's overall objectives.

The shift to remote or hybrid work models also necessitates a change in leadership styles. Traditional, hands-on, or micromanagement approaches are often less effective when team members are dispersed. As Darren Menabney (2020) stresses, that micromanagement is a garanteed way to hinder creativity and innovation and to completely destroy morale. Leaders need to adopt a more results-oriented management style, focusing on outcomes rather than processes. This involves trusting employees to manage their own schedules, giving them the autonomy to complete tasks in their own way, and providing the resources they need to succeed. At the same time, leaders must be vigilant in identifying signs of burnout or disengagement, which can be harder to detect in a remote setting.

Figure 6

The Negative Effects of Micromanagement



Note. The Negative Effects of Micromanagement [Image] By Joblu 2023, Joblu (https://joblu.io/resources/how-to-deal-with-micromanagement/) CC BY

As seen in Figure 6, 85% of employees who experienced micromanagement have also reported their morale impacted negatively.

2.6 Source Material Analysis

The sources used in this thesis come from a variety of reliable academic, industry, and practical platforms, ensuring a comprehensive and well-rounded examination of the impact of remote and hybrid work models on collaboration in game development. The majority of the materials were selected based on their relevance to the game development industry, focusing on remote work, team collaboration, mental health, and leadership—key areas central to the research question.

Relevance of Sources

The relevance of the sources is high, given that they directly address the core themes of this research. Many of the studies and reports focus on the effects of work models (remote, hybrid, on-site) in creative and technical industries, including game development. For instance, sources from platforms like Statista and industry reports provide up-to-date data on the increasing use of collaboration tools and the shifting preferences of workers in different work models. These are particularly relevant, as they reflect the changes brought about by the COVID-19 pandemic, a critical period for remote work evolution.

Furthermore, a significant number of the sources explore interdisciplinary collaboration, a key aspect in game development teams that consist of designers, programmers, artists, and project managers. Studies from peer-reviewed journals offer deeper insights into how various disciplines interact under different work models, making them integral to understanding the nuanced collaboration dynamics within game development.

Reliability of Sources

The majority of the sources come from a reliable platform such as Google Scholar which ensure the validity of the research findings presented. These sources undergo rigorous review processes, providing a solid foundation for understanding the effects of remote work on productivity, creativity, and communication within teams.

Additionally, industry reports from recognized organizations such as Statista, Gartner, and Joblist provide quantitative data on current work trends, particularly in technology-driven fields. While

these reports offer practical insights, they are cross-checked with academic studies to mitigate any potential bias that could arise from industry narratives.

In terms of practical application, corporate reports from companies like Microsoft and Slack offer valuable insights into the tools that are shaping remote and hybrid work. However, to maintain objectivity, these findings are supplemented by independent academic research to ensure that the conclusions drawn in this thesis are well-supported by diverse and credible sources.

2.7 Base Concept Realizations

After completing my theory base for this thesis, I have made a lot of realizations. As mentioned the game industry is similar to the tech industry because they both create an app or something similar, and it also can be very much compared to the artistic industries. While both has research done on their work environments, specifically on the game industry and game development it is quite bleak. This can be for multiple reasons, but it is quite a new field and its popularity has sky-rocketed even more recently.

Based on these we can clearly see that there are benefits for both on-site and remote work, which leaves me to believe that a combination of the two, hybrid would work best based on my findings. However if the answer would be this easy then most companies would have resided to this option and yet we see them pushing for on-site.

With my research I will aim to uncover whether people working in the game industry prefer to work online, on-site or hybrid and why.

3 Research Implementation

The methodological approach for this thesis was selected to provide a comprehensive understanding of how different work models, remote, hybrid, and on-site, affect interdisciplinary collaboration within game development teams. Given the nuanced nature of collaboration in such a creative and technical field, it was essential to choose a research method that could capture both the quantitative trends and the qualitative experiences of professionals in the industry.

After careful consideration of the research objectives, a closed-ended survey with Likert scale (Bhandari, P. & Nikolopoulou, K., 2020) questions was chosen as the primary method. This approach allows for the collection of quantifiable data on the preferences and perceptions of individuals across various disciplines, such as programming, design, and art. The survey format also enables a broader reach, allowing input from a larger, more diverse sample size within the game development industry. This was particularly important for gathering insights into the different ways remote and hybrid work models impact productivity, creativity, communication, and mental health across disciplines.

The Likert scale questions provide a structured way to assess attitudes and behaviours, allowing for easy comparison of responses (Bhandari, P. & Nikolopoulou, K., 2020). This method was selected because it provides clear, comparable data points that can reveal trends in how game development professionals experience different work models. Additionally, this structured approach simplifies data analysis, which is critical for drawing conclusions about general perceptions and attitudes within the industry.

To complement this, open-ended questions were included at the end of the survey to capture more detailed personal insights and experiences mentions Fio Dossetto (2024). These qualitative responses allow for the exploration of nuances that may not be fully captured in the Likert scale questions. This mixed approach ensures that both quantitative and qualitative data are considered, allowing for a more complete and well-rounded analysis of how work models influence collaboration in game development.

3.1 Research Methods

The research methods chosen for this study are designed to gather both quantitative and qualitative (The Fullstory Team, 2024) data on how different work models, remote, hybrid, and on-site, affect collaboration, productivity, and mental health within game development teams. A survey-based approach was selected as the primary research method, using Likert scale questions alongside open-ended questions to capture a wide range of responses from professionals working in various disciplines within the game industry, such as programming, design, and art.

Survey Design

The survey was divided into three main sections: general demographic information, Likert scale questions, and open-ended questions. This structure ensured that the responses could be easily segmented based on relevant factors such as job role, personality type (extroverted or introverted), and work model preference, providing a rich dataset for analysis. Is the collaboration good, does this affect their choice of work model. How does it affect their productivity, mental health and well-being. The survey questions can be seen in Appendix 1.

3.2 Ethics of the Research

This research was conducted with careful consideration of ethical principles to ensure the integrity of the study and the well-being of its participants. The following measures were implemented to uphold ethical standards based on the WHOs standards (WHO, 2011):

1. **Informed Consent**
   Participants were informed about the purpose of the research, how their responses would be used, and their rights as contributors. Participation in the survey was entirely voluntary, with respondents given the option to withdraw at any point. By ensuring transparency, the study respected participants' autonomy and informed decision-making.

2. **Confidentiality**
   All responses were collected anonymously, and no personally identifiable information was gathered. The data was stored securely and used solely for the purposes of this thesis. This ensured that participants' privacy was fully protected, reducing any potential risk of harm or misuse of information.

3. **Non-Coercion**
   The recruitment process emphasized voluntary participation, with no pressure or incentives provided that might influence respondents' decisions. This approach ensured that contributions were genuine and unbiased.

4. **Data Integrity and Honest Reporting**

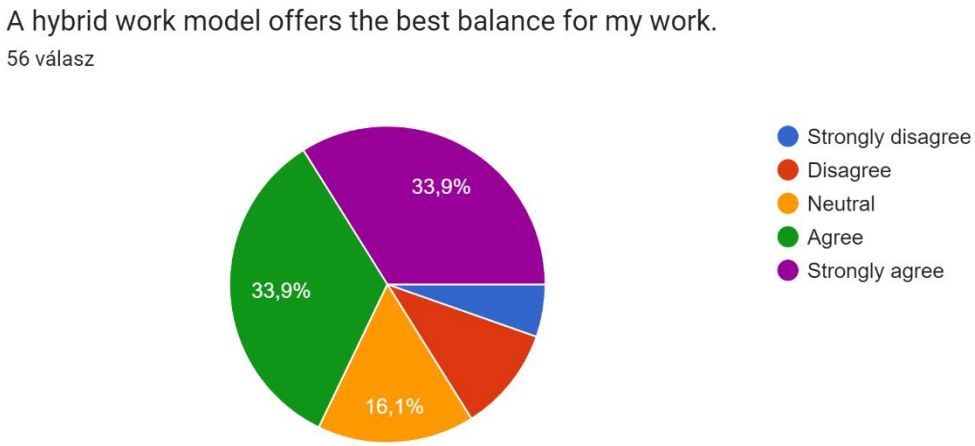
   The data was analysed and reported accurately, without any manipulation or omission of findings to fit preconceived expectations. Ethical considerations also extended to acknowledging the study's limitations, ensuring that the conclusions drawn were fair and supported by the data.

4 Results

When analyzing my research it was very clear immediately that the most preferred work model will be hybrid. This firstly can be seen from the second question I asked. Only 16% of respondents disagree with the statement of "A hybrid work model offers the best balance for my work." , and a whopping 68% either strongly agrees or agrees with it as can be seen in Figure 7.

Figure 7

A Hybrid Work Model Offers the Best Balance For My Work

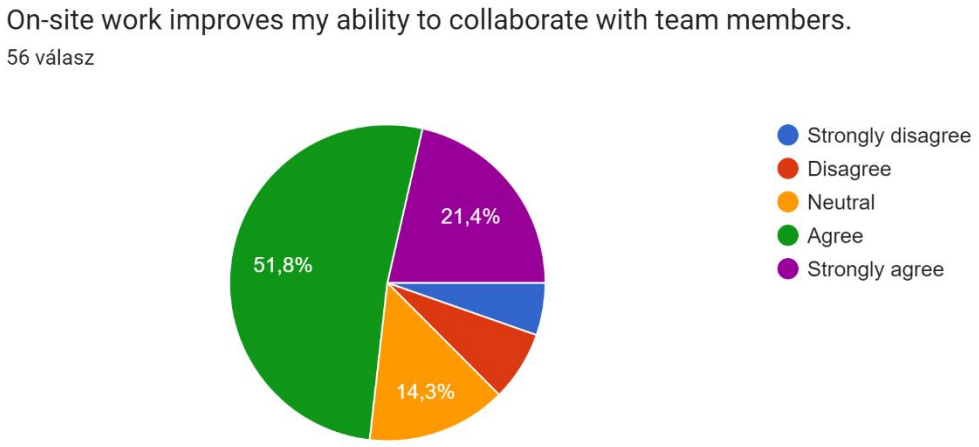


The open ended questions are also overwhelmingly positive in regards of hybrid work as it allows workers to deal way better with "bad days". According to some respondants, some days people wake up on the wrong side of the bed and would much rather not interact with people if possible. Even though these happen people still yearn for personal connections and conversations. Hybrid work, especially if a person can adjust those days themselves, compliments all of these needs.

Collaboration is also improved when on-site according to my research with a staggering 73% of people agreeing with the statement ” On-site work improves my ability to collaborate with team members.” as seen in Figure 8.

Figure 8

On-site Work Improves My Ability to Collaborate With Team Members



One of the most interesting finding from my research I found was the very last question, ” What makes you go to the office when it is not required of you to do so?”. I wanted to explore the different resons why people would go to the office when they did not have to. I expected answers like being more productive, or social interaction and these were mentioned a lot, but one thing was mentioned in nearly every answer in one way or form: benefits. This could be either ”lunch benefits”, ”massages by company”, ”after work events, like BBQ”, ”cake days” and more. This is a crucial finding as it could be important for companies to see what are the reasons to workers to go on-site on their own.

4.1 Abstraction of Results

One of the interesting parts of my research was that a staggering 82% of people agreed that video conferencing tools and messaging tools are effective for maintaining communication within the team, however 84% had only 8 or less personal conversations per week when working online as seen in Figure 9 and 10. This means that while these tools are effective, people tend to not use them for having personal conversations. This could mean that they are dedicated to work when

working remotely, but also mean that it is ineffective at satisfying the needs of people to socialize, because most respondents have answered personal conversations being their reason to go to the office in the first place. As one participant mentioned, “Socializing with coworkers, meeting new people, staying up-to-date with office happenings.”.

Figure 9

Video conferencing and messaging tools (e.g., Zoom, Slack) are effective for maintaining communication within the team.

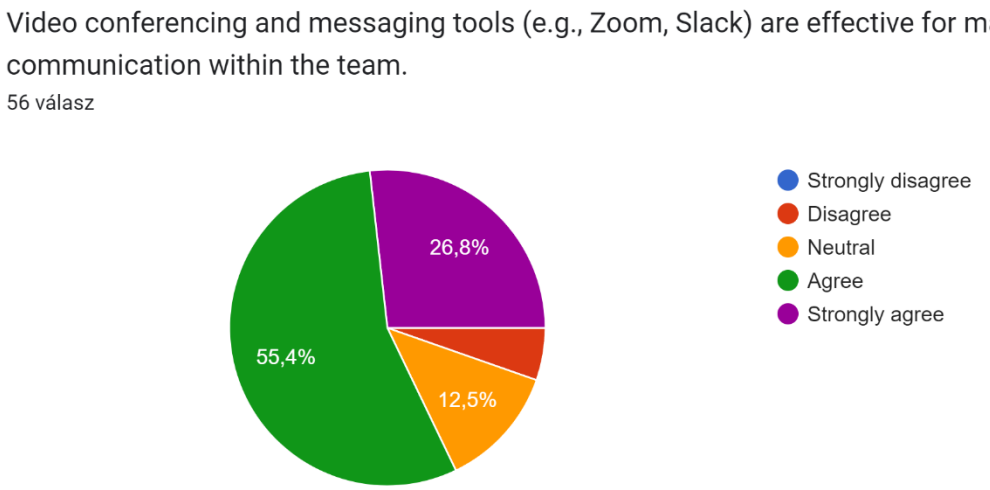
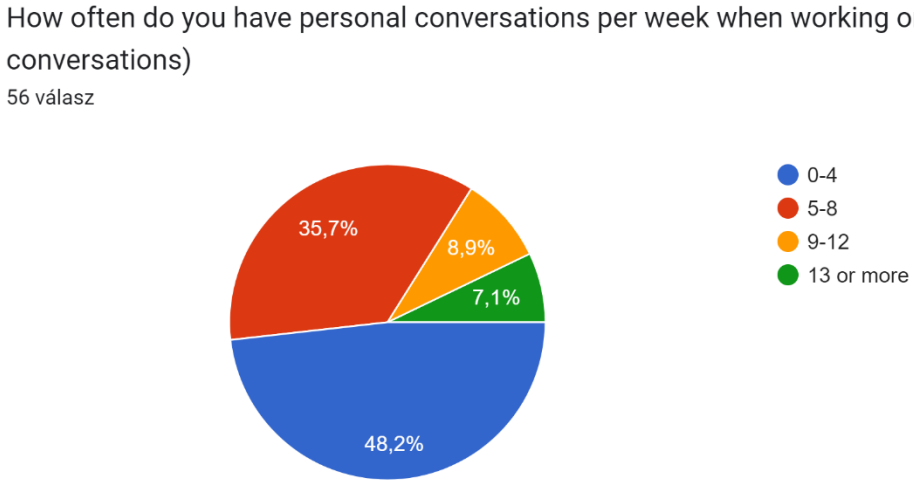


Figure 10

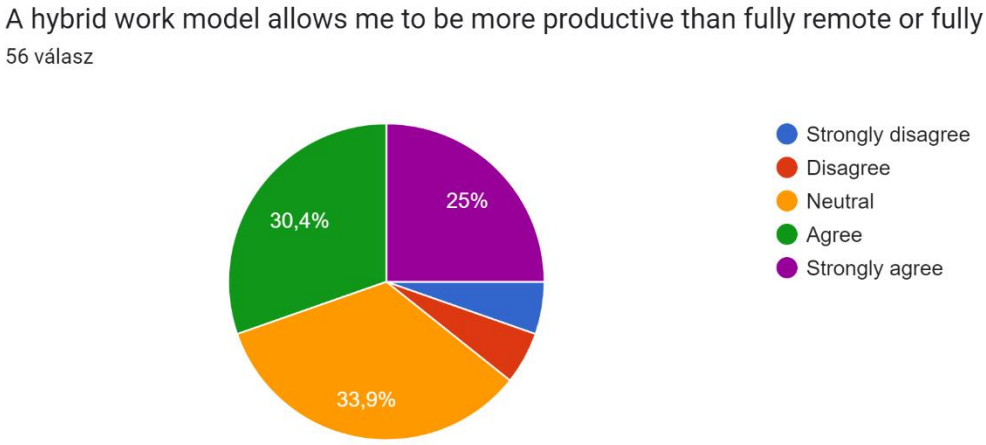
How often do you have personal conversations per week when working online. (not work related conversations)



When it comes to productivity people barely disagreed with the statement ” A hybrid work model allows me to be more productive than fully remote or fully on-site work.”. Only 10.8% disagreed or strongly disagreed, which is another strong indicator that people in the game industry prefer hybrid as seen in Figure 11.

Figure 11

A hybrid work model allows me to be more productive than fully remote or fully on-site work.



And the distractions from a home office was way less negatively impactful for respondents work performance than distractions from the office envronment. Only 12.5% of people disagreed with distrtactions from their office environment have negatively impacted their work performance, on the other hand nearly 60% disagreed with distrtactions from their home environment have negatively impacted their work performance, as seen in Figure 12 and 13.

Figure 12

Distractions in my onsite/office environment negatively impact my work performance.

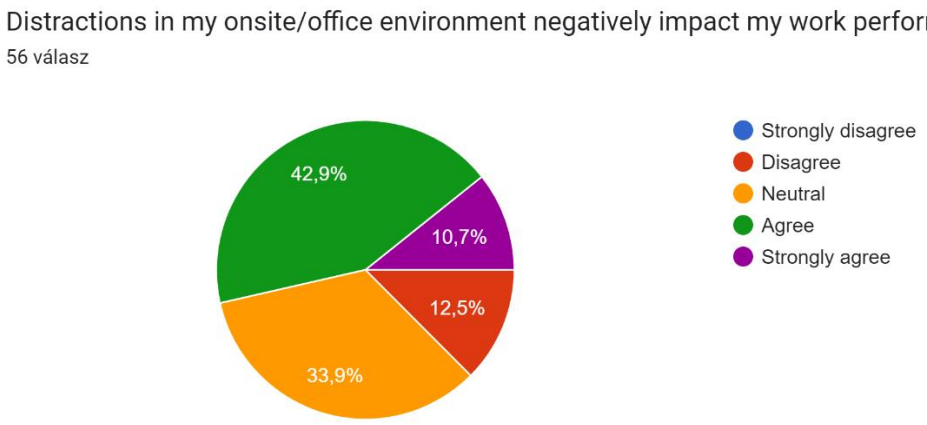
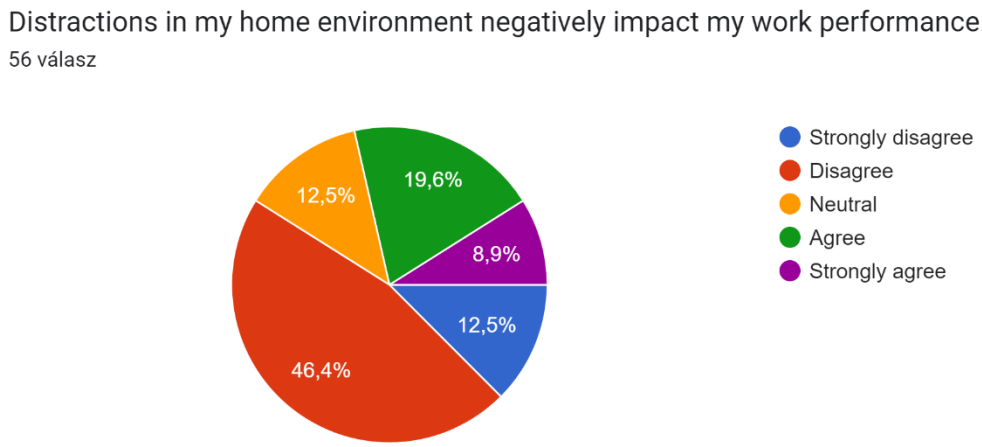


Figure 13

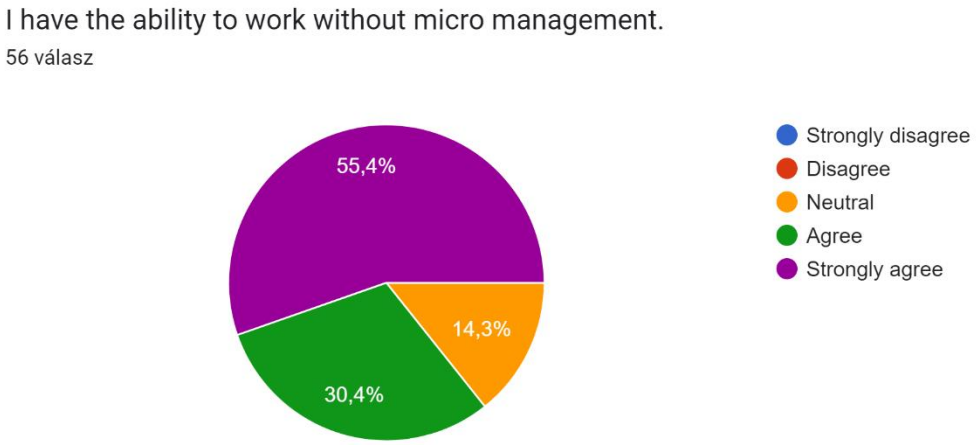
Distractions in my home environment negatively impact my work performance.



Most importantly no one disagreed with the statement "I have the ability to work without micro management." As seen in Figure 14. This means that the participants are confident in their skills and believe that they can be trusted by their peers, leaders and managers to do what they are required to. This can also be hugely influencing the preference to work in a hybrid work model, because they think they can be trusted whether they are working from home or from the office.

Figure 14

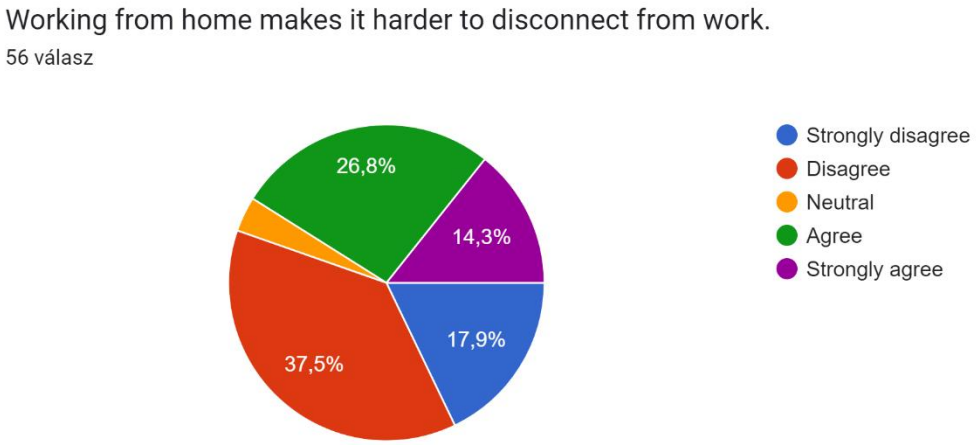
I have the ability to work without micro management.



Coming to mental health and well-being there has been an interesting split between people agreeing and disagreeing on whether working from home makes it harder to disconnect from work. 41% agreed and 55% disagreed with the statement as seen in Figure 15. This seems to be an interesting topic as it is not at all one sided.

Figure 15

Working from home makes it harder to disconnect from work.

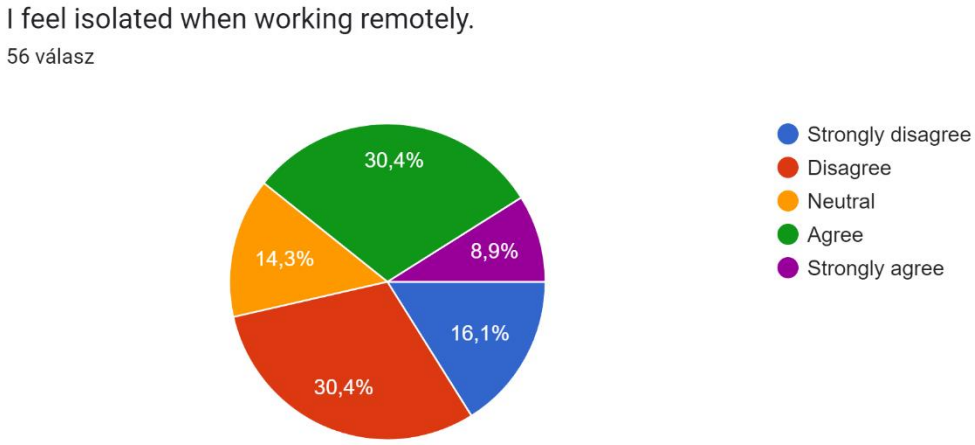


Another split between answers came for the statement, ” I feel isolated when working remotely.”. 47% agree, but 39% disagrees (Figure 16). This can be corrolated to maybe personality type, as

more extroverted people prefer to have as many social interactions as possible and introverts don't neccesarily mind having little as long as they are meaningful, but it could also mean that the people feeling isolated don't recieve enough support during remote work or as one participant mentiones, "not being included in every important conversations within the office".

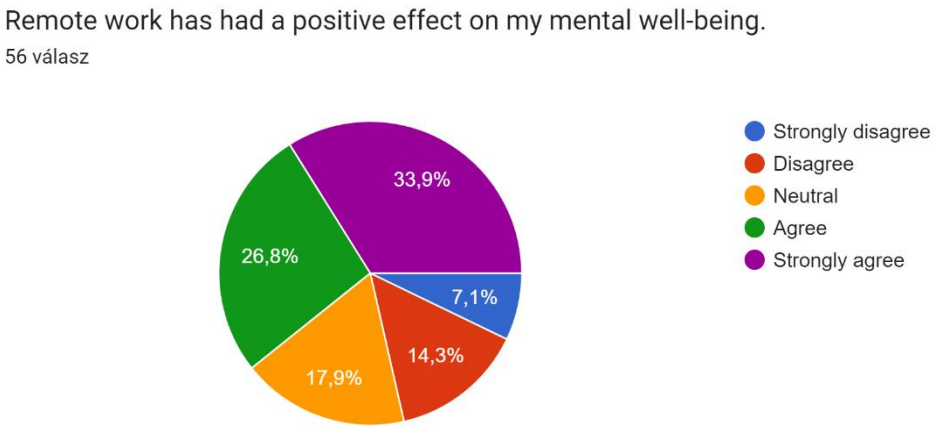
Figure 16

I feel isolated when working remotely.



Even though there seems to be a split between opinions when it comes to feelings of isolation and feeling disconnected from work after working remotely, most respondents still agree that remote work had a positive effect on their mental well-being as seen in Figure 17.

Figure 17



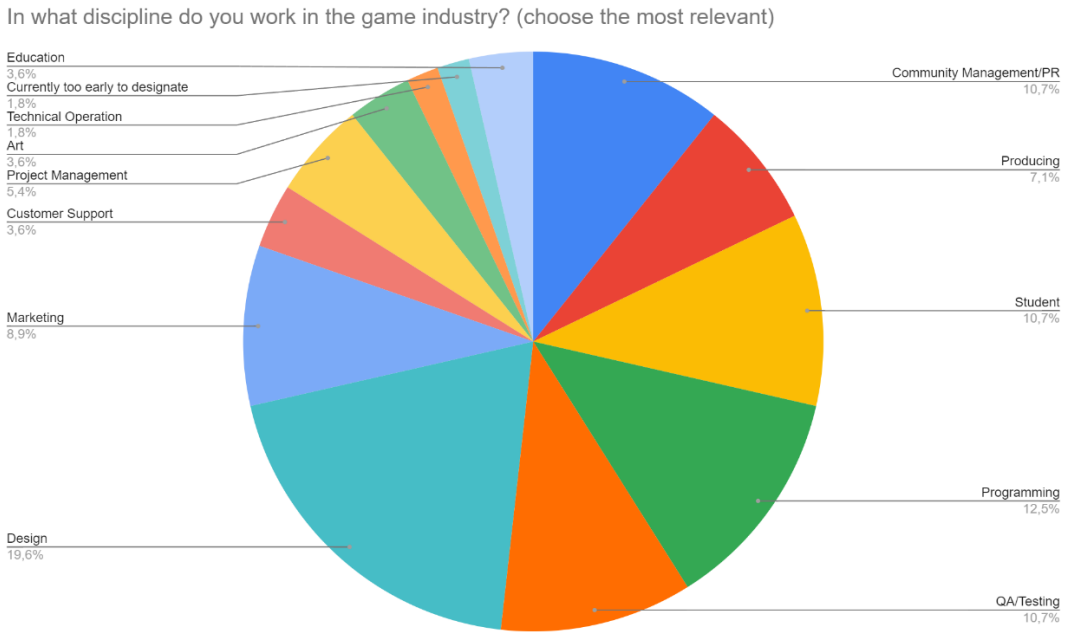
4.2 Collected Data

The collected data was cleaned so that when people choosing their discipline, who filled the other segment could be grouped together. For example one participant answered other, with Customer Support as an answer and another only answered Support. These were merged together for the sake of clean data.

The survey that I prepared was sent out to multiple platforms such as industry professional networks and companies. This resulted in a total of 56 answers all together. As seen in Figure 18, a huge number of different disciplines have been considered and have participated in the survey. This makes the answers diverse which is great for the purpose of this research.

Figure 18

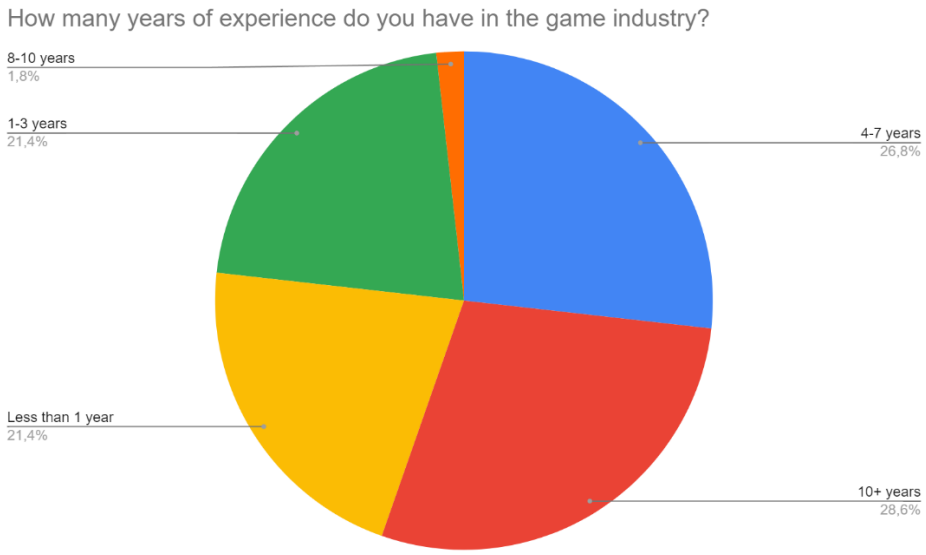
Different Disciplines the Respondents Work In



The other thing that is very important to mention is that I also gathered people with different work experience. Around 60% of respondents are already established members of the game industry as they have over 4 years of experience and around 21% of participants have just started their endeavors in the industry as they have less than a year of experience as seen in Figure 19.

Figure 19

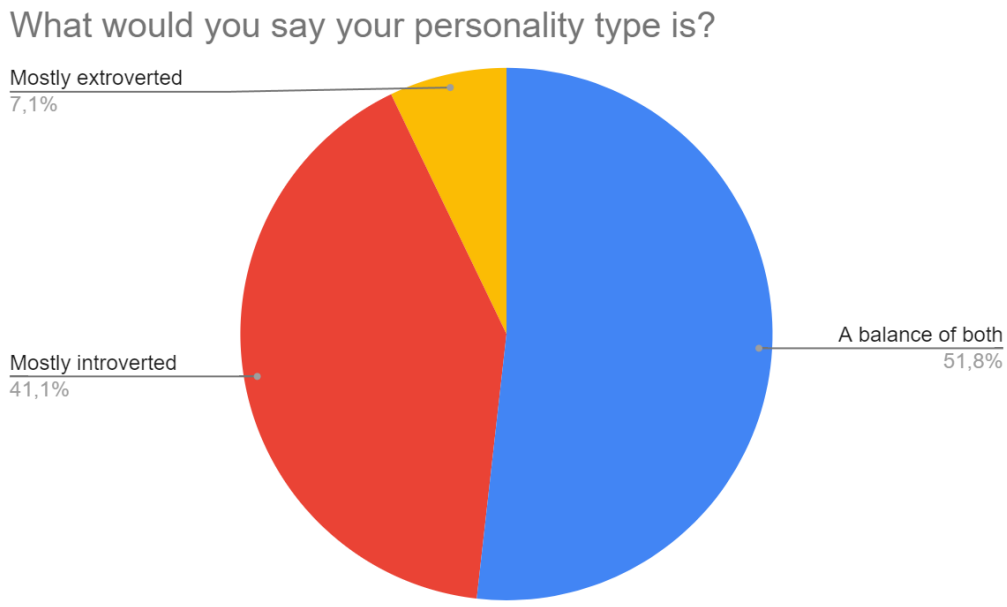
Years of Experience in Game Industry Participants Have



Personality also greatly impacts the work model someone prefers. As seen in Figure 20 a bit over 50% of people are Ambiverts (a balance of both extrovert and introvert), but 41% of people identify as introverts. Only 7% of people think of themselves as extroverts.

Figure 20

Personality Type of Respondents



4.3 Data Analysis

The Likert scale data I used statistical analysis, meaning I calculated responses, while for the open-ended responses I read all of them and drawn conclusions from them by the recurring themes.

4.4 Suitability, Reliability, and Validity of the Data

The ethics of this data was based on the JAMK guidelines (Jamk University of Applied Sciences, 2024) . As much as this data is nice to start with, a sample size of 56 can not be a representative of the entire game industry. It could be helpful for further analysis, but it surely needs a bigger sample size to ensure reliable quantitative results.

Reliability was maintained through the standardized structure of the survey, ensuring consistency in how questions were presented and answered. The use of Likert scales provided uniform measurements, allowing for comparable responses across participants. Although the sample size of 56 participants is a limitation, the consistent design makes the results reproducible under similar conditions.

The survey was designed to accurately measure its intended focus, with questions based on existing literature and tailored to the context of game development. Quantitative data from Likert scales was complemented by qualitative insights from open-ended responses, enhancing validity. While self-reported data introduces some bias, the alignment of findings with existing research supports the accuracy of the results.

5 Discussion

The findings of this research highlight the complexities of work model preferences and their impacts on interdisciplinary collaboration in the game development industry. The results provide significant insights into the advantages and challenges posed by remote, hybrid, and on-site work arrangements, as well as the unique needs of professionals from various disciplines.

5.1 Argumentation

The strong preference for hybrid work among respondents (68% agreeing it offers the best balance) aligns with the core advantages of this model: flexibility and the opportunity for in-person collaboration. The data reflects a clear trend that hybrid work satisfies professionals' need for autonomy while maintaining the interpersonal connections vital for effective collaboration. For example, while remote work was seen as beneficial for focused, independent tasks, 73% of respondents agreed that on-site work improves collaboration, underscoring the importance of direct, real-time communication in creative processes.

A notable split was observed regarding feelings of isolation when working remotely, with 47% agreeing and 39% disagreeing. This divide highlights individual differences, such as personality traits, with introverts likely feeling less affected by isolation compared to extroverts. Additionally, some respondents pointed to inadequate support or exclusion from key conversations as contributing to feelings of disconnection. This finding emphasizes the need for better strategies to integrate remote workers into team dynamics, ensuring inclusivity and effective communication regardless of location.

5.2 Incidental or Unexpected Findings

One of the most unexpected findings was the emphasis on on-site benefits as a motivator for voluntary office attendance. Respondents frequently cited perks such as free meals, massages, or social events as key reasons for choosing to work on-site, even when not required. This suggests that beyond productivity or collaboration, fostering a positive and rewarding office culture could encourage on-site participation and enhance overall team morale. This could be further investigated, as it appears to be a consistent theme in motivating office attendance. Understanding its impact could provide valuable insights into whether such perks should be more widely utilized or incentivized.

Another surprising result was the strong consensus (82%) on the effectiveness of digital communication tools (e.g., Zoom, Slack) for maintaining team communication. However, 84% of respondents reported having fewer than eight personal, non-work conversations weekly when working remotely. This indicates that while digital tools are functional for professional interactions, they fail

to replicate the social aspects of office environments, which are essential for team cohesion and employee satisfaction.

5.3 Reliability

The research successfully captured diverse perspectives from professionals in various disciplines within the game industry. However, the sample size (56 participants) limits the generalizability of the findings. A larger sample would provide more robust data and reduce potential bias from individual experiences. Furthermore, the self-reported nature of the data introduces subjective elements, particularly regarding mental health and personal productivity, which may not be wholly reflective of objective realities.

5.4 Ethical Implications

The findings underscore the importance of balancing flexibility with inclusivity in workplace policies. Organizations must recognize the diverse needs of their workforce, particularly in terms of mental health, to ensure equitable support for both remote and on-site workers. Moreover, addressing the challenges of isolation and burnout in remote settings is crucial for fostering sustainable and healthy work environments. This research also highlights the ethical responsibility of companies to provide meaningful incentives and a sense of community for their teams, regardless of their chosen work model.

6 Conclusion

This study set out to examine how different work models—remote, hybrid, and on-site—impact interdisciplinary collaboration, productivity, and mental health in game development. Through analysing survey results and incorporating relevant literature, the findings have shed light on the nuances of these work models and their effects on professionals across various disciplines.

The preference for hybrid work emerged as a central theme, with the majority of respondents indicating that it provides the best balance between flexibility and collaboration. This aligns with the hybrid model's ability to combine the strengths of remote work, such as focused productivity and autonomy, with the benefits of in-person communication and resource accessibility. However, the

research also uncovered challenges, such as feelings of isolation in remote setups and coordination issues in hybrid models, emphasizing the importance of tailored approaches to team management.

Key insights were drawn regarding the tools and strategies necessary for effective collaboration. While digital tools like Slack and Zoom were seen as highly effective for communication, they often fail to replicate the social and creative dynamics of in-person interactions. Furthermore, the findings highlighted the significant role of organizational culture and leadership in ensuring that team members feel connected and supported, regardless of their work environment.

While this research offers valuable perspectives, limitations such as the sample size and reliance on self-reported data should be acknowledged. Future studies could expand the scope to include a larger and more diverse group of participants or explore longitudinal effects of work model changes in the game industry. Investigating how specific disciplines within game development adapt to these work models could also provide deeper insights.

In conclusion, the transition to flexible work models represents a transformative shift in how collaboration and productivity are managed in the game industry. By understanding the diverse needs and challenges faced by professionals, organizations can create inclusive, efficient, and sustainable work environments that foster both individual satisfaction and team success.

Based on all these findings and research these are my recommendations for companies if they want to have people who enjoy their work and environment and have better mental health and well-being:

1. Don’t force employees to come to the office, rather try and make them go by giving benefits for people who decide to go
2. A hybrid work model where employees can choose whether they prefer to go to the office or stay and work from home on a daily basis
3. Organize team events where people feel welcome to join
4. Have your communication structure set up in a way that it doesn’t matter where are people joining from

References

ACCLiiVE. (2023, April 15). *49% Millennials prefer remote work in comparison to only 27% Gen Zers*. LinkedIn.

AktivTrak. (2023, October 03). *8 Challenges of Managing Remote Employees & How to Solve Them*. AktivTrak. https://www.activtrak.com/blog/challenges-of-managing-remote-employees/

Bhandari, P. & Nikolopoulou, K., (2020, July 3). *What Is a Likert Scale? | Guide & Examples*. Scribbr. https://www.scribbr.com/methodology/likert-scale/

Buffer. (2023). *Burnout*. Buffer. https://buffer.com/state-of-remote-work/2023

Buffer. (2020). *Biggest struggle with working remotely*. Buffer. https://buffer.com/state-of-remote-work/2020

Charlene, B. (2024, March 28). *Why File Sharing is Essential for Modern Business Collaboration*. CompanionLink. https://www.companionlink.com/blog/2024/03/why-file-sharing-is-essential-for-modern-business-collaboration/

Chavez Alvarez, S. (2024, July 12) *Understanding Essential Documents in Project Management for a Gaming Project*. Medium. https://medium.com/@projectmanagementandleadership/understanding-essential-documents-in-project-management-for-a-gaming-project-bda9b9aac993#:~:text=In%20the%20gaming%20industry%2C%20these,in%20a%20successful%20game%20launch.

Cross, R. & Carboni, I. (2021) *When collaboration fails and how to fix it*. https://privacymattersdev.github.io/articles/210106-Governance-Article.pdf

Dossetto, F., (2024, July 9). *Open-ended questions vs. close-ended questions: examples and how to survey users*. Hotjar. https://www.hotjar.com/blog/open-ended-questions/

Goh, E., Al-Tabbaa, O & Khan, Z. (2023). *Unravelling the complexity of the Video Game Industry: An integrative framework and future research directions*. https://doi.org/10.1016/j.teler.2023.100100

Henriksen, D., Richardson, C. & Shack, K. (2020) *Mindfulness and creativity: Implications for thinking and learning.* https://kyleshack.com/wp-content/uploads/2020/08/mindfulness-and-creativity-implications-for-thinking-and-learning-henriksen-richardson-and-shack.pdf

Jamk University of Applied Sciences, (2024). Ethical Principles. JAMK. https://www.jamk.fi/en/for-students/degree-student/regulations-and-principles

Menabney, D., (2020, October 21). *How Micromanagement Kills Any Remote Team And What To Do About It*. Forbes. https://www.forbes.com/sites/darrenmenabney/2020/10/21/how-micromanagement-kills-any-remote-team-and-what-to-do-about-it/

Montañez, R. (2024, March 22) *Fighting Loneliness on Remote Teams*. Harward Business Review. https://hbr.org/2024/03/fighting-loneliness-on-remote-teams

Nimmo, W. (2024, September 7). *Real-Time Messaging for Remote Work and Collaboration: A Game-Changer in the Modern Workplace.* LinkedIn. https://www.linkedin.com/pulse/real-time-messaging-remote-work-collaboration-modern-workplace-nimmo-9xuyc/

Niemelä, J. (2021) *A Systematic Mapping Study of Crunch Time in Video Game Development.* https://oulurepo.oulu.fi/bitstream/handle/10024/18501/nbnfioulu-202106178507.pdf?sequence=1&isAllowed=y

Novotney, A. (2019, May) *The risks of social isolation*. American Psychologycal Assosiation. https://www.apa.org/monitor/2019/05/ce-corner-isolation

Psico-smart Editorial Team. (2024, August 28). *What are the key challenges of conducting performance evaluations for remote employees and how can they be overcome?.* Vorecol. https://psico-smart.com/en/blogs/blog-what-are-the-key-challenges-of-conducting-performance-evaluations-for-remote-employees-and-how-can-they-be-overcome-14315

Richter, F., (2020). *Microsoft Teams Sees Jump in Usage as Remote Work Surges*. Statista. https://www.statista.com/chart/21191/daily-active-users-of-microsoft-teams/

Rogers, S. (2014). *Level up!: The guide to great video game design*. Wiley.

Sarode, A. P., & Shirsath, M., (2012). *The Factors Affecting Employee Work Environment & It's Relation with Employee Productivity* https://www.ijsr.net/archive/v3i11/T0NUMTQxMTY5.pdf

Statista. (2023, July 7). *Usage of digital workplace technologies among workers worldwide in 2019 and 2021, by category*. Statista. https://www.statista.com/statistics/1260623/collaboration-tools-usage-among-workers-category/

Sturdee, M., Ivory, M., Ellis, D., Stacey, P., & Ralph, P., (2022). *Personality Traits in Game Development* https://dl.acm.org/doi/pdf/10.1145/3530019.3530042

Sukhanova, K., (2024). *Video conferencing software market Share 2023*. Techreport. https://techreport.com/statistics/software-web/video-conferencing-market-statistics/

The Fullstory Team, (2024, October 4). *Qualitative vs. quantitative data in research: what's the difference?.* Fullstory. https://www.fullstory.com/blog/qualitative-vs-quantitative-data/

The Microsoft 365 Team. (2022, August 29) *Why Video Conferencing is Essential for Your Business: 10 Key Benefits.* Microsoft. https://www.microsoft.com/en-us/microsoft-365/business-insights-ideas/resources/10-reasons-to-use-video-conferencing

Torki, M., (2021). *Exploring the Relationship between E-Learning Difficulties and Learners' Self-Reliance during the Coronavirus Pandemic* http://dspace.univ-tebessa.dz:8080/jspui/bitstream/123456789/11308/1/Mouna%20TORKI%20Dissertation-converti-converted%20%281%29.pdf

VirtualSpace. (2023, June 23). *6 Reasons Why Project Management Tools Are Important for Your Business*. LinkedIn. https://www.linkedin.com/pulse/6-reasons-why-project-management-tools-important/

Vorecol Editorial Team. (2024, August 28). *Evaluating the Efficiency of Collaboration Tools for Remote Teams*. Vorecol. https://vorecol.com/blogs/blog-evaluating-the-efficiency-of-collaboration-tools-for-remote-teams-165505#:~:text=In%20the%20era%20of%20remote,increase%20their%20productivity%20by%2025%25

WHO. (2011). *Standards and operational guidance for ethics review of health-related research with human participants*. https://www.who.int/publications/i/item/9789241502948

Wilczyński, K. (2023). *The relationship between remote work and job satisfaction : the mediating roles of perceived productivity, engagement, and personality type*. University of Malta https://www.um.edu.mt/library/oar/bitstream/123456789/122237/1/2418EMAEMA592205079649_1.PDF

Zimmermann, T., Nagappan, N., & Murphy-Hill, E. (2014). (rep.). *Cowboys, Ankle Sprains, and Keepers of Quality: How Is Video Game Development Different from Software Development?* https://thomas-zimmermann.com/publications/files/murphyhill-icse-2014.pdf

Appendix 1

Questionnaire Questions

Section 1: General Information

Age:

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

Gender:

- Male
- Female
- Non-binary
- Prefer not to say

Discipline (choose the most relevant):

- Programming
- Design
- Art
- Marketing
- Project Management
- QA/Testing
- Producing

- Community Management/PR
- Student
- Other (please specify): _____

Work Model:

- Fully remote
- Hybrid (some days remote, some days on-site)
- Fully on-site

Personality Type:

- Mostly extroverted
- Mostly introverted
- A balance of both

Years of Experience in the Game Industry:

- Less than 1 year
- 1-3 years
- 4-7 years
- 8-10 years
- 10+ years

Section 2: Likart Scale

Work Model Preferences:

1. I prefer working fully remotely over working on-site.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

2. A hybrid work model offers the best balance for my work.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

3. I find it easier to focus on tasks when working remotely.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

4. On-site work improves my ability to collaborate with team members.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

Collaboration and Communication:

5. Remote work has improved my ability to collaborate with colleagues across disciplines.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

6. How often do you have personal conversations per week when working online.

0 - 4 | 5 – 8 | 9 – 12 | 13 or more

7. My current skillset for collaboration tools.

Beginner | Advanced | Competent | Proficient | Expert

8. Video conferencing and messaging tools (e.g., Zoom, Slack) are effective for maintaining communication within the team.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

9. Face-to-face collaboration is crucial for creativity in game development.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

10. Remote work makes it more difficult to build trust with my colleagues.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

11. I feel as emotionally invested in face to face meetings as I feel when having online meetings.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

Productivity and Work Environment:

12. Remote work increases my overall productivity.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

13. A hybrid work model allows me to be more productive than fully remote or fully on-site work.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

14. Distractions in my home environment negatively impact my work performance.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

15. Distractions in my onsite/office environment negatively impact my work performance.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

16. I am able to maintain a better work-life balance when working remotely.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

17. I have the ability to work without micro management.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

Mental Health and Well-being:

18. Remote work has had a positive effect on my mental well-being.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

19. Working from home makes it harder to disconnect from work.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

20. I feel isolated when working remotely.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

Leadership and Team Dynamics:

21. My manager and leader effectively communicates expectations and goals in a remote work setting.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

22. I feel connected to my team even when working remotely.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

23. Regular remote meetings with leadership are necessary to maintain team cohesion in remote work.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

24. Remote work has made it more challenging to feel part of the team's culture.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

Section 3: Open-Ended Questions

1. What do you think is the biggest advantage and disadvantage of working remotely in game development?
2. Have you faced any challenges with collaborating across disciplines while working remotely? If yes, please describe.

3. How has remote or hybrid work affected your mental health and well-being? Please provide specific examples if possible.
4. Is there anything you believe game development companies should change or improve regarding remote or hybrid work models?

5. What makes you go to the office when it is not required of you to do so.