

Received : Dec 12, 2023 Accepted : Dec 20, 2023 Published : Mar 28, 2024 Conference on Management, Business, Innovation, Education and Social Science https://journal.uib.ac.id/index.php/combines

Literature Review on Cinematic Technique in Video Game Storytelling

Tony Wibowo¹, Deli², Bayu Syahputra³

Tony.wibowo@uib.ac.id

^{1,2,3}Faculty of Computer Science, Universitas Internasional Batam, Batam, Indonesia

Abstract

Cinema and filmmaking have evolved over the years into a means of creatively telling a story. The combination of camera angle, movement, framing, and composition is used to convey narrative in so many variations. However, cinematic techniques have been used extensively in media other than film, and one of those media that has adopted the cinematic approach to conveying narrative, feeling, and story is video games. As video games have evolved in their narrative complexity and graphical realism, cinematic techniques have become increasingly common in video game storytelling. Narratologists argue that video games often mimic the look and experience of films by adopting similar cinematic techniques or introducing cut scenes, which are small digital films. This article aims to categorize and compare video game storytelling and its use of cinematic techniques across genres, generations, and platforms by examining relevant articles and recent updates from the video game industry. The use of cinematic storytelling in video games could respond to the evolving film industry to create a more immersive and interactive form of storytelling. Video game storytelling can also benefit from adopting cinematic techniques to increase player engagement and emotional connection with the game's narrative and immersion to world-building and mythos presented in the video games.

Keywords:

Cinematics; Video Game; Storytelling

Introduction

One of the developments in the film industry in Indonesia has experienced quite significant changes, namely the emergence of various kinds of works that can be enjoyed and accepted by the public. Film itself is considered capable of being an effective communication medium in conveying messages and information to the audience and is able to connect all viewers directly or indirectly (Kubrak, 2020). Film can be seen based on the story themes that emerge, such as discussing social realities which indirectly connect the audience with shared meanings and perceptions (Hong, 2021). A film's ability to become a good work cannot be separated from

artistic photography techniques which include camera angles, moving images, image composition, and lighting arrangements, which are several supporting techniques in creating good cinematography in conveying messages, as well as being equipped with scenarios and artistic arrangements. which synergize with each other in creating a message delivery to the audience (Liu, 2023).

The film industry in Indonesia developed gradually starting on December 5 1900 with an interval of 5 years with the concept of showing live pictures at Schwarz's house, so that the term The Rojal Bioscope emerged, with this the emergence of buildings for film art performances. In 1951-1955, the continuous development of cinema buildings throughout Indonesia reached its peak, namely the establishment of an organization of All Indonesian Cinema Entrepreneurs (GAPEBI) which evolved into the All Indonesian Cinema Association (GABSI) (Budiartawan et al., 2022).

Developments in the film or cinematography industry itself are not only taking place. The usage of technology in cinematography has undergone significant advancements over the years, revolutionizing the filmmaking process and enhancing the visual storytelling experience. Technology combines the art of film with learning media based on e-learning and mobile learning, which of course uses technological devices to present information and communication (Kumar & Jothi, 2021). With changes like this, it is demanded that the use of cinematography not only be included in visual presentation but also extend to cinematography packaged in the use of technology, one of which is games.

In this study, we will explore the idea of combining storytelling using cinematics technique that are constructed withing the potential of interactivity and immersivitiy of video games. Due to lack of previous study are being done regarding this area of research, especially in Indonesia, we are interested in analyzing storytelling more deeply in its application to video games in such a way as to give rise to perceptions and insights into cinematic storytelling and of course This can determine the user's interest in each video game with different genres.

Literature Review

In the development of film, the film itself also has a concept with documentary film art which participates in completing one of its developments. Documentary films themselves are considered to have an important position in conveying a story more realistically, namely in accordance with events and reality based on facts and data. Documentary films began to be freely shown in Indonesia after the reform era(Hanan, 2021). In 2002, documentary film works began to appear, which were packaged both professionally and amateurly. just one subject but has grown into a big medium. In every documentary film, it is not far from the use of storytelling in presenting and explaining every detail of the story, message and information that will be conveyed to the audience (Hasan, 2020). Storytelling is considered a form of communication that is effective in conveying it to the mass media, so that a message and story can is well received by the general public, storytelling is equipped with a form of visual communication, namely on the cinematography side it is designed in such a way that it uses shooting techniques so that the audience is able to interpret the message transmission well (Mokhtar & Othman, 2022).

Video games are one of the game media that is of interest to many people from all walks of life, both small children and even adults. The scope of games themselves is one of the entertainment media. Video Games using electronic devices and they involve one, two or even

more players in making decisions, namely controlling the storyline in a game to achieve the goals determined in the game (Barnabé, 2019). The development of video games itself in the era of the rise of technology and the application of digital to aspects of people's lives, does not rule out the possibility that the video game industry has increased rapidly since 2009 and reached its peak in 2015. The development of the video game industry itself has given rise to many variations in the types of games in video games. Video games that circulate among the community or their users and the development of video games themselves is not only created in offline media, but variations of online games are also emerging (Mo et al., 2018; Oliver et al., 2016). With adequate internet access to enter the digital world, it is not difficult for users to get a variety of existing game types such as League of Legends, Minecraft, Ragnarok, Resident Evil and games like Point Blank which are of course much in demand by users. The development of existing video games also has various genres, namely action, Massively Multiplayer Online Role Playing Games (MMORPG) and Massively Multiplayer Online First Person Shooter (MMOFPS) (Chen et al., 2020; H. Wang et al., 2021).

In the design and development stage of the concept of a video game, it is considered important, one of which is getting to know the user more closely, which means that the target user in the game is who and is appropriate so that the video game created can be played. Thus, studying users and researching games that have been circulating before is considered very necessary because it is one of the processes of the perception analysis approach (Bradford, 2020; Kudláč, 2019; Sugiyo & Purwastuti, 2017). Storytelling is basically a procedure for combining images with a soundtrack which includes images, music and video. Storytelling includes seven elements that are considered efficient in delivery, namely point of view, dramatic question, emotional content, the gift of your voice, soundtrack, economy and pacing. The use of storytelling in the implementation of interactive multimedia such as websites, films and even games makes it a special concern for its users. Through the application of storytelling with a combination of textural, visual, auditory and other interactive features in video games, it creates a new experience and challenge for users when playing. In implementing storytelling, there are several stages that must be considered, namely determining the theme of the story, writing the story text, designing the storyboard, writing the script, choosing the appearance of the image, inserting the soundtrack and finally, there is support for special effects and transitions (Bozdog & Galloway, 2020; Kudláč, 2019; Tarnowetzki, 2015).

Cinematics cutscenes in video games are pre-rendered or scripted sequences that use a combination of animation, visual effects, and audio to tell a specific part of the game's narrative. These sequences often serve to advance the plot, provide character development, or showcase important events (Fox, 2016; Tianean et al., 2020). Cutscenes often serve as transitions between different gameplay segments. They help maintain a smooth flow between interactive gameplay and narrative moments, preventing abrupt shifts that might break immersion (Gilbert, 2019). While traditionally cutscenes were pre-rendered, recent advancements allow for real-time cinematics, where game engines render the scenes on-the-fly. This blurs the line between gameplay and cinematics, offering a more seamless experience (Bradford, 2020). Some games, especially those with episodic content, use cutscenes to create a serial narrative structure. Each episode may end with a cliffhanger or a significant revelation, encouraging players to continue playing (Sahdev, 2011). Prior studies focused on how to implement cutscene effectively whether in technique, application to usage to convey narrative (Barnabé, 2019; Bollo, 2017; Evin et al., 2022; Tianean et al., 2020; Yang & Zisiadis, 2014). However,

there are still limited on studies that focused on elements that are required to adopt cinematography in video games. This paper is our attempt to answer that gap.

Research Methods

This research uses a qualitative approach, more specifically an exploratory study approach. A qualitative approach is a research approach used to understand, explain and analyse a context from a non-exact perspective and emphasises in-depth understanding, meaning, context and interpretation [ref]. An exploratory approach was chosen because the phenomenon of the application of cinematic storytelling in video games is still limited. The main objective of an exploratory study is to identify, describe and classify the elements or variables involved in the said phenomenon (Pallesen et al., 2015; B. Wang et al., 2019). We also use the form of a case study, which is an in-depth study of a case that is an appropriate description of the phenomenon we are researching (Ecenbarger, 2016).

There are plenty of video games using a cinematics approach, in the times when AAA studios and Indie developers alike are pushing the computing capability to run a video game, practically all video games have some element of cinematics video game storytelling through cutscenes, in-game events, and trailers. However, in this study we will focused on 3 different games from 3 difference genre to gather a more comprehensive insight on how storytelling in video games works:

- 1. The Last of Us (TLoU) released on 2013 followed by its sequel on 2020 is one of the most successful action video games released on PS3 system at first and now multiplatform household title. This video games takes the popularity of Walking Dead and other zombie-based media combined with drama to draft one of the strongest and most impactful video game opening sequence of all time.
- 2. Beyond: Two Souls (BTS) is a narrative-driven video game released on 2015 and developed by Quantic Dream, a developer specialized in this genre. BTS introduced back and forth time flow in its narrative presentation making this game is a rather unique in its own genre.
- 3. The Legend of Zelda: Breath of the Wild (BotW) and its sequel: Tears of the Kingdom (TotK), are renowned as the best action adventure game ever released for Nintendo Switch. Released in 2017 and 2023, respectively, from the opening scene only, BotW has inspired other video games like Genshin Impact, Assassin's Creed Oddysey, and Windbound.

In this research, we reviewed each game using video game movie YouTube channels such as Gamer's Little Playground (https://www.youtube.com/@glp) and MKIceAndFire (https://www.youtube.com/@MKIceAndFire), and our playthrough. The review focuses on how the story is told in these games, especially from a cinematic storytelling approach. We also did surveys distributed through narrative-heavy game forums to gain insight from players who enjoyed this type of storytelling in video games. The results of our review are summarized and grouped in various kinds of storytelling.

Results and Discussion

Based on analyzing our playthrough, video game movies were provided online, and data was collected from 164 survey respondents from various video game forums. Here are our

findings presented in a case study to see what went right when applicating cinematics techniques in video games.

Case Study 1: The Last of Us

The Last of Us (TLoU) series is a critically acclaimed action-adventure game set in a post-apocalyptic world. The first installment follows Joel, a smuggler, and Ellie, a young girl immune to a devastating infection, as they navigate dangerous environments and confront moral dilemmas. The sequel, "The Last of Us Part II," expands the narrative, introducing new characters and exploring the consequences of actions. Both games are praised for their cinematic storytelling, realistic characters, and emotional depth, setting a high standard for narrative-driven gaming experiences. The series has influenced modern storytelling in video games, emphasizing character development and immersive storytelling.

They create excitement in the game through a cinematic approach employing several key elements. Firstly, the use of realistic motion capture and advanced animation technology allows for lifelike facial expressions and character movements, enhancing emotional appeal and player engagement. Secondly, developers leverage sophisticated cinematography techniques with framing, camera angles, and scene transitions reminiscent of films (see Fig 1). This creates a visually immersive experience and dramatizes pivotal moments in the story, infusing a cinematic quality into the gameplay.



Figure 1: TLOU Cutscene and Gameplay Meeting

Thirdly, outstanding voice acting brings characters to life with authentic dialogue and emotions, reinforcing the player's connection to the characters and deepening the overall narrative experience (See Fig 2). Lastly, a strong and complex narrative with deep characters adds an additional layer to the story. Player decisions in the game also significantly impact the storyline, increasing the player's sense of responsibility for the fate of the main characters. Overall, combining these elements creates an exciting gaming experience in terms of gameplay and captivates players through a deep and convincing cinematic approach.



Figure 2: TLoU Voiceover

Case Study 2: Beyond: Two Souls

Beyond: Two Souls (BTS) is an interactive narrative-driven video game whose main mechanic is choosing an action that will result in different outcomes in the narrative. This is one of the video games that cast professional actors and actresses as characters: William DaFoe, Ellen Page (now Elliot Page), and Eric Winter. The whole game is developed using motion and face capture to simulate realistic animation in action and face. The entire action is captured and produced similarly to develop a cinema. Almost all cinematic techniques and storytelling tropes are used in this video game. From camera movement, various lighting effects, Chekhov's gun, action sequence, and angled reveal are used within the narrative development of this video game.

Like all, if not most, video games within this genre, life is strange, heavy rain, and the wolf among us benefits heavily from cinematics technique. It is almost indistinguishable from interactive movies like Choose Love, Bandersnatch, and A Heist with Markplier. The only difference is one provided by a streaming service or typical cinema provider; the other is available on Steam or specific video game provider. Some of these "video games", are shot using actually video clips, like Erica, Love is Around Us, and Death Come True, to even blur the two media more. BTS has an interesting aspect that are unique to this genre: non-linear time flow. However, this is perhaps one the reason, characterization in this game is prominent compared to others is the same genre: the usage of professional actors and actresses to nail the narrative cinematically (See Fig. 3).

Figure 3: Proffesional Actor in Video Game Motion Capture

One of the storytelling technique that used in cinema are non-linear storytelling. Cinema utilized this in form of flashback, sub-plot narrative, in-depth character development arc and

currently, to support a shared universe storytelling. Video game does utilize the same application, there are video game that have flashbacks to tell a narrative in a more depth and different perspective. However, BTS tell a story about a character from her childhood to adulthood with all the problem, condition, and character development is told with a non-linear flow in episodic manner. Like all episodic storytelling, the usage of foreshadowing are used heavily in this video game, but all concept, condition and lore in the narrative are told conclusively using the next episode, regardless of time line linearity. The story presented have a coherent timeline and can be viewed using a linear timeline like a traditional cinema. Still, the best way to enjoy the whole narrative is by using the intended flow, a non-linear narrative presentation, which makes this video game an interesting case study regarding the usage of cinematic in video games.

Study Case 3: The Legend of Zelda

The Legend of Zelda (LoZ) is one of the household names alongside Mario and Sonic as one of the video game industry's earliest icons. LoZ are typically action adventure game that keep re-inventing itself with the plethora of mechanics that are unique to Nintendo as a platform and LoZ as a franchise. Breath of The Wild (BoTW) is one of the earliest game release for Nintendo Switch change the concept of openworld that over saturated in video games industry at that time with return to sandbox approach, akin to minecraft. At first, the narrative presented in this video game are limited to a single cutscene at the beginning and end of tutorial area (which itself is about 6 hours of gameplay), clearly narrative is not the aims of BoTW. However, BoTW is regarded as one the best video games of all times, there are some application of narrative presentation that we can learn from this game.

BoTW entice player to explore, it is shown from the vista shown at the beginning of the games, where players are shown to the panoramic shot of the world. This value are presented in its narrative presentation. Besides interaction with NPC, there are 2 more ways BoTW presents its narratives: cutscene and geographical. One of the most interesting mechanics of BoTW are memories, where you need to go to a specific place shown just by pictures where you will presented the narrative. These cutscenes are presented not linearly because players, like the game suggest, explore the world and find those cutscenes by literally stumble upon them. Without guides and internet, a typical player will not find the whole story. But that is also make the narrative presentation are precious, because its not what drive the storytelling, but become part of the game mechanics (See Fig 4).

Figure 4: Cutscene in The Legend of Zelda: Breath of the Wild

Geographical storytelling is one of the more obscure technique, especially for cinematics storytelling, but in the game like BoTW it become one of the strongest elements for narrative presentation. Some cutscene shows places where the event occurs, whatever happens in that cutscene retain in geographical area of the world setting. This create a very strong immersivity where player not only see the cutscene, but also interact with the aftermath. BoTW are continued with its sequel, Tears of the Kingdom (TotK), which many players agree, make BoTW seems like a technical demo due the expansive development in all areas compare to BoTW.

TotK take one more step beyond BoTW in presenting its narrative, due to its world size, most players might not appreciate the narrative presented in BoTW. TotK still present the important cutscenes as players explore, but now player can find it more easily. TotK introduce air travel where players can enjoy the world using bird eye perspective. A large image on the ground shows all narrative presented, akin to Nazca lines, and player must look of a tear drop image on the larger image. This make cutscene are more accessible and manageable to player. Despite the significantly larger world, TotK presents the narrative more effectively than BoTW, and both stay true the value of the game: exploration (See Fig 5).



Figure 5: Bird Eye View in Tears of the Kingdom

Discussion

Based on the elaboration on those study cases, we managed to identified key element that support the usage of cinematics in video games successfully: a sound and compelling narrative is critical factor that ensure successful storytelling, regardless of media, however in video games, such narrative must be presented within video game environment and platform, which is interactive. Making player to choose decision within the narrative with results in different outcomes like that TloU and BTS shown is one of the common usage of storytelling within video game. Choice matters in video games are varying, like in BTS it could drive the narrative to totally different outcomes. Other video games who has this kind of storytelling are Heavy Rain, Detroit: Become Human and Wolf among Us. Other trope like TLoU have lesser role for choice, because in the end goal of the narrative, it doesn't derived much, which in video game could ruin the immersivity from narrative standpoint.

Other critical factor is to use cinematography approach in conducting cutscene, whether it is the process like TLoU or the actor in BTS. This are done to ensure the quality of the cinematics usage in video game are on par or even exceed the cinema experience. Artistic and emotional presentation that are often shown in cinema are only can be replicated in video games by professionals in their field. Video game developers, in the end, are not cinematographer. Expanding the teams to include professional in their field allow video game

developer to develop more in the video game aspects rather than spreading thin. Other video games like Death Stranding, Until Dawn and Mass Effect Trilogy.

Video games is ultimately an interactive media, presenting narrative in this environment should be a journey that are controlled by player, not presented linearly. BotW and TotK are both excellent study cases where how cinematics and narrative are presented as part of the video game progression and exploration. Narrative presented in this way may not can be explored or enjoyed by all player, however players who do, are rewarded by how the video game lore and mythology are all about. Other video games who also use this trope are Souls franchise, Witcher 3, Firewatch and Red Dead Redemption.

Conclusions

The film industry in Indonesia has undergone significant changes, marked by the emergence of diverse works that connect with the audience through effective communication. Storytelling via cinematic techniques is now applicable to many other media, including Video Games. We have examined video games in study cases to successfully implement and adopt a cinematics approach in storytelling for a video game. We found three critical factors that should help developers to craft narrative presentations in video games: choice matters, usage of the cinematography professionals and inclusion within gameplay.

These findings should be able to kickstart more studies withing the research area. Project Management within video game should be affected with inclusion of cinematics narrative presentation. Acceptance on video game narrative presentation within players should be explored to ensure the successful adoption.

References

- Barnabé, F. (2019). Narrativization Processes of Video Game Tutorials: From EarthBound to Undertale. *DiGRA 2019: Game, Play and the Emerging Ludo-Mix*.
- Bollo, D. (2017). High performance animation in gears of war 4. *ACM SIGGRAPH 2017 Talks, SIGGRAPH 2017*, 10–11. https://doi.org/10.1145/3084363.3085069
- Bozdog, M., & Galloway, D. (2020). Worlds at Our Fingertips: Reading (in) What Remains of Edith Finch. *Games and Culture*, *15*(7), 789–808. https://doi.org/10.1177/1555412019844631
- Bradford, W. J. (2020). Exploring the Narrative Implications of Emerging Topics in the Legend of Zelda: Breath of the Wild. *Journal of Sound and Music in Games*, 1(4), 1–21. https://doi.org/10.1525/jsmg.2020.1.4.1
- Budiartawan, N. J., Windu, M., Kesiman, A., Gede, I., & Darmawiguna, M. (2022). Pengembangan Game Cerita Rakyat Bali Berbasis Desktop "Calon Arang (The Darkness of Dirah)." *KARMAPATI (Kumpulan Artikel Mahasiswa Pendidikan Teknik Informatika)*, 11(1), 48–60. https://ejournal.undiksha.ac.id/index.php/KP/article/view/39196
- Chen, A., Mari, S., Grech, S., & Levitt, J. (2020). What We Know About Massively Multiplayer Online Role-Playing Games. *Harvard Review of Psychiatry*, *28*(2), 107–112. https://doi.org/10.1097/HRP.00000000000000247
- Ecenbarger, C. (2016). Comic Books, Video Games, and Transmedia Storytelling: A Case Study of The Walking Dead. *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, 8(2). https://doi.org/10.4018/IJGCMS.2016040103
- Evin, I., Hämäläinen, P., & Guckelsberger, C. (2022). Cine-AI: Generating Video Game

- Cutscenes in the Style of Human Directors. *Proceedings of the ACM on Human-Computer Interaction, 6*(October). https://doi.org/10.1145/3549486
- Fox, J. A. (2016). 'It's a-me, Mario!'Exploring dynamic changes and similarities in the composition of early Nintendo video game music. *Fields: Journal of Huddersfield Student Research*, 2(1), 15–30.
- Gilbert, L. (2019). "Assassin's Creed reminds us that history is human experience": Students' senses of empathy while playing a narrative video game. *Theory and Research in Social Education*, 47(1), 108–137. https://doi.org/10.1080/00933104.2018.1560713
- Hanan, D. (2021). New Perspectives, Challenges and Questions from Filmmakers in the Post-Suharto Reformasi Era 1998–2020. In *Moments in Indonesian Film History* (pp. 265–329). https://doi.org/10.1007/978-3-030-72613-3_7
- Hasan, R. V. (2020). Indonesian Documentary: a Theoretical Review of Truth Claims Perspective. *Journal of Urban Society's Arts, 7*(1), 15–20. https://doi.org/10.24821/jousa.v7i1.3903
- Hong, Y. (2021). The power of Bollywood: A study on opportunities, challenges, and audiences' perceptions of Indian cinema in China. *Global Media and China*, *6*(3), 345–363. https://doi.org/10.1177/20594364211022605
- Kubrak, T. (2020). Impact of films: Changes in young People's attitudes after watching a movie. *Behavioral Sciences*, *10*(5). https://doi.org/10.3390/bs10050086
- Kudláč, M. (2019). Transmedia Storytelling: The Many Faces of Video Games, Fluid Narratives and Winding Seriality. In *Second Language Learning and Teaching* (pp. 191–203). https://doi.org/10.1007/978-3-030-25189-5_13
- Kumar, M. B., & Jothi, P. S. (2021). A Comparative Study Of Hollywood And Kollywood Films With Reference To CGI Elements. *Elementary Education Online*, *20*(6), 2943–2950. https://doi.org/10.17051/ilkonline.2021.06.272
- Liu, X. (2023). Exploring the Realism of the Movie "The Chinese Doctor." *International Journal of Education and Humanities*, 11(1), 1–3.
- Mo, C., Wang, Z., Zhu, G., & Zhu, W. (2018). Understanding Gaming Experience in Mobile Multiplayer Online Battle Arena Games. *Proceedings of the 28th ACM Workshop on Network and Operating Systems Support for Digital Audio and Video, NOSSDAV 2018*, 25–30. https://doi.org/10.1145/3210445.3210450
- Mokhtar, N. H., & Othman, Z. (2022). Communicative Skills Through Corporate Storytelling Video: Students' Perception. *Journal of Language Teaching and Research*, *13*(2), 253–260. https://doi.org/10.17507/jltr.1302.04
- Oliver, M. B., Bowman, N. D., Woolley, J. K., Rogers, R., Sherrick, B. I., & Chung, M.-Y. (2016). Video games as meaningful entertainment experiences. *Psychology of Popular Media Culture*, *5*(4), 390–405.
- Pallesen, S., Lorvik, I. M., Bu, E. H., & Mold, H. (2015). An Exploratory Study Investigating the Effects of a Treatment Manual for Video Game Addiction. *Psychological Report*, 117(2). https://doi.org/10.2466/02.PR0.117c14z9
- Sahdev, I. (2011). *A Look Into The World Design Of Xenoblade Chronicles*. Siliconera. https://www.siliconera.com/a-look-into-the-world-design-of-xenoblade-chronicles-2/
- Sugiyo, R., & Purwastuti, L. A. (2017). Local Wisdom-Based Character Education Model in Elementary School in Bantul Yogyakarta Indonesia. *Sino-US English Teaching*, *14*(5), 299–308. https://doi.org/10.17265/1539-8072/2017.05.003

- Tarnowetzki, L. (2015). *Environmental Storytelling and BioShock Infinite: Moving from Game Design to Game Studies* (Issue April). Concordia University.
- Tianean, J., Jimenez, B., & Levey, S. (2020). Implementing Character Design Fundamentals through Digital Illustration. *Journal of Culture and Arts*, 1(1), 24.
- Wang, B., Gong, Y., & Rau, P. L. P. (2019). What Makes for Successful Game Storytelling in Different Countries? A Comparison Between Japan, Korea and China. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics): Vol. 11577 LNCS*. Springer International Publishing. https://doi.org/10.1007/978-3-030-22580-3_7
- Wang, H., Zhang, Z., Khalid, M. N. A., Iida, H., & Li, K. (2021). Mmorpg evolution analysis from explorer and achiever perspectives: A case study using the final fantasy series. *Information (Switzerland)*, 12(6), 1–18. https://doi.org/10.3390/info12060229
- Yang, B., & Zisiadis, M. (2014). *Transmedia Marketing: Strengthening Multiplatform User Participation Through Storytelling*. Umeå University.