**Analysis of AI Abuse In The Entertainment Industry**

**Introduction**

The Entertainment Industry covers a broad range of jobs and businesses, these include the music, film/television, gaming, tourism, publishing, and other industries. Advancements in technology have both improved and transformed these industries and their goals. Examples in history have shown this, like when color was added to television, improvement of printing methods and distribution for books, improved hardware and engines for game development, and online markets making global access possible for everyone.

Although these technological advancements have many benefits, there’s also examples of how these advancements hurt industries. When stores and markets started moving online, and delivery becoming more successful, physical stores and media got less popular, such as when Blu-Ray or Redbox lost their customers to online rentals/subscriptions. Another example is advanced automation with machines reducing the number of factory jobs, and need for workers.

With the new rise and popularity of AI technology, this study focuses specifically on the advancements of this technology, specifically in the music, and gaming sectors of the entertainment industry. Going into depth on how these AI advancements have changed these industries for both better and worse. Including an analysis of the types of technology being developed and implemented, the ethical and social impact on society, and how the future of AI may further change them.

**AI Applications In Different Industries**

**Music**

***Technology Advancements***

One of the ways technology has changed the music industry is improving the ease of accessibility and creation of music. This includes programs like digital audio workstations (DAWs), which allow audio to be recorded and edited so people can mix their own tracks without extensive setups and effort. Using music programs combined with digital instruments, and audio libraries mean producers don’t even need to buy instruments, know how to play, or hire players to make entire tracks. AI has added more tools and resources online, allowing for even more simplified editing and mixing.

AI is trained on datasets of various songs, tracks, instrumentals, and vocals to build recognition of patterns and styles to generate something similar based off a request. One resource is generative models like ChatGPT, and Gemini which allow ideas for lyrics and themes to be generated based off a prompt. These models can also generate tracks and melodies, mimicking specific instrumentals, or musical styles to refine and change music composition.

Outside of generation, AI also is great for editing music through things like deepfake technology, which can replicate the sound or pattern within audio data. This can change the pitch and tune of vocals, separate instrumentals and vocals from tracks, and even change entire genres of music. All of these tools and resources allow for indie producers to either generate entire songs, add missing resources, or improve their music with editing.

***Implementation***

These tools are implemented into software as tools, or as their own applications with programs like eMastered, and BandLab which offer presets and analyzation of songs to “master” them, providing tools to improve audio balance and clarity. Another company that implements AI is Spotify, which uses models to craft recommendations and playlists based off listening trends personalized for each user.

AI tools giving access to resources that aren’t obtainable has also been shown, with one notable example being Drake’s use of deepfake technology in his “Taylor Made Freestyle” to recreate Tupac’s voice. Indie producers using this to a more extreme degree to generate entire backing tracks, lyrics, and edits to their music when they may not have access to instrument players, or teams to help create ideas.

***Challenges***

One of the main concerns of AI usage, not just in the music industry but entire entertainment industry is the human disconnect, and copyright/ownership issue in media. When producing music, there’s a human element that may come from personal experiences, or creativity which AI can’t relate to. Any songs about tragedy or dealing heavily on emotions and experiences won’t have the same connection with the audience since it’s based off data from others. Although AI can mimic other’s creativity, when using AI heavily it’ll be just recycling creativity from others, this combination of re-used content, or just the knowledge that something is AI can ruin music for listeners seeking a deeper experience.

The other big issue of copyright is based off who may own the AI generated content, if it’s the training data, the person who developed the AI, the one who gave the input, or if it’s uncopyrightable. Even if AI is using copyrighted content, it may not be initially obvious that it’s using AI or that copyrighted material in the first place since it combines so many sources of data, without the dataset itself it may be impossible to trace back. An example of this being an issue is in Drake’s song referenced earlier, which deepfaked Tupac’s voice even though he was unable to give consent, leading to an issue where he was sued by the music holders, even though it wasn’t his real voice, it still used his name and popularity, which was copyrighted.

**Gaming**

***Technology Advancements***

The gaming industry has always been impacted by advancements in technology, virtual markets making them more accessible, stronger hardware allowing games to do more, and various engines being developed that allow developers to build on them. With the emergence of AI there’s various fields it’s being used to improve the creation, production, performance, and even marketing of games.

One of the most important technologies is Generative AI, like Generative Adversarial Networks (GANS) or even public language models like ChatGPT or Grok. Trained off existing game data, like their story, gameplay, and even price they can help generate ideas for portions of a game’s story or even create entire stories on their own. Some public models like Microsoft’s Copilot are also able to generate images, which can be used for concepting or making assets for games without the need for an artist. But the biggest impact is that AI is now able to generate entire sections of games through referencing source-code, allowing indie or bigger developers to fix errors, and create systems they may have been unfamiliar with.

For performance, different machine learning models focused on upscaling images, and predictive generation work to reduce hardware stress. While keeping a game at a lower resolution and frame rate, these machine models work to artificially increase the resolution, and generate frames which takes less performance than actually running the game at those higher resolutions and framerates.

Lastly for game marketing, machine models can analyze game data, such as average spending habits, genre of game, play-time, and other personal data to recommend other games it think you may like. This can help either target people when a game goes on discount, or new releases in genres they enjoy.

***Implementation***

Many companies in the gaming industry have already been implementing AI into their infrastructure and development. Nvidia has used AI support in their DLSS system, which both upscales lower resolutions, and uses frame generation to increase the framerate artificially. Normally it requires powerful hardware to run these smoothly, but using one of Nvidia’s GPUs with DLSS allows lower-end software to still get the benefit of improved visuals and framerate without the hardware cost.

Games also have used AI to create interactive and infinitely generated stories, remembering inputs players give with a prompt. One of the earliest examples of the AI-generated story games is AI dungeon, where it can be given a prompt with a setting and rules, then automatically generate a story where you can control it for various possibilities. It even has options to remember specific moments or rules to increase immersion for different scenarios. AI has also just been used in portions of games, like Inworld origins that uses a more defined set of rules for developers to keep a story, but have infinite replay ability.

AI has also taken a place in game development, able to write portions of code, generate ideas, and even game rules or behaviors. Youtuber Matt Wolfe demonstrated how indie developers, even with minimal or no experience are able to use models to get an idea, and code to successfully make a game even though he’s never made one before. There’s also a place for AI in making assets, like how Plask AI can generate 3d mocap animation just from video alone, preventing the need for mocap suits, or actors.

***Benefits***

One of the major benefits of AI in gaming is how much more accessible it’s allowing both playing, and the creation of games. Like mentioned above, with Nvidia’s DLSS people who can’t afford more powerful hardware are still able to have smooth framerates and high resolutions, allowing more people to experience them on lower-end devices. There’s also more tools for indie developers to start creating games even with no experience, since AI can help creatively, and with the confusing parts of coding.

There’s also now more libraries and resources available so lower-budget games can have access to what they need. AI allows not just 2D art, textures, and concepts to be made but also 3D assets like animation through Plask. This saves time needing to either manually create these assets, or the budget to buy these assets if you don’t have the funding.

***Challenges***

AI also brings many issues to gaming, including the same issues with most AI media where it separates human connection, replaces the need for jobs, and brings copyright into question. Like with music media, game development can lose human emotion, since all content is based off other content, deep narratives and passion for games can be lost. This can cause many games to be repetitive, as they run out of unique data and even eventually begin to train on themselves.

For jobs in the industry, AI reduces the need for creative positions like concept artists, since AI can just generate a concept or even model entirely from scratch. Companies like Activision have already implemented AI to generate concepts, and Microsoft has laid off many workers in their gaming Ips, many of them being 2D Artists. Since it’s cheaper to generate these for free, less writers, concept artists, modelers, and coders are actually needed to work on these games.

Lastly is the issue of copyright, which shares the same problem with the music industry where AI content can infringe on rights. Since AI in this industry is trained on games, their designs and assets can be used in training without detection since it’s taking from so many different sources. Since AI concepts can be undetectable, it becomes possible to create a new copyright based off previously copyrighted material and without the training data to prove it, it becomes easy to get away with.

**Ethical and Societal Implications**

***Ethical Concerns***

The main ethical concerns facing AI are the replacement of human workers, and the loss of human involvement, as well as concerns facing the use of people’s work for training, and lack of transparency. Although there’s also viewpoints thinking that AI is the next step for evolution, and encourage AI’s integration into all these industries.

For the impact on jobs and workers, AI has the capability to perform the same tasks, at a faster, and cheaper level than a human worker. Companies looking to save on budget can automate the tasks of entire departments, like concept artists and other 2D Media, and even animators, modelers for 3D Assets. There’s also reduced need for writers and creative minds since you can just ask a chat model to give you an idea for whatever media you’re trying to create, whether it be writing a book or story for a game, or film. AI is not just cheaper, but can generate these assets almost instantly, saving time, resources, and effort.

Many of the people who support the replacement of these jobs are people in positions where AI isn’t threatening them, or owners that save money directly through the use of AI. Since it’s easy for many people to access AI, it can be seen that everybody can benefit and create using AI so there’s no real loss overall. Even if it is more efficient and accessible, it can still be argued that AI can’t replace human creativity and experience. When AI is in creative fields like writing, or composing many people may be pushed away by the idea that a machine made these stories and songs so they cant feel a deeper connection. AI can’t actually experience the same emotions or life that other writers are able to put in their creation with passion.

The other main concern is based around how ethical it is to use people’s work or identity for training and development. AI models can draw from many resources on the internet, many of these being from people who haven’t given consent, or are unable to, and with the lack of transparency in what exactly the AI is doing, it can become impossible to know if your work is stolen. An example I brought up earlier is Drake’s use of AI to fake Tupac’s voice, who isn’t around to give consent for the use of his voice anymore. Many people were outraged by this, and the holders of his music threatened to sue him, leading to him taking down his post. There’s also examples of actors being used in movies, like Star Wars: Rogue One using the faces of their old actors from old movies that also aren’t around anymore. Since all machine learning models are based on data, when generative AI takes artwork or media from online resources, many people are left feeling uncomfortable since they get none of the credit.

The argument against this is that AI can immortalize people that aren’t around anymore, and their work. New songs being released from artists that aren’t around, or fans being able to see one of their favorite actors on the screen again can bring people joy. So the question is whether or not AI is being used just for using their fame and previous work for profit, or if the use of AI devalues their previous work.

***Societal Impact***

Leading off the ethical concerns, AI does have positive and negative impacts on the entertainment industry as a whole. In the case of gaming, and writing, AI is able to generate nearly infinite sources of entertainment that people can create for themselves. If somebody wants to read a sci-fi story, they can just ask a model to create one from scratch, giving them a new experience they haven’t seen before. With the performance increases from things like DLSS in gaming, it also provides more accessible gaming and entertainment for people that may not be able to afford it.

Society with AI becomes more efficient, tasks are automated and completed automatically, small developers are able to make way larger projects with access to AI tools and resources, and it becomes cheaper to produce different forms of media, perfectly tailored to individuals seeking a specific experience. This can inspire people to create or try new things, since AI makes it possible to at least make something, without needing to learn or put very much effort into it.

There’s a negative that comes with this though, as entertainment can only generate so much with the lack of human creativity and involvement. Jobs become less common as AI replaces them, then as it becomes cheaper and more advanced, more companies implement AI. With the lack of human touch, and relatability, many AI can start training on AI-generated content, leading to repetitive and non-relatable content for people wanting to connect with authors. This also leads to developers not putting as much passion in their work, since AI does all the hard work, and they reap the rewards leading to the markets getting flooded with AI products.

One more effect already being seen is people getting a bias towards AI, automatically rejecting entertainment media they believe to use AI. AI has gotten good enough, where artists are needing to show proof of their work so people don’t think it’s AI. On social media comments can occasionally be seen thinking new or unknown artists are using AI, and automatically lose interest because of it. AI creates distrust in entertainment, and steals credit from legitimate sources, with the lack of transparency in AI many artists are getting their work stolen, and used without being able to get credit.

**Future Directions**

***Trends***

The future for AI in the entertainment industry are going to make production cheaper and easier than ever. Music artists will be able to write new songs based off their old ones, improve their lyrics, and even make an entire backing track at the click of a button. This is shown through AI services already offering presets and ways to improve music, based on listening trends and what’s popular in the genre.

For gaming, game development and playing will be more accessible than ever before, with AI powered systems enhancing the performance of lower end systems on heavy games. Writers can fill in gaps of their story, set a theme, or even have portions of code written for them through generative AI. Many games will become more interactive, with language models implemented into NPCs or Story/World creation making nearly infinite scenarios possible, and randomly generated content different for every player.

One more trend is the disconnect and suspicion of AI within all forms of media. Since AI technology has advanced to a point where it’s difficult to tell what’s real or not, social media trends already show people accusing real artists of generating their art with AI. Since many feel like AI has no creativity or passion, this automatically leads to a negative bias towards all forms of media where people feel AI is overused.

***Recommendations***

Since AI is becoming so powerful and advanced, it’s important to make sure the entire industry isn’t overtaken or hurt by it’s use. AI can completely remove the artist it’s trained on from their creation, replace human workers, and make a mistrust of legit media.

The main recommendation is making sure AI is transparent in how it works, what it’s trained on, and that the content it makes is created by AI. Properly labeling art, music, or games as “AI-Generated” will allow people to recognize human-made and AI-made media, and build further trust. Copyright infringement can be avoided with the release of training data, protecting creators from abuse of stolen content. Lastly, if AI is transparent with how it works, it’ll allow bias and problems within it to be fixed, and further build trust with audiences.

The next recommendation is making sure all trained data is obtained with consent, or anything with unobtainable consent is clear in it’s purpose. Making sure that content is made with 100% consent of what it’s trained on will remove the negative morality people can feel from stolen work, from both the artist and viewer’s perspective. If it’s a case like with a singer or actor that’s not around anymore, talking with the families, and clearly doing it to honor rather than profit off them is very important. The overall mistrust AI generates from the lack of transparency, consent, and goal makes a very dangerous market and future for every piece of media in the entertainment industry. With these corrections, more people may be willing to accept AI as a new tool and source of entertainment, rather than an annoying issue taking over all aspects of the industry.

**References**

**Music**

“Music and Technology: A Symphony of Evolution.” *MDLBEAST*, mdlbeast.com/xp-feed/music-industry/the-impact-of-technology-on-the-music-world. Accessed 26 Feb. 2025.

*How to Use AI in Music Production*, musiversal.com/blog/use-ai-in-music-production?fbp=fb.1.1740704400031.957843097399150911&ip=66.249.79.3&os=Unknown#:~:text=Beyond%20simple%20analysis%2C%20AI%20excels,truly%20unique%20and%20innovative%20compositions. Accessed 26 Feb. 2025.

<https://www.bandlab.com/>

<https://emastered.com>

Kaput, Mike. “How Spotify Uses AI (and What You Can Learn from It).” *Marketing AI Institute*, Marketing AI Institute, 26 Jan. 2024, www.marketingaiinstitute.com/blog/spotify-artificial-intelligence.

Davies, Ben. “Drake Using AI Tupac Is Scary for Music.” *Medium*, Medium, 23 Apr. 2024, [medium.com/@ben.davies2001/drake-using-ai-tupac-is-scary-for-music-f819115dea4e](mailto:medium.com/@ben.davies2001/drake-using-ai-tupac-is-scary-for-music-f819115dea4e).

Conner, Eden. “The AI Music Issue.” *The Harvard-Westlake Chronicle*, hwchronicle.com/108719/opinion/the-ai-music-issue/. Accessed 27 Feb. 2025.

**Gaming**

“What Is Nvidia® DLSS and How Does It Work?” *What Is NVIDIA® DLSS and How Does It Work? | Lenovo US*, www.lenovo.com/us/en/glossary/what-is-nvidia-dlss/?orgRef=https%253A%252F%252Fwww.google.com%252F. Accessed 28 Feb. 2025.

“Nvidia Introduces DLSS 3 with Breakthrough AI-Powered Frame Generation for up to 4X Performance.” *NVIDIA Newsroom*, 27 Feb. 2025, nvidianews.nvidia.com/news/nvidia-introduces-dlss-3-with-breakthrough-ai-powered-frame-generation-for-up-to-4x-performance.

[AI Dungeon](https://aidungeon.com/)

[Inworld Origins](https://inworld.ai/origins)

[RoyKindleNoInvAI\_002](https://www.youtube.com/watch?v=IyKKhxYJ4U4) – Matt Wolfe, Using AI To Build A Game From Scratch (No Experience)

[Plask Motion: AI-powered Mocap Animation Tool](https://plask.ai/en-US)

Merchant, Brian. “Ai Is Already Taking Jobs in the Video Game Industry.” *Wired*, Conde Nast, 23 July 2024, www.wired.com/story/ai-is-already-taking-jobs-in-the-video-game-industry/.

**Concerns and Impact**

Coates, Gavin. “The Ethics of AI in Art: Is Creativity at Risk?” *Naturalist Gallery of Contemporary Art*, Naturalist Gallery of Contemporary Art, 26 Nov. 2024, naturalist.gallery/blogs/journal/the-ethics-of-ai-in-art-is-creativity-at-risk#:~:text=Impact%20on%20Human%20Creativity,devaluation%20of%20human%2Dmade%20art.

Admin, AIT. “Role of AI in Media and Entertainment Industry in 2024.” AIT Global Inc., 10 Sept. 2024, aitglobalinc.com/ai-in-media-and-entertainment-industry/#:~:text=Future%20Trends%20in%20AI%20in%20Media%20and%20Entertainment%20Industry&text=AI%2DGenerated%20Content%3A%20As%20AI,to%20inspire%20and%20assist%20creators.

Sanhita Mukherjee. “The Future of AI in Game Development: TalentDesk.” *TalentDesk.Io*, www.talentdesk.io/blog/the-future-of-ai-in-game-development. Accessed 28 Feb. 2025.