

THE INFLUENCE OF DIGITAL TECHNOLOGIES IN FILM MAKING: “POST INTERNET ERA”: INTERNET OF THINGS (IOT) IN CINEMA INDUSTRY

Abstract

The film industry has undergone many changes as a result of the enormous advancement in technology, including IoT (Internet of Things), augmented reality, and virtual reality. In the past, film producers never imagined that the film industry would ever be associated with the internet, but these new technologies have changed a lot by doing marketing through the internet, using social media platforms, online streaming, etc. Even now, some individuals are unaware of how filmmaking functioned prior to the development of the Internet and new technologies. Today's modern equipment's, which connect all the instruments and use sensors for signal processing, have greatly decreased the amount of labour needed on many film sets. Aspiring filmmakers have access to a multitude of educational tools on the internet, such as tutorials, classes, and online film schools.

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I. INTRODUCTION

The film Industry has always amazed us with fresh technological advancements and storytelling innovations. As technology advances, new tools and technologies are revolutionising the way films are made in the past. The advancement of technology has altered the entire filmmaking process. These Internet-related innovations have transformed digital cinematography into virtual reality (VR) and artificial intelligence (AI). These improvements allow people in the film industry to experience more experiences and challenges in their daily lives, while also providing a lot of exposure to young people. At the time of introduction of computers, it was not aware that the operating systems would be the salient features of the hardware companies. With the introduction of this system, the fashion industry and photography can connect with its customers or makers easily. It turns out to be an efficient way in the production process by reducing the wastage of materials. It helps in managing the time efficiently.

The emergence of the Internet has altered the entire film marketing strategy. Moreover, the internet has made the film distribution little easier, with the rise of streaming platforms (OTT Platforms). Prior to the Internet, people would market their films in a variety of ways, such as through numerous posters and promotional efforts. It has now been transformed by allowing filmmakers to engage with their target consumers through a large network of online platforms and social media outlets.

In this introduction, we will look at how technology has changed in the Internet era and how film makers are utilising this technology in their filmmaking process. These technologies are now assisting filmmakers in Post Production as well. So, in a nutshell, we'll look at how the Internet of Things (IOT) and Artificial Intelligence (AI) play a significant role in the filmmaking process and how they impacted the early filmmaking process.

1. Technology in the Film Industry: Present Scenario: The film industry has undergone a massive transformation as a result of the internet, and the early production style has evolved. These new technologies have completely transformed the filmmaking process, from production through post-production, distribution, and even audience engagement. The advancement of visual effects (VFX) and computer-generated imagery (CGI) has expanded storytelling possibilities, allowing for the creation of previously inconceivable worlds and people. Furthermore, the internet has opened the door for virtual reality (VR) and augmented reality (AR) experiences, allowing audiences to experience the thrill of new adventures. The internet has also transformed film distribution, with streaming platforms and video-on-demand services providing quick access to a wide collection of films that can be seen at any time. The technological development in film making has been shown in Figure 1.

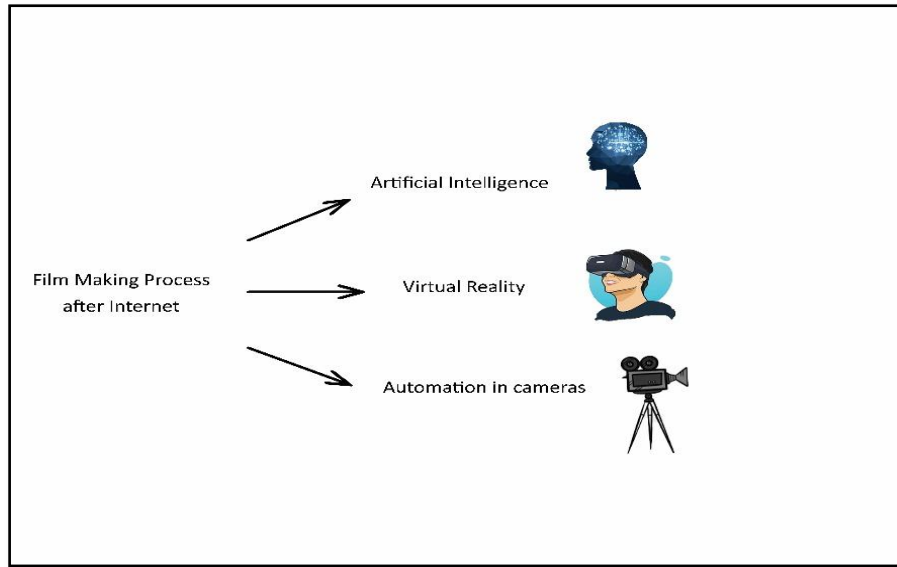


Figure 1: Technological development in Film Making

Furthermore, social media and online marketing have become the most effective instruments for promoting films, reaching a large audience, and developing devoted fan communities. The cinema business has entered a new period of infinite creativity, when boundaries are constantly pushed and the art of narrative is raised to new heights, thanks to modern technology.

2. Augmented Reality in Film Making: Augmented Reality in filmmaking refers to providing the viewer with a fresh experience by including more visuals via Computer Generated Imagery or by adding more graphics to the Real-world surroundings. Filmmakers may easily produce additional graphics to captivate consumers with this technology. Normally, there are three stages in the filmmaking process: pre-production, production, and post-production. During preproduction, the director will sketch his own ideas, but this has recently been transformed by AI technology, which is being used to generate sets and properties needed for filmmaking.

Artificial intelligence (AI) has emerged as an important tool in the world of filmmaking in the post-internet era. Artificial Intelligence (AI) integration has opened up new possibilities in virtual characters and CGI, helping for realistic simulations and lifelike performances. AI in filmmaking not only improve efficiency and creative capacities, but it also opens up amazing possibilities for storytelling and audience experiences, pushing beyond the limits of what can be achieved in the world of cinema.

In the future, this artificial technology could be used to reduce the post-production process in filmmaking, where it will help in adding graphics and creating an experience of an entirely new universe for individuals who love movies.

II. VIRTUAL REALITY (VR) TECHNOLOGY IN FILM MAKING

For a while, virtual reality has remained an ongoing debate in the film industry; yet these new technologies have kept quiet everyone. The virtual reality (VR) technology uses computer generated graphics to generate a three-dimensional simulation environment. This allows the audience to immerse themselves in the world by establishing direct contact with every object in it.

VR has revolutionized the way audiences enjoy films, delivering viewers with immersive and fascinating narratives that transport them into incredible virtual worlds. Filmmakers are now able to create amazing immersive 360-degree locations giving audiences to explore and connect with the story on a whole new level. Attract viewers with incredible pictures and engaging content in VR. The technology enables new camera techniques in which the spectator becomes an active participant in the film's universe. VR has also created new options for documentaries, allowing audiences to immerse themselves in real-world events and environments.

The movie *The Lion King*, directed by Jon Favreau, featured extensive use of computer graphics. He utilised the use of virtual reality to bring the environment to reality. He took the reference from the animated version of the *Lion King*, and he needs to bring the environment in real life, which will be an enormous task, which he and his team accomplished with the help of virtual reality (VR) technologies.

III. INTERNET OF THINGS (IOT) IN CINEMA INDUSTRY

People were forced to wait in the early days of the cinema company to watch movies in movie theatres, and after a while, the movies would be broadcast telecasted on television, and only then can people watch movies in their home. These have changed after the entry of the Internet of Things (IOT) into the cinema industry, as people are now able to watch movies on their smartphones as well as at home. Plenty of possibilities for film makers have opened up as a result of these online Platforms. Because of this improvement on the Internet, marketing for movies has also become simpler for film makers in the movie business.

Not only in this area, also social media platforms such as Instagram, Facebook, WhatsApp, and many more help movie makers in promotion by allowing them to distribute their release date to a large number of people simultaneously. Following the growing popularity of OTT Platforms, people are now distributing their movies completely via online platforms because we can access user data analytics and examine viewership over the Internet. Even on film sets during production, people use automation to operate the equipment via sensors. This will aid in determining the amount of light needed for the scene. On the set of a film, the director may easily track the attendance of the workers that are on film set, which will aid in the monitoring of the workers involved in the production.

Following the emergence of the Internet, many people started utilising social media platforms and started to earn money using online platforms such as YouTube by submitting their films or works and getting credited for views. Many YouTubers have recently developed and begun using YouTube as a revenue-generating asset. Many people are uploading lessons where we may learn so many things while sitting at home, and many young

people are using this in recent years. For example, if you want to learn graphic design using Adobe Photoshop, just type in the search box and you will get many options in which you can register or if it is free easily you can learn from your home and in the learning website there are so many certified courses online are available.

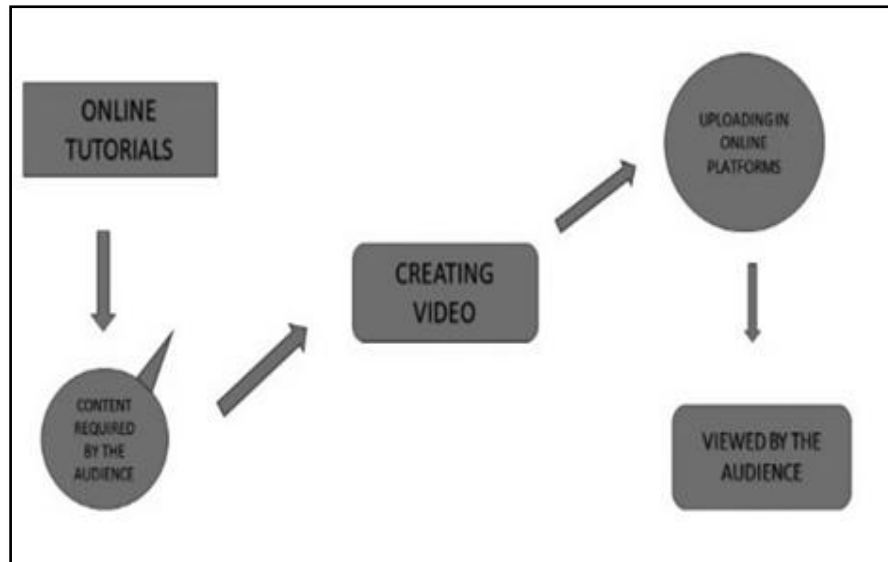


Figure 2: Technological development after Internet of Things (IOT)

IV. CONCLUSION

In the rapidly expanding cosmos, technologies are being upgraded on a daily basis. Both developed and developing countries have made use of technology. As a result, the film industry will undergo significant transformation in the near future. Also, with the inputs of all these latest digital tools audiences both physical and OTT will be in for a interactive experiences. Innovations in technology not only make work easier, but also aid in the development of new technologies such as artificial intelligence (AI) and virtual reality (VR). The future is largely dependent on technical advancement, and implementing it will benefit both filmmakers and consumers on a massive scale.

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