Digital Technology's Effect On The Production Process In Filmmaking

Ms. Dulcie Suri
Assistant Professor
Chandigarh University

Abstract –

This article’s main goal is to clarify some of the problems with digital filmmaking and identify the effects of digital technology on the filmmaking process. This study examines the evolution of filmmaking techniques throughout cinematic history and examines the significance of the digital revolution. The study explores how film may thrive in the digital age and considers if the current situation is fundamentally different from the uncertainties surrounding the birth of cinema. To provide a current, correct, and unbiased consideration of the subject, this research utilizes a variety of websites, screenings, and textbooks. It should be emphasized that as the author of this piece, I have a background mostly in audio and video production, having earned a postgraduate degree.

Key words: Filmmaking, Digital Technology, Photography, Production, Pre-Production, Post-Production etc.

Introduction –

This article explains some of the problems with digital filmmaking while attempting to determine how the digital revolution has affected the process of making films. Evaluation of the effects that digital filmmaking has had and will have on cinema as a whole is the goal in the end. The purpose of this thesis is to investigate the broader effects that digital technology has in comparison to earlier technologies, as well as what these effects entail for filmmakers, the film industry, and audiences. Information is electronically stored in discrete binary digits using digital technology. Numerous variables, such as the resolution, bit rate, and compression ratio used by the particular technology, affect the information's quality. Additionally, it's critical to remember that digital filmmaking faces challenges that go far beyond those of the camera. using digital editing.

Digital Technology –

Binary code, often known as bits, is used to store digital information. Bits are combinations of the digits 0 and 1, which represent words and images. Large volumes of knowledge can now be compressed using digital technology and stored on compact, manageable, and portable storage devices. Additionally, digitization speeds up data transmission. Digital technology has a lopsided impact on how people work, interact, and learn. Communications through digital techniques have benefited from broadcasting. For many forms of communication, especially cellular phones and cable systems, digital technology supplanted analogue signals. Beat code modulation was
created by analog-to-digital converters to transform analogue data into digital signals. In comparison to analogue transmissions, digital signals were easier to repeat and were less obscure. The way books and periodicals are published has changed as a result of digital printing, electro photography, and organized data technologies. The copying of music and other works using digital technology has been addressed by patent disputes.

Film-Making Production Process –

1. Pre-Production –

   The initial step in the preproduction process is idea. Prior to the production process, there is a phase called pre-production where concepts are further developed and planning is done. Just Pre-production, for a small video firm, may include everything that happens prior to filming, such as client meetings, research, storyboarding, location planning, etc. Pre-production is more detailed for feature films and only gets started after other prerequisites like funding, the screenplay, casting, and main staffing have been satisfied. Pre-production in this instance includes:

1.1. Concepts and Vision –

   It is a good idea to arrange your ideas on paper before beginning to compose your script. This can be written in a stream-of-consciousness style; it is not necessary to break it down completely. You can acquire a clear picture of your concept or vision for the film by outlining what you are attempting to shoot. In addition to the language, your piece's tempo, setting, editing technique, color scheme, and themes should all be part of your overall vision.

1.2. Script Writing –

   Writing out a script will aid you in production and postproduction if you're creating a documentary, shooting a live event, or planning to have your performers improvise.

1.3. Shooting Script –

   A shooting script to get you thinking about how you're going to shoot and edit this project. The shooting script is the same script with more technical information, such as the type of editing transitions, camera angles, and nods to color palettes and clothing, as well as more stage direction and particular locations.

1.4. Storyboard Script –

   A storyboard is a fantastic tool for planning camera placement and framing, and it also gives your cast and crew a more in-depth understanding of the final product.

1.5. Shooting Schedule –

   The shooting schedule includes a thorough explanation of when the cast and crew are expected to arrive on set and which sequences will be shot when. This schedule should be distributed to everyone involved in the shoot. You are not need to shoot in the script's order. You may maximize your time by using the availability listings for the crew, cast, locations, and equipment.
2. Production –

The term "production phase" in the context of film and video production refers to the phase of the creative process in which footage is captured. In large feature films, the start of the production phase signifies the "point of no return"—the point at which it is no longer feasible to abandon the project financially. At this stage, finishing the project and dealing with the financial fallout is usually less expensive than continuing. However, it's pretty typical to shoot "pick-up" photos in post-production. The objective of main photography is obviously to capture all necessary shots. Pick-up shots could be necessary if a mistake is found, the script is changed, or even if a performance is thought to be inadequate. Production in the context of music typically refers to a project's artistic direction. An active role in the creative process is played by a music producer, as opposed to a film producer who plays more of a managerial function. You're now prepared to take pictures. The day has come, and you are naturally at the set one hour early. We will cover a lot of ground in the pages that follow.

Before Shooting Checkout Equipment –

i. White Balance –

Bring a white card or piece of paper to use for white balancing, which accounts for the difference in colour temperature to give a natural result on videotape. Most consumer video cameras have auto-white balance. Outdoors, sunlight and fluorescent light have a high temperature, making objects appear bluish. Indoors, candlelight and incandescent light have a low colour temperature, making objects appear reddish.

ii. Focus –

Utilize manual focus only. Zoom all the way in, then concentrate before zooming out to focus.

iii. Shutter Speed –

Fast moving objects won’t appear blurry with a higher shutter speed, but the shutter speed will also allow less light into the camera.

3. Post-Production –

The third and last major stage of production is known as post-production. Post is a common abbreviation for it. "We can take care of that in post," In post-production, a lot of things could happen. While digital cameras may be imitating their celluloid counterparts, digital non-linear editing introduced a completely new idea for how images could be combined, similar to how text can be cut and pasted in computer word processors. Perhaps because of this, computerised non-linear editing was one of the first applications of digital technology in the film industry, specifically in post-production. The fact that traditional editing was not exactly economical was undoubtedly a factor in the decision to develop this technology. Non-linear editing is just one application of digital technology in post, though. The effects and animation produced by computer-generated images (CGI) have arguably had one of the biggest ongoing effects of digital technology on cinema over the past fifteen years. Corliss recently wrote an article on digital technology. The benefit of computer-generated imagery, according to Steven Spielberg, is that directors can now follow what their imaginations tell them. These computer-generated image effects, as Corliss astutely notes, are what encourage people to buy tickets. Perhaps all three of Bordwell and Staiger's reasons for change apply to this technological advancement. A picture produced by a computer in addition to being financially successful, novelty also gives the director more creative control.
Digital Distribution –
Given that digital distribution and digital exhibition may be so closely intertwined in some aspects, such as security, distinguishing between their distinct functions can be difficult. However, for the sake of this research, it will be considered that distribution will focus on the aspects involved in conveying the image to the screen, whereas digital exhibition would focus on the aesthetic effects of digital projection. While it is unavoidable for one part in a chain to effect the next, there may be some overlap between the two sections. It is safe to argue that these two issues are the most contentious in today's digital discourse.

Conclusion –
We recognize that film has undergone various technological advancements over the last century, so why are we suddenly linking any further advancement with some type of loss? Isn't it simply another shift? Perhaps this is the most significant impact that digital will have on the filmmaking production process. As demonstrated throughout this study, cinema consumption is not decreasing, but rather rising. Digital technology given consumers the ability to find whatever films they desire, as well as the ability to skip, pause, and scrutinize pictures and sequences in ways that were before unavailable. Digital has made it easier and more affordable for audiences to explore their own creativity, utilizing film as a means to communicate and express their observations. Choice, a proliferation of markets that can now be catered for, an increase in production, and an increase in consumption have all been enabled by digital. As a result, studios are looking for ways to boost production efficiency, and the solution appears to be a production process that is fully digital. While persistent ambiguity will always exist in a changing environment, it is safe to conclude that digital has arrived and will not be leaving anytime soon.

Reference –