

The Role of Video Editing in Post Production

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Abstract: *Currently, there is a lot of film production going on. We are now seeing movies in every language in cinemas. After the shooting of the film, we see the use of video editing in post-production. Since video editing is a very important factor in post-production, the role of video editing in post-production has been presented in this research paper.*

Keywords: Transitions, Import, Render, Digital Intermediate (DI), Time Code Reading (TCR), Digital Cinema Package (DCP)

1. Introduction

A non-linear editing system was introduced in the form of CMX 600 in 1971. It was specified as a RAVE or Random Access Video Editor by CMX. It had two black and white monitors, one for edited video and the second one for preview. In the preview monitor, the editor can view the original footage and select the editing points. During the 1980's major expansion happened. That was the time when production houses were competing to save time and energy, visual effects were used to mesmerize the viewers and the process of editing had become a little faster. Gradually technology developed, and different machines were invented, but the Avid system was the most expensive in that era. It became a viral non-linear editing machine. Further, Final Cut Pro editing software (Apple Inc.), Media Composer (Avid Technology) and Adobe Premier Pro (Adobe) grabbed the maximum share of the film and television editing industry. Gradually the technology developed and video editing became easier.

2. Methodology

I worked as a video editor for a Marathi film. I used adobe premiere pro software for video editing. What is done while editing the video of the film is realized through this research. After the digital video file is saved on the computer, the file can be edited using software tools. Although different software packages are available for this purpose, they have common features that make simple editing of digital videos closely similar. Video editing software packages usually display the digital file in two views: storyboard and Timeline. As noted earlier, a digital video contains many frames that are individual pictures Displayed in succession to give the impression of a moving video. So a digital video that is one Hour long (3600 seconds/hour) could contain as many as 216,000 frames. In the storyboard view of the video, individual frames (pictures) are placed on the storyboard that can be manipulated. Individual picture frames can be cut, pasted or moved around as needed by the user. Special effects can also be applied to selected frames. The timeline view edits the video according to a time frame. So users can add titles between time slices (for example between 5 and 6 minutes) of the video or add a transition or special sound as the video reaches a specific time. Common editing features that are available with both timeline and storyboard views include the following:

2.1 Cut and Paste

Using the software, users can cut different pieces of the video. The timeline toolbar is used for cutting pieces of the video in time segments. For example, users can cut Between 5 minutes and 10 minutes of the video. Users can also cut video frames in the Storyboard view. In this view, individual frames of the video are shown where users can cut, Copy, or move frames to different places in the video file.

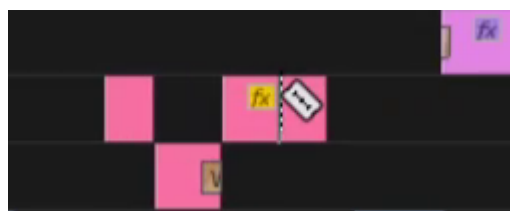


Figure 1: Cut and Paste

2.2 Transitions

These are the editing features that can be applied when transitioning from one frame to another or from one segment of the video to another. The common transitional Effects that are usually applied when editing videos include the checkerboard effect, circles across, Bars, box out whether diagonal or vertical, dissolve, and fade in/out.

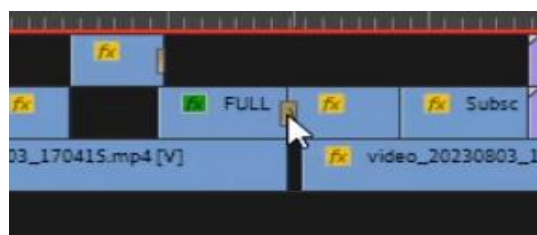


Figure 2: Transitions

2.3 Apply Titles

Titles can be added to individual frames, to a group of frames, or to a particular Time segment of the video. Titles can be added to the video at the beginning of the movie, Before selected clips on the storyboard, on the selected clips on the storyboard, and as credits at the end of the movie.



Figure 3: Apply Titles

2.4 Digital Intermediate (DI)

Digital intermediate refers to a digital file or files resulting from a scan of a film (usually negative) original that is used for editing, effects and grading/colour correction. It is the material that is used in DI labs and constitutes the whole film.



Figure 4: Digital Intermediate (DI)

2.5 Time Code Reading (TCR)

Timecode is a grouping of numeric codes produced at normal intervals by a timing synchronization framework. Timecode is utilized in video generation, appearance control and other applications which require transient coordination or logging of recording or activities.

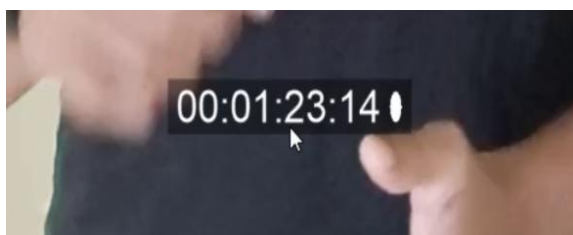


Figure 5: Time Code Reading (TCR)

2.6 Rendering and Export Video

Rendering in video editing is the computer process of combining still pictures, video clips, audio clips and other visual elements into a single digital video frame. Once finished creating and editing a video, several choices as to how will export it from Premiere Pro.

Export Format: MP4, MOV, AVI, WMV, FLV & Digital Cinema Package (DCP) A Digital Cinema Package is the standard conveyance organised for film screenings at a computerized cinema.

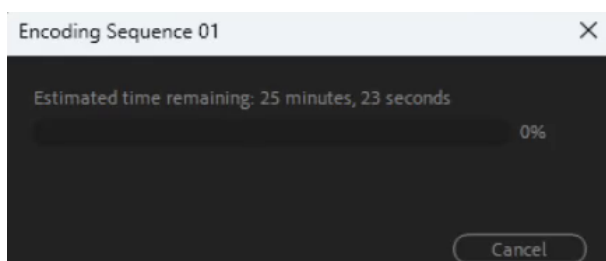


Figure 6: Rendering and Export Video

3. Result and Discussion

During the video editing of this Marathi movie, from the video format to the timeline in the video editing software, the output file was set as desired and the editing started. At the time of film editing, the project is edited by setting the

project in a frame rate of 24 FPS. 24 FPS is a standard frame rate format. Along with this, if we talk about Resolution, all theatre screens in India are now in 2K format, so the Resolution setting is kept at a Frame Width of 2048 and Frame Height of 1080 Pixel. HD Format i.e. 1920*1080 format is also played in film theatres, But 2K format has good video quality so we can see a frame rate of 24FPS and video resolution of 2048*1080. This is why I started editing using this film in this format. After setting up the project, Imported the video and added it according to the appropriate scene and deleted the unwanted video. After that all video footage was edited like a scene and a rough cut was made then the edited footage was shown to the director while showing the film to the director Time Code Reading (TCR) was used. TCR appears on the film as time. The advantage of showing which scene is at which second or minute is useful for immediately deleting unwanted footage from the film due to timing.

After the director's cut, colour correction/colour grading was done on the film and the final film was outputted in MOV format with TCR and this file was outputted in DCP format along with this MOV file. DCP stands for Digital Cinema Package this format is used during the screening of the Censor Board. In this DCP format, video and audio files are separated.

4. Conclusion

Overseeing raw video footage, sound effects, design and unusual effects to create a film is a part of video editing in filmmaking. This is often an important role of the post-production handle, and your capabilities can determine the quality and transportability of the wrapped result.

Video editing is the process of controlling and combining video records to develop a complete video. Video editing or non-linear video editing is the process of taking raw, untouched or recently recorded video and removing clips that are not important to your story or the point of the video. The absence of this film is called cutting. Video editors will collectively cut film clips, change and fix sound mixes, add advanced effects, and make other basic specialized changes to video records. Video editing is essential because mixing images and sounds is the key to connecting us authentically, and now and then really into the film, we're observing.

References

- [1] Karel Reisz, "The Technique of film editing," 2009, Focal Press, 2nd Edition
- [2] Kuleshov, Lev Vladimirovich. "Film Directing Fundamentals". China film press, 1961.11. pp 227-235.
- [3] Murch, W. (2001). In the Blink of an Eye: A Perspective on Film Editing. Silman-James Press.
- [4] H. Nicolas, "Shadow synthesis for video postproduction," *IEEE Signal Processing Letters*, vol. 12, no. 4, pp. 321-324, 2005.
- [5] A. Kadi, "Talk about the process of film and television production," *International Journal of Social Science and Education Research*, vol. 3, no. 9, pp. 112-116, 2021.