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CSAVT-02
Video Technology

Certificate in Sound, Audio and Video Technology (CSAVT)
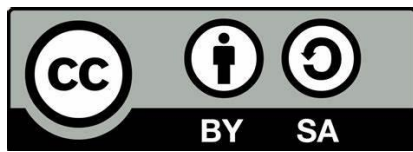
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CSAVT-102

Video Technology

Unit-1 Conceptualising Pre-Production

Introduction

There is a very thin line between TV & Video Production. And producing videos are now become a profession. Many of us are still confused about the production process and producing videos are not less than creating a creative content. In other words you can say Video industry is the content-driven industry. Every production has toundergo several stages of processing. But the video production divided into three basic stages like- - Pre-Production - Production - Post-Production Here we will discuss the first stage of film & video production & its functions in production.

Outcomes

Upon completion of this unit you will be able to:

- Describe the concept of Pre-Production
- Use small idea to a large extent
- Explain the fundamentals of Pre-Production
- Visualize the idea before shooting.
- Prepare a rough idea to a visual form.

Terminology

Visualisation:	Representation of an object, situation, or set of information as a chart or other image.
Storyboard:	It is the first planning tool of a film/video project on paper. Sequential drawing sheet of a film/video project.
Script:	A kind of written format of text for film, TV, Play, Drama etc.

The Concept

Pre-Production is the most vital stage for any Video production. Much of your time should be spent in planning stage (Pre-Production). Depending on the complexity of the project, 25% will be spent on filming, and the other 15% will be spent in editing, publicity, distribution & transmission. Pre-Production includes many things like ; Title-Pre Production work diagram

Above said all these steps are very necessary to understand the Pre-Production

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Research & Development:

Though Pre-Production is the most vital part in the process of video production, you have to concentrate on research & development. And before you start for shoot you should give stress on what is the purpose of shoot, who is the target audience and in which way you should develop the content.

Why research is necessary?
- Because the content is important.
- Because you have to set your target audience.
- Because the final output timing is necessary.
- Because research shows the actual & accurate budget.
- Research shows how to practically maintain the quality of the production.

Development work will be done by the team members afterthorough research. What should be done and what should be avoided is decided in development stages. Final concept of the project is decided in this preliminary stage of Pre-Production. In this phase of film making, the maker chooses a story. Furthermore, the story is chosen from a thought, play, novel, book, another film, a genuine story, unique thought, a daily paper cutting and so forth. In the wake of recognizing a topic or the message, the maker sits with authors to set up a synopsis. Next work is that the maker creates a blueprint out with the assistance of art director. It separates the story into one-paragraph scenes and that make an emotional structure. At that point, they decide the treatment required to improve the quality of the production.

In later stages, a screenwriter writes the screenplay. The screenwriter may rework it a few times to enhance the sensation, exactness, shape, characters, exchange, and general style to improve the quality of the venture. Be that as it may, makers frequently skirt the past steps. S/he may build up the screenplays in which financial specialists, studios, and other invested individuals are informed through a procedure called script coverage.

A film distributor may be contacted at the beginning of film making to help in subsidizing of the film and the conceivable budgetary accomplishment of the film. Executive producers embrace a headstrong business approach and consider factors, for example, the style, the intended interest group, the authentic achievement of comparable film preparations, the on-screen characters who

may show up in the project, and potential directors. Every one of these variables infers a specific interest of the task to a conceivable audience amid the projection and transmission.

The producer and screenwriter get ready with treatment, and present it to potential investors and financers. In the event that the point is effective, somebody may offer budgetary sponsorship. When all parties have made the decision to settle the arrangement, at that point film may continue into the pre-production stage. By this stage, the film ought to have an exact showcasing plan for particular audience.

Visualisation:

Visualisation is the way toward making pictures, charts, or liveliness for conveying an idea or message. Conveying through visual symbolism has been a powerful approach to impart both theoretical and solid thoughts since the development of human civilization. Visualization these days has extended to different segments of science, training, designing, intuitive interactive media, drug, agribusiness, space science and so on.

Followings are the purposes of visualisation behind any production be it a short film, TV commercial or promotional videos.

1. To tell the entire thought in visual shape Keep in mind that you're working for the visual medium, so you should visualise the entire process of production which would eventually be transformed onto the screen.

• What sort of changes do the characters experience throughout their journey and by what method will you show it before the audience?
• Which sorts of hindrances are likely to be faced by the characters and how would you display them on screen?
• Identify all the sequences and stamp them as plot focuses.
• Design each shot that outwardly improve the screen.

2. To Create a Strong Visual portrayal

Once the story is chosen, you have to make visual attestation. That is the reason it is said that a photo is worth more than a thousand words. Best pictures convey the story rapidly, effectively and strikingly. Be that as it may, there is a few inquiries those may come to your mind

• Has the new information moved the potential change in your scene?
• How would you utilize this trap to draw the viewers and the correct perspectives at the perfect time?

3. To Create the best shooting Plan

When you visualize the shot in your inward vision, you've all the while arranged the camera position on the location. You've likewise distinguished the focal point you'll require. You don't need to be stressed over the specific focal point and its millimetre. It's sufficient to think about the wide angle lens or a zoom lens. Once you've recognized every camera setup, now you've the certainty to make a shot-list and an appropriate shooting design.

4. To Develop the Point of View

All the great stories have a perspective and a "possess method for narrating style." It's vital to investigate that, from whose perspective you'll be narrating the story. Your decision on shot takingshould be distinct. If you decide to let it know from the other individual's perspective, your shots will be not quite the same as others. A spectator perspective may require all the more wide shots. These wide shots may at the same time catch the untold segments of the story. Every character in the shot gives a new data.

5. To Lead the Production Team

You need to remember both the imaginative and business parts of the film. Separating individuals in a little group will help you to enhance the standard of the movie.

Your crew members are totally manacled with you and they can't move until you've made sense of how and what you need to be shot. The group can't work until the point when they comprehend what the activity is, the thing that particular range of the area is "encircled in". This should be particular that why and how it is critical in the content. Working through these choices ahead of time doesn't imply that, you can't alter your plan.

Great pre-perception for better shoot

You need to shoot with your vision first and after that you shoot with a camera. Indeed, even essential storyboards help you to investigate shot juxtaposition and sequencing. You see many people with "cool" shot thoughts get into the alter room and locate the "cool shot" but doesn't cut with alternate shots. The main shot often does not coordinate with the second shot.

When we shoot we're working non-direct. Yet, the story is composed in a straight way. While shooting we utilize nonlinear arrangement to unfurl the story and it is the best technique. Stories are generally composed with occasions unfurling sequentially. There are exemptions like the Christopher Nolan motion picture "Keepsake", "Regular Suspects" and others. Conferring top to bottom pre-representation may help you to improve films.

Screenplay Writing:

- It is a composed work by screen writers for a film, video or TV production.
- A screenplay is a more than 100 pages written document and comprises of 12point textual style on 8 1/2" x 11" splendid white three-opening punched paper.
- One designed content pagemeasures up to approximately one moment of screen time. A normal page tally of a screenplay should come in the middle of 90 and 120 pages.
- Comedies may be of shorter duration (90 pages, or 1 ½ hours) while Dramas run longer (120 pages, or 2 hours).

Screenplay is the plan for a film or video project. Experts on the shooting set including the producer, director, Cinematographer, Art executive, VFX director, Set architect and on-screen characters change the screenwriter's vision by utilizing their individual feedback. In spite of the fact that a film is synergistic workmanship, the screenwriter must know about every individual's part. Also, the content ought to mirror the author's knowledge.

In spite of the fact that film is principally visual medium, screenwriters, instead of telling anything, demonstrate the story. A 2-page internal monolog may function admirably for a novel, yet it won't work for Film or TV production.

The advancement, exercises, explanation, feeling and reaction and trades of the characters are also depicted in a screenplay. A screenplay made for TV is generally called a teleplay. It helps in production when you have a grip of the general separating measures. The best, base and right edges of a screenplay are 1" while the left edge is 1.5". The additional half-inch of blank area to one side of a content page takes into account authoritative with cuts. The whole record ought to be single-separated. The principal thing on the main page ought to be the words FADE IN or something to that effect for transition:

Transition

Title-Sample Screenplay

Attribution-Mendaliv

Source-Link-https://commons.wikimedia.org/wiki/File:Screenplay_example.svg

The principal page is never numbered. Back page numbers showed up in the upper right hand corner, 0.5" from the highest point of the page, flush ideal to the edge. Be that as it may, it might shift starting with one screenplay author then onto the next.

The following is a specimen screenplay with rundown of things (with definitions) that depict the screenplay arrange, alongside indenting and organizing data. Screenplay programming will consequently design all these arranging components, yet a screenwriter must have an essential learning of the definitions to when and how to utilize every definition.

1- How to write a decent screenplay

Screenplay is the backbone of any production. Here you will take in a portion of the best, screenwriting procedures to start your alluring screenplay composing.

The secret to making the opening work is not exhausting. Simply give utmost importance to the main lead of the venture in the screenplay. The contention may or may not be identified with the primary story, but it should first stun the viewers.

These are a couple of ventures of screenwriting methods to get your motion picture/video generation begin. Initial couple of pages of screenplay has a few capacities like-

- It sets up the lead character.
- It demonstrates the time, area.
- The basic component ought to be first and foremost to begin the story.

The first act ought to build up the fundamental inquiry of the story: What does your lead character need to do, for sure and who remains in that direction?

Other than that, there are a few hints to make the screenplay more appealing.

- Try to maintain a strategic distance from superfluous portrayal in light of the fact that the gathering of people needs to know where they are and a name of the place.
- Don't let the characters to reveal to us what they are going to portray on the screen.
- Don't attempt to set up a protracted content (Not more than 150 pages).
- Though it is a visual medium so attempt to keep up a decent harmony amongst discourse and physical activity.

2- Format of Screenplay Writing:

- **2 (a) How to write Scene Heading**
- Indent: Left: 0.0" Right: 0.0" Width: 6.0"

A scene heading is a one-line depiction of the area. It should demonstrate the time of year of when the scene is being shot. It is otherwise called a "slug line." It should preferably written in UPPER Case.

Illustration: EXT. SHOPPING MALL - DAY indicates that the shot is being taken outside a shopping center during the daytime.

2 (b) How to write Sub header

Indent: Left: 0.0" Right: 0.0" Width: 6.0"

Sub headers help a director when some modification is made during the shooting. A decent case is when, there are number of fast cuts between two areas; you can utilize the term INTERCUT and the scene areas.

2 (c) How to write Action

Indent: Left: 0.0" Right: 0.0" Width: 6.0"

Scenes are composed on a present situation. It should be kept in mind that only stationary objects and activities are to be included so that they can be shown to the viewers on the screen.

2 (d) How to write Character

Indent: Left: 2.0" Right: 0.0" Width: 4.0"

When a character is presented to the viewers, its name should be conveyed along with the activities. For instance: The entryway opens and JOHN strolls in to the room. The name of the character should always be in upper case and constantly recorded over his/her lines of discourse. Other minor characters might be recorded without names, for instance "Cab driver" or "Client."

2 (e) How to write Dialogues

Indent: Left: 1.0" Right: 1.5" Width: 3.5"

Compose a solitary line or lines of discourse for each character. The length of the exchange of dialogues may varyaccording to the pace of the show in scene.

2 (f) How to write Extension

Put after the character's name

Some indicative alphabets should be mentioned in bracket after the name of the character to let the director know how the voice would be heard on the screen. For instance, if the character is talking as a voice-over, it would show up as JOHN (V.O.).

2 (g) How to write Transition

Indent: Left: 4.0" Right: 0.0" Width: 2.0"

Transition of shots should be mentioned as follows:

- CUT TO:
- DISSOLVE TO:
- QUICK CUT:
- FADE IN:

- FADE OUT:

While composing content, you should abstain from utilizing a progress unless there is no other approach to show a story component. For instance, you may need to utilize DISSOLVE TO: to show that a lot of time has passed.

2 (h) How to write shot

Indent: Left: 0.0" Right: 0.0" Width: 6.0"

The length of visual recorded between the on and off of the camera is called a 'Shot'. A shot demonstrates the viewer to the point of convergence inside a scene.

Examples of Shots:

- ANGLE ON –
- EXTREME CLOSE UP –
- ESTABLISHING SHOT-
- PAN TO -
- JOHN'S P.O.V –
- TILT UP-
- TRACK IN-
- DOLLY OUT-

Storyboard Making:

As examined above, arrangement is most important part of the entire production. There are numerous perspectives for pre-productionarranging; however we will concentrate on storyboard making.

Storyboard is the primary arranging device for a movie producer. It is the visual portrayal of a film or video project. Shot by shot you create the content and choose how to create each shot on the shooting floor.

A storyboard made with all sincerity helps you manage the budget and the man power. A storyboard brings out thoughts and discovers the genuine problematic spots in your scenes.

Making Storyboard is a crucial and finest part of the production. In the least complex frame, one can draw lines and figures on a notebook. This makes an energized 3D pre-visualization that practically feels like a motion picture. The best part is itsuits to customer's pocket.

Before you begin making the storyboard, study and live your shooting areas in subtle mind. You may even take a few previews from potential edges. This sort of field work will give you a superior visualisation and presentation to form the shots on paper. Camera is additionally an extraordinary apparatus for making an essential storyboard. Subsequent to taking many

pictures, stack the photos into a PowerPoint introduction and afterward play the introduction to perceive how it streams.

Creation of Storyboard:

Put two lines of boxes on the page with plenty of space above and beneath each column for making notes.

1. Match your cases so as to it can help you when you will shoot.
2. 2-Have loads of duplicates of your clear sheets.
3. Sketch every scene utilizing numerous cases to catch all your proposed shot points.
4. Critically analyze the completed item searching for crevices in shot scope or hazardous setups.
5. Always utilize pencil since it will help you to erase and redraw.
6. Indicate the camera position with kind of camera shots and camera developments.
7. 7-Use bolts to demonstrate the zoom's course.
8. 8-Use single bolts to convey development.
9. Show the bearing of a tilt by drawing the start and consummation in two separate casings. At that point put a bolt and a directional documentation to influence the activity to clear.
10. Use the space around each edge to influence notes on camera.
11. Also keep a notebook ready where you can note down the required apparatus, sound impacts, props, make-up and embellishments.

Pre-visualization helps you take your project to the next level. You will get two sorts of advantages in this kind of storyboard like-

A) It makes for a compelling customer introduction. They can without much of a stretch handle how your idea will truly function.

B) It can help you to imagine better complex sequences that are difficult to draw on paper.

When you are done with your storyboard, proceed to arrange your shooting technique. The scenes in your content may require various camera angles. If you are recording with a single camera, shoot the scenes directlywith fixed lighting arrangement. Make the shot list by looking through a scene's storyboard and noticing which casings can be taken amid a similar setup. Keep in touch with them together on the rundown. At that point utilize your shot list as a guide, and verify shots as they're taken. You will shield yourself from skipping a critical close-up or building up wide-shot.

Another advantage of the shot list is in making a calendar. You can get a harsh picture of how much time it will take to shoot a scene according to your designs. The crew members, just with a look at the shot list, can see how many shots are left in a particular set up so that they can plan for the following setup.

In the event that you don't have involvement with storyboarding and shot records, at that point give yourself a training run. Watch a scene from a motion picture, TV show or business. Keep your remote beside you, and note the camera angle changes, screen activity at regular intervals. At that point hold out your storyboard paper and draw a couple of minutes of the scene.

Lighting and camera work are great aptitudes to learn. In any case, keep in mind the expertise of planning. By the day's end, it's a speculation of time which would prove vital

Making of Shooting Script:

The shooting script is more intricate, exact, overwritten form of the screenplay. Not at all like what good judgment may recommend, the shooting script is not written by the screenwriter. It is composed by the director alongside his cinematographer, while both examine everything required for the film.

In wide terms, the primary distinction between the screenplay and the shooting script is that, the screenplay is an offering apparatus, while the shooting script is a production instrument.

At the point when a screenwriter pens the screenplay, s/he is endeavouring to offer, to the exclusion of everything else, the story. In this way, he needs to make a smooth read with an agreeable stream, generally his/her screenplay and diligent work wind up in the wastebasket. Screenplays should contain next to zero course at all. Directing the movie and calling the shots is not the writer's undertaking; it is the Director's obligation.

While your script is being written, its motivation is to enable readers to comprehend the story, however once a script is concluded and pre-production starts, the script is modified a tad bit to improve it a calculated outline for the production. When we're part up the script into areas that we can film, those terms are quite recently excessively unclear and could cause lamentable false impressions. As a result of this, we make an adaptation of the last written work content called a shooting content that is altered for our necessities in pre-production.

The script is conveyed and referenced while the film is underway too. Before making a shooting script, influences a reinforcement to duplicate of your written work. That way the last draft of script stays in place and all pre-production changes occur in the new duplicate. At that point, you need to number up the scenes.

These numbers are truly critical and shouldn't be changed at any point of time. After the film is shot we need to shoot a pickup scene that may need to go between scenes.

While making a shooting script, ensure the areas and time of day/night for each slug line. We require underwriting the name of each character on the first occasion when we see them in the content. We underwrite huge sounds. We could likewise include camera angles and movement under the supervision of the director.

Sometimes these things will be capitalized by the screenplay writer. In any case, these are the underlying changes we make while making a shooting script. The subsequent stage is to introduce props.

During pre-creation stage, the director changes the story according to his shooting content. The shooting script is ordinarily splitted into shots, including exact cinematography wording. For example, close-ups, Long shot, panning, dolly in, overexposed and so on. Before main photography begins, the shooting content is arranged according to the scheduled of dates.

a) A Guide to writing a shooting script

The shooting script is the producer's approach to discuss well with alternate departments of a production. It additionally spares time and money. Other than that if you're shooting content is finely written, the chances of committing errors would be less.

Shooting script is a critical apparatus to convey your director's vision to the team alongside storyboard. In the shooting script the director is separating the screenplay into number of shots. So it is a sort of another draft of the script composed by the director, in this manner the shots you write in the shooting script will characterize the scene.

b) Arrangement of shooting script

Before you have a look at the shooting script, ensure that, the script is elegantly written and to be in the correct manner. It is essential. In case, the content is not composed in proper manner, you will be left with a broken apparatus and you won't know the correct length of a scene.

Try not to go into an excessive number of subtle elements now; simply consider the general atmosphere. Your subsequent stage will be to ensure the right feel from the shots.

c) Writing the shooting script

At least three significant aspects should be looked into before writing shooting scripts.

1. **Camera**
2. **Lighting**
3. **Blocking of the characters**

The camera

When we say camera, we mean camera angle and the sort of focal point you utilize as a part of the project. Consider the shot you need for each action. You ought to write it first in the script since it encourages director to picture the film better. When you are done, go through all the script and ensure that nothing is left behind. Go through the shots again and think what sort of focal point will present to you the best outcomes.

Lighting and hues

It is high time the directors considered more image techniques to enhance the atmosphere. For that he needs to talk to the executive of photography. He should be given freedom to express his thoughts for a better yield. Your attempt should be to ensure that the subject of the film is communicated by these shots.

Blocking of the characters

The third step is to consider the blocking of the characters. Blocking is the movements of the characters required for filming a particular scene.

The shooting script configuration:

The shooting script is a table equipped with practically everything about the shots. It ought to contain these points of interest including number of the scene, number of the shots, the clarification in the matter of who is in the shot, what is going on in it, time – day/night, area Indoor/outdoor, the exceptional camera needs (like Steadicam, helicam, submerged camera or activity cam) and the area of the scene. You need to compose the changes required for each shot and specify extraordinary sound impacts (Sync or foley) that are essential for the scene.

Activity

- Study script, screnplay writing in YouTube and try to identify the tricks in which they would have been made. Try to utilize your skills and learning to develop that kind of ability.

Unit summary

In this unit you would get to know the basics process of transformation of a small idea into big screen storytelling for visual medium.

Assignments

- Define pre-production in 5 lines.
- Describe the names of software used for screenplay writing.
- Explain the need of research in Pre-production.
- Define screenplay in 150 words.
- Write down the concept behind pre-production and explain why it is necessary in the first stage of Film/Video production.
- What are the steps to write a good screenplay?
- Explain the necessity of screenplay.
- What are the main aspects of a shooting script?
- Try to write a two character dialogue scene.
- Differentiate between shooting script and screenplay.

Assessment

Initially write a short story. At that point make heaps of inconvenience to the main protagonist. After the improvement, include few characters and suitable discourse into the story. At that point divide the story into little scenes.

Resources

- https://issuu.com
- http://www.oercommons.org
- http://www.storyboardthat.com
- https://en.wikipedia.org
- http://www.indiewire.com
- https://goodinaroom.com
- http://www.elementsofcinema.com/

Unit 2 People involved in Pre-production

Introduction

Even asitis a medium of art, still it is considered as a community oriented medium of science and business. Number of artists, expert and different groups of people are engaged with the procedure of film making. At the time of shooting the director did his/her work with the assistance of other crewmembers.Quite a few numbersof talented and expert hands including chief associate, second associate, second unit director, script supervisor, and cameraman needed to raise the standard of the production.

Outcomes

Upon completion of this unit you will be able to:

- Describe the people involved in pre-production stage
- Usetheir talent and skill in pre-production
- Explain the responsibilities of each skilled person in pre-production
- Know the work structure of every crew member

Terminology

Skilled	Showing the knowledge, ability, to perform a certain activity within a stipulated time period.
Agreement	A negotiation, typically legally binding arrangement between parties for a course of action.
Technician	An expert for practical application of technology in film making.
Casting:	Selection of certain individuals to play their parts as actor, dancer, singer, etc for a particular role or part in a script, screenplay, or teleplay or in the film.

By this timeall of you must have the knowledge that Pre Production is the most crucial stage for any sort of film/video production.

A large no of individuals are engaged to bring the best output.

They are divided into three parts

1. **Highly skilled or fully professional**
2. **Semi skilled or professional**
3. **Unskilled or amateur**

Highly gifted people groups are exceptionally experts and they know how to do their job effectively in coordination with others including the director of photography, sound engineer, VFX supervisor, art director and stunt coordinator. Operating cameraman, assistant cameraman, lighting chief and others are proficient people groups who are associated with the production stage. In any case, while we are discussing pre-production stage then production designer, production assistant, executive producer play crucial roles.

There is no such department called production. However, as indicated by some expert's work, a division is formed and known as production office. Furthermore, a certain groups of people are included under this department. Let us quickly talk about it.

Producer:

The key individual who makes the film is known as Producer. A film takes shape due to his/her fascination towards craftsmanship and culture. At the end of the day s/he bears the entire cost of the production. After total discussion with the director, producer takes the financial burden. S/he often has to sit with the script writer and director for story, location, and casting director.

Executive Producer:

Executive producer executes the investment of producer. Till 1980 Line producers are known as executive producers in Hollywood. They used to go to the shooting spot oversee the creative parts of the production. The executive producer often invests fund as and when required.

Production Designer:

The production designers are in charge of the visual splendor of a film, TV or theater production. They pick up a style for sets, areas, designs, props, lighting, camera angles and costumes, while working intimately with the director and producer.

Once the idea is selected, designers name and deal with art department, which devise a plan and form a team. Designers should have expertise in film, TV or theater production despite the fact that they do have some assistants to oversee things. In the theater, production designers are called stage or set designers.

Production Manager:

The responsibility of the production manager includes:

1. Chalking out plans withactors and actresses to finalize shooting dates.
2. Transportation of crew members and artists n to shooting location.
3. Production administration and management
4. Preparation of Budget

A production manager deals with every single administrative issue and mostly keeps the director free of burden.

Production Accountant:

Film making is anexpensive venture therefore a huge amount of money is pumped into the production.So, the role of a production assistant is crucial as s/he keeps all the accounts starting from the pre-production stage till the release of the movie.

Production Coordinator:

A production coordinator is the person who plays the role of mediator between the producer and others. His/her part is essential in a film production.

The coordinator decides the following aspects of film making:

1. Location of the shooting
2. Arrangements of required equipment
3. Hiring of professionals

Director:

There is a person in each and every family, who manage the entire family and whose instruction is carried out by family members. And s/he is known as the head of the family. Similarly, the director is the captain of the ship or hey person in the film making.

His responsibilities include the location of the shooting, which lighting condition is best to shoot, the kind of cameras and so on. Most directors are called the Jack of all trades'. They know every segment of film making. Some are there who assumes the responsibility of producing and directing. There are a lot of cases in Bollywood like-Raj Kapoor, Raj Kumar Santoshi, Raj Kumar Hirani, David Dhawan, Sanjay LeelaBhansali and so on. Director's innovativeness, vision, specialized learning, solid self control, right administration aptitude, aesthetic and business mind sets the silver screen on fire.

In pre-production stage a director discusses the story with the producer, artists, art director and cameraman and others. If required, then s/he corrects the whole story and sequences. Before going for shoot s/he talks about each subtle elements of the film with the chosen crew members.

Screenplay Writer:

A screenplay writer is an essayist. S/he is the individual who writes screenplays for several mediums such as stages, films, TV projects, funnies or computer games.

Each screenplay and teleplay begins with an idea or thought. These days, however, scripts are mostly written on current issues and biopics are also made. Screenwriters who frequently pitch new ideas, regardless of whether unique or an adjustment, don't become jobless.

Storyboard artist:

A storyboard artist envisions stories and representations, frames of the story. Quick pencil illustrations and marker renderings are two of the most widely recognized conventional systems, albeit now days Celtx, and other storyboard applications are regularly used to draw storyboard. The computerized camera is one of the most recent procedures in making storyboards.

They are generally independent specialists, commonly procured by art director and movie director. Commonly independent storyboard artist will have a place with at least one storyboard organizations much like an illustration agency.

Numerous storyboard specialists these days start and complete their work on PCs utilizing programming and advanced pencils or a graphics tablet. Storyboard artists may utilize photographs to make visuals where stock photographs or photographs taken particularly for the task are assembled carefully to deliver a photographic portrayal called a photo visual.

For movies, a few movie producers, directors, and makers utilize clip art PC programs intended to make storyboards, or utilize a devoted 3D storyboarding programming, or a more multi-purpose 3D program which can likewise be utilized to create components of the storyboards.

Art Director:

An Art director is a man who is in charge of each one of those properties and set, that is required for shooting at area. His/her guideline is completed by his/her group to develop a set. Art director's work begins after the scripting. In this stage Art director talks about with director about every shot, at that point trains his/her group to fabricate another set by the request of the every scene. Art director conveys his/her full and effective group to make the set in time.

Art Department coordinator:

Continuously the art department is the greatest department on any film production, because of its group individuals. Art Department coordinatorcoordinates everyday administration. These people groups must be very proficient and sorted out to adapt to the day by day to every day work stack.

Their primary obligation is to co-ordinate information between the accompanying departments like: set decoration, props, production, locations and construction. They are ordinarily accountable to the supervising art director and the production designer.

They are among the first to be utilized in a film's art department. As a rule they start working with the production manager. They ensure that art department spending plan (e.g. work costs, set dressing, wraps, and so forth.) is monitored properly. Along these lines correspondence is made between film's producers through the production manager.

Art department coordinator plays out an extensive variety of jobs including:

1. Compilation of costumes
2. Schedule for the art department; sorting out transport and travel related issues
3. Shipping hardware during overseas schedule
4. Supplying duplicates of all illustrations and data.
5. They additionally download and set up all area photos for the Production Designer and make a rundown of all sets for the construction.

Art Department coordinators examine all location notes with points of interest of development, dressing and vehicle prerequisites. They also arrange authorization letter from the concerned authorities for shooting requirements. They also oversee health and safety issues.

During shooting, they needed to be contacted by the standby art director who liaisons with them about any pressing needs.

Art Department organizers deal with an independent premise and might be required to spend long time working far from home.

Casting Director:

Casting director is the individual who chooses the character for every single scene. He organizes audition for this selection process. Before picking up anybody, he hands over a page of script to an actor to show his skill before the director and casting director. A good performance during audition lands the actor in a role for the project. As so many characters are there in a movie or production, it takes even a week to finalize the actors for a project. Each aspirant is selected o the basis of his/her aptitude, capacity, conduct, persistence, dialogue delivery style. In spite of the fact that each character is unique in his/her own capacity, casting director takes utmost care to finalize the casing.

Lyricist:

A lyricist writes the lyrics of the songs. A successful lyricist works closely with a music director of a production. Commonly, a lyricist plays a crucial role in the success of a movie.

An average lyricist manages to operate admirably with other members of the music team. A decent lyricist can come out with some very good lines, which enhance the quality of a music album.

Music Director:

Music director is the head of music department of a production. However, the job of a music director is extremely troublesome in Indian Film industry. Despite the fact that Indian audience cherishes music, the part of music in Indian movies is critical and unequivocal. Before shooting, music director makes music with Lyricist and director for movie. Music director adds to the circumstance in a movie with his soulful creation working in tandem with director and uses it in the movie.

Cinematographer:

The most imperative division in the production is filming the scene. It is done specifically under the supervision of cinematographer. Cinematographer is the individual who knows the whole traps of photography, lighting and camera systems. S/he trains the camera administrator and other technicians. In pre-production stage a cinematographer examines every details of each and singular shot with the director.

Visual effects Supervisor:

The most innovative, otherworldly shots and scenesare conceived under the immediate supervision of visual effects supervisor. Before shooting visual effects supervisor speaks to the director, cameraman, and production manager for execution of the special effects. Several professionalsare engaged to enhance the standard of visual effects.

Crew's Responsibility:

A group of people plays very important role in the success of a commercial feature film and they are called the crew members.The success of a movie depends upon the level sincerity of the crew members. Crew sizes fluctuate depending upon the scale of mounting. Some specialized crew members identified as day players, carpenters, crowd specialists, security guards, and so on.

Unit summary

In this unit you learnt the key people and the role they play at the pre-production stage of a production. What's more, in the wake of perusing this unit you comprehended that every one's part is extremely novel and testing in the film production.

Assignment

- Discuss the role of Producer in Film/video making?
- Who is responsible for all the expenditure in the shooting?
- Who is known as the captain of the ship?
- Describe the role of a music director in Indian film industry.
- Briefly discuss the works of a production coordinator.
- Write down the three categories of people worked for film making.
- What is the role of visual effects supervisor in the pre-production stage of film making.
- Who is responsible for the implementation of Health and safety procedures?
- Whose job is very important in Indian film industry?
- Who are capable of writing both words and music piece?

Resources

- https://www.sokanu.com
- http://www.thevideoeffect.tv/
- https://en.wikipedia.org/wiki/Main_Page
- http://filmincolorado.com/

Unit 3 Making of Set, Music & Budget etc.

Introduction

Ahead of beginning the shoot of a film, a large number of tasks are to be completed by experts with refinement. Making of a striking set to shoot is always expensive than doing it in natural location. Making of music, making of budget and making of set are to be discussed in this unit.

Outcomes

Upon completion of this unit you will be able to:

- Describe the set making process in pre-production stage
- Elaborate the responsibilities of art department
- Explain the importance of budget in film making
- Know the music talent of Indian film industry

Terminology

Set	Representation of a building, palace and other properties as and when required by the director.
Storyboard	It is the first planning tool of a film/video project on paper. Sequential drawing sheet of a film/video project.
Diegetic Sound	Type of sound which is visible in screen.

Making of Set

Set making is the procedure to construct full-scale view, as determined by an art director working in a team with the director of a film or any other production.

The set designer creates illustrations and realistic views , research about properties, surfaces, etc. Designers and most business theaters have started creating scale illustrations with the assistance of PC drafting projects, for example, AutoCAD, or 3d max.

Art Director, the man behind the set

It is the art director's business to understand the imaginative vision of production designer and director to improve the standard of production. The art directors are the vital components in theaters, short films, feature films, advertisements and varieties of TV productions.

In bigger productions, art directors take charges of the work routine and the art department budget. On a few occasions, the art department may comprise of just the production designer, art director, and a few assistants.

The art directors dissect the content to distinguish all props or extraordinary things those are required by the directors. On a big budget film or TV production, this work may begin four to five months before the shooting. On low budget productions, it can be as less as one month.

It's vital for an art director to work with other concerned divisions. They work together intimately with the Location Manager to consult about when and where the locations can be readied. They should discover savvy inventive arrangements which add to the splendor of the production. On location, they additionally look after the safety arrangements.

Job of an art department coordinator:

The art department is a indispensable part of any film or TV production. Art department coordinators give everyday

administration and support to help keep the division running successfully. They should be exceptionally fit and sorted out individuals to adapt to any situation required by the production team.

The coordinators are answerable to the supervising art director and the production designer. They fill in as a scaffold between the art department and production.

They are among the first to be utilized in a film's art department. They as a rule begin their work with the production manager. They clarify the art department spending plan (e.g. labor costs, set, dressing, props and so on).

Art department coordinators play out varieties of roles including:

1. Compiling of locations those may include house, hill, palace, school, hospital, police station and so forth.
2. Preparing calendar for the art department;
3. Organizing transport and travel;
4. Shipping equipment when working overseas
5. Supplying duplicates of all illustrations and data;
6. Download and set up all location photos;
7. Make a rundown of all sets for the construction
8. Preparing of set dressing budget.

Art department coordinators are considered the most capable individuals in a production unit. At times they chip in with their assisting skills to help out the production designer.

Film Music Composition:

Indian films are incomplete without regular doses of dance, music and songs. Film music not only adds value to a scene but impacts a film's overall appealimmensely.

Film music makes disposition and fortifies importance of film. Music is not seen as a rule but it comes in the sequence in a natural manner.

At present, music is routinely showcased as a ware from the films for which it is formed or made. It has its own auxiliary crowd. By and large Film music has gone up against its very own musical existence since the arrival of compact disc. The lyricist composes the verses in types of expressions of the melody which are set to tune by the music arranger or music

director. S/he is helped by an orchestra. The melodies are sung by proficient and prevalent vocal artist. They are playback vocalists who play back for the actors.

Tunes in Bollywood motion pictures are purposely created with lyrics. These are regularly composed by recognized lyricists and frequently inserted into the music track. In Hollywood, a writer who exercises considerable authority in film music is in charge of the main part of music on the film's soundtrack. While in a few films melodies may assume an imperative part in some Bollywood films.

Bollywood film tunes regularly utilize outside instruments and revise existing tunes. Bollywood films comprise various genre of music like Ghazal, Disco, Qawwali, Devotional, Pathetic, Patriotic, Thematic and so forth.

The different employments of dialects in Bollywood tunes can spellbind the listeners. A few melodies incorporate different dialects, for example, Urdu and Persian, and it is normal to hear the utilization of English words in tunes from present day Hindi motion pictures. Other than Hindi, a few other Indian dialects have likewise been utilized including Braj, Avadhi, Bhojpuri, Punjabi, Bengali and Rajasthani in Bollywood films.

Presently film soundtracks are uploadedin social networking sites like Youtube much before the film is releasedin theater. Earlier, radio was the only medium of film music yet with the introduction of satellite TV and FM radio the situation has been changed radically. Also, the appearance of new media like web has changed the audience group.

Film Budget Making:

Budgeting a film is a procedure required to make a financial plan for the production. The budget is fundamentally a report, which can run into more than 150 pages in length. It is utilized to secure financing for and prompt the three phases of the film making.

As a rule a budget is divided into four segments like:

1. Above the line (talents, procuring of types of gear, location and so on),
2. Below the line (direct production costs),
3. Post-production (editing, visual effects, and so on.),
4. And others (insurance, completion bond, promotion and so on.)

The budget excludes film promotion and marketing, as it is the obligation of the film distributor. However, sometimes the producer bears the cost of film promotion.

Elements of Budgeting

Story rights: As discussed earlier, a film's success depends on the quality of novel, music or computer graphics. It can cost anything from two or three thousand. A unique screenplay from a writer can cost more.

Screenplay: While the remuneration of a screenplay writer in India depend on the paying capacity of the producers, in US Columbia Pictures pay 2 percent of the gross profit to the screenplay writers.

Producers: Film producers and executive producers are the key individuals who put resources into a film production.

Director: As the director is the captain of the ship he is one who receives the bouquets and the brickbats. When move does well a director walks away with the credit while the failure also attributed to him. What we see on a screen is the imagination of the nobody but the director.

Production costs: The cost of delivering the film includes gear procurement, wages of the crew, production configuration, set making, studio costs, costumes, cooking, settlement, transportation, travel, inn stay, and so on. The director of photography is typically the most generously compensated individual from the crew.

Visual effects: Now a day each story demands greatest measure of VFX shots and the best thing is, it looks normal in extra large screen. Though the cost of computer generated imagery and other visual effects enhance the quality of a movie, it needs loads of diligent work.

Music: The music arrangers who are in demand ask for fat remuneration for their unique score. Some movies may not look good content wise but they get away and become a hit because of their music albums. Ordinarily, the music budget of a noteworthy film is around 2 percent of the last aggregate. In any case, some film's music budget crossed million.

Tips for cutting the budgets

Elimination of night scenes-

Shooting around evening time requires intense/costly lighting and the payment of crew members during the evening is more than usual. For Example, Broken Arrow (1996) cut expenses by several dollars by dispensing with the night scenes from the content. Numerous directors have utilized the "day for night" system for this cost cutting purposes.

Avoid area shooting in celebrated regions-

Shooting a scene on, profoundly bustling region for instance, the Parliament of India/Mumbai Railway Station requires halting movement with a high security caution. On the off chance that the director moved the shooting area to a set then the production can save significantly. Besides, a few areas, (for example, business ventures like inns, eateries, bars and dance club) are more ready to permit filming than others. A few producers who work on a low-budget, generally abstain from paying area charges and look to catch shots at set or by vfx.

Use obscure, not-well known on-screen characters-

Striving for obscure and not well known on-screen characters and performing artiste is the best alternative to cost cutting. Picking of settled motion picture stars demands more cost than obscure performing artists.

Film in another district

For instance, numerous Hollywood films set in U.S. urban areas are shot in Canada to exploit bring down work costs, subject to fluctuating trade rates. They exploit government and commonplace endowments intended to develop and maintain the film and TV production ventures in the region. Numerous U.S. states have reacted with impose motivations of their own.

Going over budget

In the US film production framework, producers are regularly not permitted to surpass the underlying budget. Exemptions have obviously been made, a standout amongst the most prominent cases being Titanic (1997). Director James Cameron ran on solid land with the budget and offered his charge back to the studio. In different nations, producers who surpass their budget have a tendency to eat the cost by getting less of their producer's expenses. While the US framework is productive and can stand to go over budget, some other nations' film businesses have a tendency to be financed through government appropriations.

A few cases of Budget:

A portion of the motion picture studios and production houses are hesitant to give the best possible budget. Here a few cases of budget are given from the web sources.

Lara Croft: Tomb Raider – The Cradle of Life

- **Story rights and screenplay**: $4 million
- **Producers**: $4 million
- **Director (Jan de Bont)**: $5 million
- **Cast**: $17.25 million
    - **Angelina Jolie**: $12 million
    - **Extras**: $250,000
    - **Other (inc. Angelina's perks)**: $5 million
- **Production costs**: $67 million
    - **Set design and construction**: $17.8 million
- **Visual Effects**: $13 million
- **Music**: $3.3 million
- **Editing**: $3 million
- **Post Production costs**: $1.6 million
- **Total**: $118 million

Terminator 3: Rise of the Machines

- **Story rights (Carolco and Gale Anne Hurd)**: $19.5 million
- **Screenplay**: $5.2 million
- **John D. Brancato& Michael Ferris**: $1 million
- **Director (Jonathan Mostow)**: $5 million
- **Producers**: $10 million

- **Cast**: $35 million

- Arnold Schwarzenegger: $29.25 million + 20% gross profits
- **Arnold's perks**: $1.5 million
- **Rest of principal cast**: $3.85 million
- **Extras**: $450,000
- **Production costs**: $58 million
- **Post-production costs**: $4 million
- **Visual effects**: $20 million
- **Music**: $2 million
- **Other costs**: $33.6 million
- **Total**: $187.3 million

Spider-Man 2

- **Story rights**: $20 million
- **Screenplay**: $10 million
- **Producers**: $15 million
- **Director** (Sam Raimi): $10 million
- **Cast**: $30 million
    - Tobey Maguire: $17 million
    - Kirsten Dunst: $7 million
    - Alfred Molina: $3 million
    - **Rest of cast**: $3 million
- **Production costs**: $45 million
- **Visual effects**: $65 million
- **Music**: $5 million
- **Composer** (Danny Elfman): $2 million.
- **Total**: $202 million

(Source- Wikipedia.org)

Unit summary

In this Unit we have learnt the key persons involved in making the set, budget, music, and their role and responsibility in the preproduction stage. Besides that you have acquired the knowledge about the elements of budget and how to minimize the cost in budgeting.

Assessment

- Discuss the role of Art director in Film/video making?
- Who is responsible for all the expenditure in the shooting?
- Who is known as the bridge between art and production department.
- Describe the role of Music director and lyricist in Film industry.
- Briefly discuss the works of an art department coordinator.
- Write down the process to minimize the cost of budget in film making.
- Briefly discuss the element of budgeting in 100 words.

Resources

- https://www.futurelearn.com/
- https://www.youtube.com/
- http://www.thevideoeffect.tv/
- http://www.magix.com/us/movie-making-software/
- https://en.wikipedia.org/

Unit 4 Production Design & other things

Introduction

As discussed earlier, production is the activity of making or assembling ofraw segments or crude materials to a finished item. At the end of the day, it is compilation of good things. Every assembly unit needs crude materials, apparatus, areas for foundation and man forces to run it. Much the same as some other businesses, film is considered as an industry. It needs individuals or a group of individuals for both before the camera and behind the camera to complete the job. In this unit, we will talk about the area requirements for shooting, the hiring of gear and picking of crew individuals.

Outcomes

Upon completion of this unit you will be able to:

- Describe the peoples involved in pre-production stage • Use of their talent and skill in pre-production stage
- Explain the responsibilities of each skilled person in pre-production

Terminology

Skilled   Showing the knowledge, ability, to perform a certain activity within a stipulated time period.

Agreement   A negotiation, typically legally binding arrangement between parties for a course of action.

Technician   An expert in the practical application of a science, technique of an art or craft.

Casting   It is the pre-production process for selecting a certain   type   of   actor, dancer, singer, or extra to enact a script, screenplay, or teleplay or in the film.

Production Design:

The production originator is the individual in charge of the whole procedure of planning.

He regularly uses the storyboard as a guide and cashes in on an opportunity to make representations of the settings. Film is the successor of painting and theatre. Film has fused a considerable lot of the angles from its antecedent. Outline for sensible films has an incredible arrangement to do with visual generalizations the way the watcher anticipates that specific things will look. In the event that content requires the foundation of an upscale home, certain components can be utilized to make that impact. In the event that the objective is to build up a secluded, run down mountain lodge, different parts can be joined to propose that. Those settings for a dream film might be progressively the formation of an imaginative designer.

Visual environment characterizes character well in the film. A littered domain has a tendency to set up comparative qualities in the character. Numerous different components add to the

tone and climate of a scene. Shading assumes a vital part, with scenes being imagined in an assortment of passionate tones to earth tones.

A film can clearly go in a wide range of bearings as far as stylistic theme is concerned. The key is that it needs to go some place. In the event that low budget films have a typical falling flat, it is that they much of the time do not have a predictable way to deal with visual style. Frequently this is both an enhancement and a camera matter. It is additionally to a great extent a monetary reality. Low budget films regularly stall out in the areas that are accessible to them, shooting without the assets or an opportunity to change things.

Production Designer:

Production originators are the individuals who are in charge of the visual idea of a film, TV or theatre production. They distinguish an outline style for sets, locations, illustrations, properties, lighting, camera angles, make ups and costumes. S/he is working intimately with the director and producer.

Once the idea is chosen by the creative director, designers typically name and deal with a workmanship office. The workmanship office incorporates an outline and development group. They regularly frame a solid association with a specific director, who they may work with on numerous productions.

Designers must have the practical experience in film, TV or theatre. In the theatre, production planners are additionally called stage or set architects. Production architects must have the information of-

- Drama/theatre studies
- Architecture
- Creative/performing/technical arts
- Graphic design /illustration
- Interior outline
- Theatre/execution outline
- 3D design
- Landscape architecture/design
- Fine art/visual art

Responsibilities:

Most production designers fill in as freelancers. The imperative piece of their work is advertising their aptitudes and experience, in making contacts and preparation agents.

Their first errands typically incorporate illuminating the brief and concurring an appropriate charge and timescale for the production, which is some of the time done by an agent.

After this, undertakings may include:

- Reading the total scripts to recognize factors that demonstrates a specific visual style

- Considering the production brief, which can be in form of written or verbal?
- Meeting with the producer and director to talk about the ideas and the production necessities
- Sourcing fitting materials and looking into effects
- Researching on each viewpoints like art, history, legislative issues, history and producing design ideas
- Planning and observing to outline the budget
- Providing scale illustrations or models for studio or area sets
- Researching, evaluating and setting up a property list
- Producing plan thoughts for outfits, wigs, properties, enhancements, make-up and illustrations
- Identifying and surveying potential spots like studios and areas
- Presenting thoughts to other crew individuals engaged with the production, for example, performing artistes and camera administrators
- Hiring and dealing with an art department crew or team members
- Instructing the set development organization, picturesque craftsmen and enhancements experts and observing their work
- Collaborating with the costume designer and the director of photography, and additionally the properties, lighting chief and sound engineer
- Attending blocking, rehearsals and shooting to exhort on visual presentation
- Checking sets and locations amid shooting to ensure that all the necessities are met.

Location Scouting:

The audience expects everything about the product tobe wonderful. Furthermore, from the production perspective, a best area gives the absolute best. Also, legitimate area exploring brings about the best area. Area exploring is a crucial procedure in the pre-production phase of filmmaking.

When scriptwriters, producers or directors have chosen what general sort of landscape they require for the different parts of the scene that are shot outside of the studio, the look for an appropriate place or "area" outside of the studio started. Once in a while Location scouts arrange legitimate access to filming areas.

Location necessities

Appropriateness of an area relies upon many components, including:

- Overall aesthetic
- Financial cost of production
- Logistic plausibility inclusion
- Distance from base of operations or different areas planned
- Availability of stopping and offices to keep crew and ability protected and dry constantly
- Availability of electrical power or plausibility of getting generators for lights and electrical gear.

- Available light (inside or outside)
- Weather conditions (outside)
- Permission and participation of area proprietor and neighbors, nearby government, and law authorization

Process of Work

The location scouts and different locations department staff (see beneath), working under the supervision of the Location Manager, by and large endeavor to give the same number of conceivably valuable/reasonable thoughts.

Fixing problems

Taking care of location issues can be an extremely difficult occupation. It requires diligent work for extend periods of time, sharp relational abilities, concentration on each scene what will shoot, capacity to think even one foot or make a move rapidly and mindfully and in addition utilizing specialized aptitudes.

Thought of climate

Nearby climate conditions can consider vigorously along with an area's feasibility and influence numerous regions of production booking, so possibilities and exchange, budgetary-proficient plans ought to be made well ahead of time of any shoot day with plausibility to be influenced by climate.

A location with potential to be influenced by climate ought to dependably be cleared and put, ahead of time, with the property proprietor's understanding and assent "on climate hold" or under the condition that production will just affirm utilization of the area and start photography pending suitable climate conditions.

Job titles and job descriptions:

A film crew may have the accompanying titled positions staffed with respect to the Locations Department.

Location Manager

Location manager regulates the Locations Department and its staff, commonly detailing straightforwardly to the Production Manager and additionally Assistant Director (or even Director or potentially Executive Producer). Location Manager is in charge of all last clearing of a location for shooting and should frequently help Production/Finance Department(s) in keeping up spending administration with respect to real location/allow expenses and additionally work expenses to creation for himself and the Locations Department on the loose.

Assistant Location Manager

S/he works with the Location Manager and the different departments in orchestrating specialized scouts for the fundamental staff (grips, electric, camera, and so forth.) to see alternatives which the Location Manager has chosen for shooting. The Assistant Location

Manager will be beginning amid the shooting procedure to regulate the entire operation, while the Location Manager proceeds with preproduction from on the forthcoming locations.

Location Scout

A location scout does a great part of the real research, footwork and photography for reporting location conceivable outcomes. Location Manager Often do some exploring for himself/herself.

Location Assistant

Location Assistant is contracted by the Location Manager to be on-set some time recently, amid, and after the filming procedure. General duties of the assistant include:

a. Arriving first at the location to permit the set dressers into the set for arrangement
b. Maintaining the cleanliness of the location ranges amid shooting
c. Limiting the effect of a working production crew on the location grounds
d. Fielding objections from neighbours; and at last, toward the finish of the filming
e. Managing on-set time and crew concerning the conclusion of the location inside legally allowed time limitations.

There are by and large one to three assistants on a shoot at any given time.

Location Production Assistant

This position exists for the most part on bigger spending preparations. The Locations PA is the assistant who is never beginning, yet rather is continually "preparing" a location or "wrapping" a location. That is, the point at which a location requires a few days of set up and breakdown earlier and following the day(s) of recording.

Parking Coordinator

Parking Coordinator is regularly employed by Location Manager on a need premise. Their work is to direct Parking Staff keeping in mind the end goal to secure and organize crew stopping including gear trucks and individual vehicles. Locations Department and Parking Department may cooperate with neighbourhood law authorization to arrange movement control if the scene is being shot includes roadway.

Waste Removal

Location Department's aura is to be the last to withdraw a location upon wrap and to leave the location in order if worse condition as it existed upon entry. A waste evacuation organization may be enlisted on an as-require premise.

Strategies:

A location scout normally takes graphic, all encompassing photos or video of location potential outcomes. A decent location scout will make photographs of a location probability that mirror the stylish objectives of the generation and will likewise incorporate outwardly

illustrative utilitarian photography and data archiving substantially more than exactly what will possibly show up onscreen.

Extra distinct data may include:

- Reverse/interchange edge, all encompassing photography, to demonstrate space accessible for camera, lighting, video assist, hair and makeup
- Geographic arranges, compass directions, other map information as might be pertinent
- Ambient lighting conditions at different circumstances of day (or night), solar information, i.e., angle of sun at various circumstances of day
- Photos of holding/organizing territories and accessible stopping or potentially stopping limitation signage
- Hand representations of road/building layout(s), building/room floor plan(s), room or territory measurement information
- Crew/vehicle gets to information, i.e., entryways, lobbies, lifts, stairs, accessibility and data of faculty required for get to
- Notes with respect to surrounding sound conditions
- On the shoot day, if a set is to be "dressed" (props/furniture included or (re)moved),
- Locations Department as well as Art Department/Property Master Staff/Prop Stylist will photograph the particular zones to be influenced in order to guarantee that the location will be come back to its unique state once shooting is finished.

As we have examined before choosing the correct location is the initial move towards an effective shoot, here are a couple of insights that will empower you as you research to potential film/video shooting areas.

1. **Concentration on content**. Get an area that that perfectly suits to your story line sets.to explore an area or location this the primary regulation that needs to be worked out.When you will set out to survey your locations, somehow you may face face endless potential outcomes like: natural areas, memorable destinations, unmistakable structures, urban scenes and waterfront settings, and numerous different things. Keep in mind one thing.Pick an area or location that offers itself to the story you want to convey. You should never be bound by your areas or location. Areas are fundamentally rough materials. You need to acknowledge what the substance asks for already for picking a preferred best area or location.

2. **Explore at the ideal time**. We should be constantly careful about the locations or areas can change according to the weather and the climatic conditions. Choose or check your location or areaduring day time. Change in locations can create shockingly huge changes on the reasonableness of a location.

   Elements that ought to be in your mind like-

   - Noiseand Traffic
   - Visitors for entertainment and amusement spots
   - Tourists at beautiful or memorable spots

3. **Accessibility of light**. Temples, sanctuaries, mosques, churches, dance halls, eateries, amphitheaters and homes for the most part highlight with low measures of accessible

lighting. Verify the light levels by shooting two or three snapshots of test film with your handheld or mobile camcorder.

Look at the window curtains that can be opened to allow light. Sometimes you may wish to acquire lights or approach the location proprietor for authorization to supplant the knobs in available light apparatuses with brighter lights.

4. **Power supplies**. Numerous open air locations are a long way from control sources and apart from this some AC challenges could be faced in indoor locations. Hence conveying with numerous batteries of camera could be dependably a smart thought. Be that as it may, regardless you'll have to assess your energy choices at any location what you will pick.

   - How will you offer energy to your lights?
   - What on the off chance that you do wind up depleting every one of the batteries?
   - Could you find any place to connect to the charger?
   - Whether the selected spotis remote and adequate to influence an auto to lighter AC connector a smart thought?

5. Perfectly clear sound. Perfect, amazing sound is vital for making a film. Search for a hush that guarantees and provides youthe location as per your desire.

   - The whooshing sound of activity, sound of commotion of running water, and the sound from echoing of voices and developments all would be able to hinder amazing sound. As soon as you explore the location, verify all these conditions after tuning in to your camcorder's mouthpiece pickup viaheadphones. Your codeless microphone should be tested at the location too, and listen careful and intently for an impedance.

6. **.Inspect the influencing components**.Rain, Sun,wind, warm,snow, icy –these all could be helpful or may hinder, contingent upon your want to include over the film. In this way, it's basic to know and verify the figure as you will be exploring.

   Film cameras are not affected by rain, salty shoreline,dampness from waterfalls or air. Smeared lens and water or salt inside the card reader can spell catastrophe. Splendid, hot or sunny locationsthat's having loads of daylight could likewise may be a major issue: grey andblack bodies of camcorder ingest the beams of Sun and results in their overheating when it remains uncovered.

   Cool temperatures can deplete batteries and make you and your aides awkward rapidly. Always have try to keep hardware warm by putting away the same covered in a coat or auto till the point when you will be prepared to shoot, and by wrapping it in an extra scarf or coat during taping.

7. **Choose where to shoot**. Ensure for having satisfactory space for setting up the greater part of your rigging, with the goal that you're ready to get the shots you have at the top of the priority list. A little issue may appear for example the ideal location for a shoot, till

the point when it's been understood that the site may not have sufficient space for positioning your rigging. There might be a lot of room in a vast area similar to a hut or a theater, yet you will most likely not be able to meander uninhibitedly. The moment you explore for the location confirm that you have physically visited the spots were you will be shooting from.

8. **Get appropriate authorization**. You should be known that you may have to recieve grants and other legitimate consents for shooting at specific locations. As you're taking a gander at a location, plan a legitimate rude awakening.
   - Did you picked a road or walkway location that may obstruct movement?
   - Are you intendedfor shooting on another person's property?

   Burial grounds, shopping centers, markets, enterprises and organizations are on the whole private property. Numerous proprietors will be cheerful to oblige you on the off chance that you ask, however in the event that won't oblige, you have to pick a different location. It will be smarter to secure consent ahead of time than to have a shoot hindered by the specialists.

9. **Assess the zone**. Keep an eye on interchanges:
   - Is there mobile phone gathering in the region you've shot?
   - How about an adjacent pay telephone?
   - When you have to drive far, have you made arrangements for a breakdown?

Look the region for brisk sustenance stops to fulfill you and your team amidst a bustling timetable and twofold find the address of a nearby gadgets store, in case on the off chance that you have to supplant a link or connector.

10.Lastly, note down! While taking a seat to assess a location following a day of investigating, you may feel happy to have exploring reports to allude to. During the exploring campaigns in your shoot, day by day goes, on your family get-always, and in your inner consciousnesses, you'll run over innumerable locations and evolving situations, every condition would be novel and conceivably essential for you.

Record all the surveys, take still photographs or you could shoot a small video with a running sound editorial.

- Note the season of day
- The nature of the light
- The sounds noticeable all around
- your specific experiences

Here is a rundown of things to pay special mind to.

Auditoriums of schools: poor sound, substantial space, hard to draw near to activity

- **Churches:** lighting may be low, resounding sound, difficult to be unpretentious
- **Parks and Natural Areas:** evolving climate, troublesome apparatus transport
- **Urban Centers:** foundation commotion, high movement and person on foot nearness
- **Beaches:** wind commotion, salt air, sand defilement, coordinate sun
- **Events of outdoor:** rivalry for space, poor sound, swarm commotion

Make sure to recollect the extremely valuable spots that you have explored during this rundown for a location exploring pack:

- Notebook (or PDA) with composing actualize for field notes
- Still camera for making location file photographs
- Camcorder with earphones for recording test video and sound
- Compass for checking dawn/dusk, wind course, and so on.
- Watch for time-delicate perceptions
- Maps particularly for remote locations
- Cell telephone in the event that something goes wrong

Hiring of Equipments:

Employing of most recent top of the line and fitting equipments is the most ideal approach to make a best film. Every one of the equipments like camera, lighting and support gear shift amazingly broadly relying upon your need.

What kind of gear you might want to lease and for to what extent it will be utilized? Numerous rental houses offer a 3 or 4 day week.

So the day rental goes down the more you lease it. Everything is based around the day rental.

Additionally most rental houses have outside the box/understudy rental rates. With trade out hand (no credit) and a moment level rigging list autonomous productions can get equip that will do the trap at a small amount of the cost of the huge players needs. Truly simple to cut free a solitary camera and a handful of lights without trading off the huge rentals.

When you are arranging it is simpler for the rental house to toss a couple of more things into the rental at a similar cost than bringing down the quote.

Some rental houses will offer gear protection if the tenant does not have any. This is normally exceptionally pricy. Best to get a production protection bundle somewhere else that incorporates rentals. Depending what you are leasing you could be talking $10,000 of rigging or upwards of a million dollars. You can't exit any entryway without protection. As a rule around $1500 will get a bundle that will cover unobtrusive gear rentals and production protection for the span of the production. Shooting on city streets requires protection in any case, in addition to if something happens you require someone to have your back.

However, you are inquiring as to why would nobody be able to reveal to me the amount it will cost? The scope of expenses for production gear is insane colossal. For a 4K resolution shoot you could purchase a GoPro for $600 or purchase an professional cine camera with top lens, frill, crane, dolly, track and a lively lighting bundle that can cruise more than Million dollars in adapt instant. Rental rates take after the cost of gear and its rate of deterioration.

A medium range star cine camera a Red Epic, prime lens bundle, matte box, filters, take after concentration, batteries, accessories, media and tripod will run you somewhere in the range of $1000-$2500 every day rental and expect near $100,000 protection. There is no standard

method for building a camera and by and large the lens and required accessories will cost far more than the camera body. The renter will disclose to you how much protection you require.

Here and there you can locate a proprietor, owner that will consent to go ahead board with his/her camera and lights for less expensive than ala trucking gear from rental houses.

Beside the enormous players there are little rental houses and groups of proprietor administrators that might have the capacity to set you up on the off chance that you can't bear the cost of awesome.

Everything depends on what gauge of rigging you are searching for and how much spending plan can be designated to get it. Getting some rigging locally from a free source is typically the best for your production. Getting the proprietor of the rigging to work with you is frequently much more productive.

Before picking any hardware there ought to be a few inquiries may ring a bell like-

- What sort of film and what sort of hardware?
- Is it a computerized film?
- What sort of camera and focal points you will be required?
- Do you require lightning hardware and if so what kind?
- Daylight or Tungsten?
- What kind of Filters and so forth?

Choosing & hiring of crews:

To influence your film to the best, in the normal component film production will require no less than twelve group individuals, and we will demonstrate to you who to contract, how to discover them and what their obligations will be.

In the event that you are working with an amazingly constrained spending plan, at that point you will discover modest or free enable, which we will soon demonstrate to you best practices to accomplish. In the event that you have to work for a bigger budget, presumably you need a more experienced staff to work with and no more basic positions, known as Above-the-Line crew.

Have you at any point gone through the credits of any significant

Hollywood movie? Numerous people   are incorporated necessarily not all of them all in the production arrange. Obviously, there is no need employ hundreds, or even handfuls, of crew. Countless positions are an excess dealt with the enormous studios and production organizations. In the event that of bigger production, extra individuals can be addedin your group, since there may be a great deal of tasks associated with making enchantment.

Basic Personnel

How about we begin with the essential personnel, and after that we'll take a shot at how to discover them. Furthermore, the most essential is the means by which to discover the general

population who are the most suitable to fit the needs. The measure of work force that you require will clearly differ starting with one kind of shoot then onto the next. The bigger the set, the more team is required. Over all the three most imperative employments consisting in group will be:

- Producer
- Director
- Production Manager

Since it will be your motion picture, you totally should go up against one of these parts or it won't be your motion picture when it's done. It's essential that you employ capable, experienced individuals whom you know and trust for the other two positions.

On a small scale budget shoot, everybody will go up against various roles. The most important example is the producer. Alongside the standard producer parts, this individual will likewise go up against the duties of area chief, area scout, set creator and typically throwing director, despite the fact that the director might be the one to go up against this part rather, or you can procure an expert throwing director. The producer will be the person who acknowledges general duty regarding the movie. He is the person in charge of getting the finding, arranging and financing, the sets, managing accounts — both approaching and active promoting film and masterminding conveyance. Principally it's the producer's business to appoint professional and monitor the running of the project on time and on track from the earliest starting point of the task via conveyance.

Imaginative genius of the project is the director. Besides from saying "action," the director likewise integrates to the cast to learn that all of them are in agreement altogether — and not just while being on-set. The director works with the on-screen characters in pre-production to enable their understandingto that of the vision of the film and accordingly their role or cast in the movie. S/he will in like manner be in charge of all read-throughs of the content and work with the camera group to guarantee that the set and the lighting are done honestly. The director shall work intimately with producer since they are the prime members responsible for making a beeline for a similar objective.

While the director deals with the inventive parts of the film, the production manager (PM) is responsible for its specialized aspects. Planning, finance, show discharges, organizing with the associate director, booking and leasing/purchasing hardware fall under his/her ward. In bigger productions, huge numbers of duties of PM fall along with the specification of the line producer. Similarly like that of the director and producer, the production manager additionally takes a shot at the undertaking from pre-to-post.

It's essential that the director works in tandem with the cinematographer.

Commonly on ultra-low-spending shoots, the cinematographer would give the camera package and at times make a request to bring their own gaffer along. The procedure in which the shoot inthe most part works is that the director would guide the DP the way that he want scene to look along and in turn the DP would set up thecamera andlighting edges to influence his exact idea to work.

In spite of the fact that, earlier we talked about, this is basic that the cinematographer is going to provide the whole package of camera, you ought to dependably better to have a backup camera and lights, as Hollywood awfulness stories flourish.

The next crew member supporting to the director and whom the director require to assign is his assistant director. The AD is Notwithstanding, it would be wise to have the post-audio person on set, so if your PSM can likewise work post, you're brilliant!

Similarly each armed force requires privates, each set requires production colleagues! For proceeding with the armed force relationship: it's always better to have more PAs — until your set has PAs stumbling, at that point you'll need to send a few people home. Utilize your PAs for doing all the little assignments in and around the set that would somehow or another engage your key work force and keep them occupied with doing errands that are underneath them. A few cases would incorporate:

- Taping down wires
- Operating the clapperboard
- Getting model discharges marked
- Checking mics
- Standing in for on-screen characters amid sound and lighting checks

Likewise, you need to do the best for shielding them from hoarding the services table of the craft. We've all needed to work with PAs who assume that it was requested only for them.

On the off chance that you are shooting individuals, and it's practically sure that you will be, you should utilize no less than one individual, talentedfor doing perfect hair and makeup; ideally somebody able tocomprehend the distinction among "genuine" makeup and film/video makeup. Along these lines, there will be someoneto comprehendwhat should be ideal, and what should be avoided depending on the lights of the surroundings. Regardless of the possibility that you're running a zero-spending production, please make a special effort to be prepared to pay your MUA a "pack charge" on the grounds that a decent craftsman will convey her own apparatuses to your shoot. S/he should get something back for his/her project. In case it is viewed as that the creation adequately critical to enroll hair and cosmetics, review that more entertainers in a scene thinks about to more beauticians. It's more affordable and more secure to have MUAs staying around after the shot begins than to have entertainers in full cosmetics holding up for substitute on-screen characters to get readied for the scene – it in like manner shields the on-screen characters from mutinying on the set — not beautiful. Once you've gotten your lead beautician, work with him/her on what number of people s/he'll need to help and look for him/her recommendation to contracting partners.

People don't learn hair and cosmetic makeup in a vacuum; they know a great deal of others and they should know who can trim it and who can't!

In small productions, producermight deal with the costumeand, propshowever as a rule, it's best to enlist maybe a couple people to deal with these undertakings. Lot of costume or

fashion designers additionally make great props experts, hence you need to regularly spare compensation on the off chance that you get the ideal individual to deal with both.

When you complete the process of movie making, then you require a video editor. At times editor is an indistinguishable individual from the director, yet in the event that it's not, s/heneeds to work with the director forensuring that the last item suffice perfectly to the director's vision. A few editors are equipped for including special effects and colour correction and cutting the film — and some are most certainly not. In the event that you discover aneditor, greatfor making the cuts, yet not including, essential subtleties required incredibly to the last item, at that point you'll presumably need to procure somebody to include those completing touches, too.

Unless your shoot will be little and short, you ought to likewise employ for security and safety. If it's a large project or set with manyindividuals, than you require the larger security personnel. Guarantee that the security faculty are faithful and can be relied upon, so either employ known persons, or friend or pay them well.

Another critical note: if the production incorporates stunts, you should incorporate an accomplished stunt coordinator and make certain to convey at any rate $1,000,000 protection and have EMS close by. Stunts regularly turn out badly and lawyers love to sue.

Of the positions delineated above, you ought to request a demo reel from the going with people:

- Producer
- Director
- Assistant Director
- Cinematographer/DP
- Gaffer
- Hair, Makeup
- Wardrobe, Props
- Script Supervisor
- Production Sound Manager
- Editor

Where and How to discover Crew:

While contracting the crew, your principle objective should be to choose the capable individuals who could work as per the requirement. Who do you coexist together with best? Similar individuals who will have your best advantages on the most fundamental level — companions and (here and there) family. The enormous focal points are that you comprehend what's in store of these individuals, with the goal so that you do not hurl them in a tight spot, and their work will be trashy — in light of the fact that they need your project to be successful.. The disservice is that most likely they may not be exceptionally experienced, so make certain not to give them positions that they can't manage..

A) Online Resources

How about we begin with the self-evident. Assets incorporate *www.Mandy.com, www.Backstage.com* *www.Variety.com* and *www.Craigslist.org.*

Allthese have free occupation postings, despite the fact that you need to agree to accept most. One other issue is that contracting

Below-the-Line team is exceptionally troublesome. A large number of these individuals are just in it for the cash, so in case if they are not offered a union scale, they'll be outraged and, as opposed to disregarding your advertisement, signal it with the goal that your impeccably authentic promotion will get erased numerous times each day. This may not be genuine when searching for producers and directors.

Once you've gotten your team, it's an inconceivable arrangement to have no under two sessions in the midst of pre-production to go over basic information. While conducting these gatherings, discover how well the group coexists with each other; this should demonstrate to you how well they'll cooperate. On the off chance that somebody is acting diva-like or you notice a contention fermenting, right now is an ideal opportunity to make a move. The motion picture's production may just last half a month, yet they will be serious, regularly 12-hours-per-day, so you don't need strife.

B) Disconnected Resources

Film schools!

In the event that while, searching for individuals who should happily work for credit — and perhaps a couple of bucks to enable them to work more proficiently — and will's identity anxious and imaginative, the best place to meet your majority requirement of your movie is the nearby film schools. This likewise an awesome place to choose performers and after production help — and here and there altering offices, as well.

While visiting a set is an awesome approach to pick off group, yet don't hope to procure the division heads in case the motion picture does not have a huge spending plan. Rather, get the opportunity to be companions with their collaborators and, on the off chance that you were successful to make them agree, offer a position to them as the office head in your next film. They would not expect an indistinguishable pay from the division head on a bigger film, however they would be anxious to get nearer to their objectives and eager to have the title and the obligation.

Film Commissions

Most states and significant urban communities have a film commission and their employment is to motivate you to film in their general vicinity, such that they would be extremely eager to do the job with you, even as a learner film maker. Even they will be additionally prone to have free employment postings on their sites. While shooting in Philadelphia, I swung to www.film.org and they were brilliantly useful, despite the fact that our productions were

little! These are on the whole awesome assets. Do a scan for the film commission in your state or district; it's certainly justified regardless of the exertion.

C) From Network!

In case you're not kidding about getting into the business, you've heard every one of the three of those words previously. That is on the grounds that they're valid. Systems administration is the way to making it in this industry. Regardless of whether you're searching for official producers to fund your film, on-screen characters, producers or PAs, you have to meet similar individuals who are likewise searching for a break in the business — or for those who've effectively made it. While organizing, recall that the general population whom you meet likewise know other individuals. Suppose you got to meet with the camera director and you figure out how to believe her capacities and aptitudes; however you're not searching for a DP on your forthcoming shoot. In spite of the fact that you should not have to enlist her, she could be the person who could prescribe an incredible gaffer, so ask her sentiment. Quality references in this industry are unadulterated gold!

Above the-Line versus Below the-Line

Some individuals inside the business are there who trust that "above the Line" is a disparaging term; it isn't. The "line" alludes to how a team part gets paid. The individuals who are "above the line" get paid a straight pay that depends on just two elements: spending plan and position. Keeping in mind the end goal to enhance their compensation, individuals in BtL positions need to work their way up to motion pictures with bigger spending plans.

The individuals who work "over the line" get paid by the financial plan and the measure of cash that the venture acquires, alongside their experience/aptitudes. When you have paid your contribution by chipping away at bring down spending productions, you will begin getting notoriety. In the event that it's a decent rep — and you've organized legitimately — you will be made a request to take a shot at higher-spending films. The best directors and producers make a huge number of dollars per film since they are normally paid in "focuses," which is a level of the film (one point = one percent). In the event that the film slumps, the AtL individuals won't make much else besides their base pay, however in the event that it's a win, these are the people who receive the money related rewards. In spite of the fact that not specified in the article, the screenwriter is likewise an "over the line" individual.

Be that as it may you make your living in the business, organizing is constantly essential. No different business is as communitarian as making films, so keep your name, face and notoriety out there.

All the above positions we talked about till now, lets see their breakdown according to the area where they fit:

Over the Line

- Director
- Production Manager

- Producer

Below the Line

- Cinematographer
- Script Supervisor
- Production Sound Mixer
- Assistant Director
- Gaffer
- Hair, Makeup
- Wardrobe, Props
- Stunt organizer
- Editor
- PA

In spite of the fact that these positions are "below the line," the best cinematographers, editors, costume, hair and makeup men and stunt coordinators are paid high compensations.

Unit summary

In this unit you learntthe key people and their part and duty in the pre-production stage. Every one's part is exceptionally one of a   kind and testing in the film production. Other than that you have learnt that how to design the production, enlist the gear, scout the location for filming.

Assignment

First visit your favourite location. Note down the facilities available there on a notepad. Go to aequipment hiring centre and list out the equipments you want to hire for your production. Selects few characters from your college and neighbours.

Assessment

- Discuss the role of producer in Film/video making?
- Who is responsible for all the expenditure in the shooting?
- Who is known as the captain of the ship?
- Describe the role of music director in Indian film industry.
- Briefly discuss the works of a production coordinator.
- Write down the three categories of people worked for film making.
- What is the role of visual effects supervisor in the pre-production stage of film making?

Resources

https://www.sokanu.com/careers/lyricist/
https://www.futurelearn.com/
http://www.thevideoeffect.tv/
https://en.wikipedia.org/wiki/Main_Page
https://www.prospects.ac.uk/job-profiles/production-designer-theatre-television-film/
https://www.videomaker.com/

Unit-5 Know your Equipment

Introduction

Every video production starts with a camera and ends on an editing table. Starting from the early days of analogue production to present digital era the standard and quality of equipment may have varied but the basic process is almost the same. As we all are aware that the starting process is filming your subject, and this filming or shooting is carried out by a camera. So this unit of the course is dedicated to make you familiar to your shooting device. You will be going through a full on theory and practical knowledge of various kind of cameras presently used in field. You will come across varieties of terminologies and use of the buttons of the cameras.

Outcomes

Upon completion of this unit you will be able to:

- Learn to operate a video camera
- Differentiate between types of camera used for shooting.
- Describe the Lens.
- Explain the characteristics of DSLR Camera

Terminology

Lens   A transparent material which have at least one side spherical.
Camera   A dark box with a hole to capture the image.
Filming   The process of shooting a film.

Cameras and accessories

Camera is the first gateway to the world of filmmaking or video production. A camera is a dark box with a lens and a small opening for the light to enter. But the very first camera did not have a lens. Unbelievable! Yes the pinhole camera was the very first still camera to portray an image on a wall of a dark room just through a tiny hole. Such is the magical world of cameras or you can say you can create magic with light through cameras in your hand. In this course you will be having hands on knowledge on various types of cameras. Starting from regular video cameras to the still cameras which are also used for shooting video images Along with it the accessories required with a camera such as use of different kinds of lenses and tripods, trolleys, cranes, dolly, rigs and jimmy are also covered in this part.

Different types of cameras

The most common camera types used by professionals and semi-professionals are analogue and digital cameras.

Analogue Camera

The analogue cameras work on the principle of magnetic recording system. It converts the light images into magnetic information.

The two presently used analogue cameras are DVCAM and BETACAM

DVCAM

DVCAM is a variation of the DV format developed by Sony with an aim to function at the semi-professional and lower-end professional market. **DVCAM** uses the tape format for recording images. Sony HVR-Z7U is commonly used for this format. HD cameras record the pictures and sounds on the hard disc only.

Title-DV Camera

Attribution-CHIN.DENG

Source-Flickr

Link-https://commons.wikimedia.org/wiki/File:Sony_HVR-V1U_3CMOS_1080p_HDV_Camcorder.jpg

BETACAM

BETACAM is a higher version of tape based image recording device designed by Sony for professionals with a half inch cassette. The image recorded and produced by BETACAM are superior in quality compared to DVCAM.

Title-Betacam

Attribution-Ubcule

Source-Link-https://commons.wikimedia.org/wiki/File:Betacam_SP_camera.jpg

Digital cameras

The digital cameras work on the principle of pixels recording system. The light images are converted into pixels form on the recording device.

Now coming to the digital world of cameras we have a number of options to try with. Starting from daily use smartphones to highly sophisticated chip based cameras its so easy and fun to work with and bring out your creativity. The various digital cameras are cinema cameras like RED, BLACKMAGIC, ARRI, then the studio and broadcast cameras, and the familiar camcorders, the newly popular mirrorless and DSLR cameras and nonetheless our mate in our pocket i.e.our cell phones.

RED

The RED camera is a 4K digital cinema camera. It is initially aimed at Cinema style shooting, meaning that it is in many ways like a traditional film camera. It uses traditional film lenses and other film hardware including matte boxes and follow focus systems. But instead of shooting film it shoots digitally means it records images on harddisks or digital storage devices. The RED camera comes in different models like ONE, EPIC, SCARLET

Title-RED 4K digital Cinema Camera

Attribution-Roge

Source-https://www.flickr.com/photos/roge/14289690222/

Link-https://commons.wikimedia.org/wiki/File:Red_EPIC_camera.jpg

H.D. Cameras – These are High Dimensions Cameras presently used in various shootings without the necessity of inserting DVD's or cassettes.

Blackmagic

Black magic is an Australian digital cinema company. Like RED camera it is also a direct shoot and record camera. It provides aincomparable range of lenses compatibility. It also comes with an advantage that the Company provides an editing platform to support easy editing of the recorded materials. It comes in 2K, 4K and 8K variants.

Title-Blackmagic Design Cinema Camera

Attribution-Morio

Source-Link-https://commons.wikimedia.org/wiki/File:2012_Blackmagic_Cinema_Camera_front_2013_CP%2B.jpg

ARRI ALEXA

ARRI ALEXA , a very familiar name among film makers aims at high class video image production. ARRI who was first into celluloid film cameras manufacturing came up with a digital version to cope up with the market with ALEXA model.This is the first camera of the Alexa product family. The ARRI ALEXA's CMOS Super-35mm sensor is rated at 2.8K and ISO 800. That sensitivity allows the camera to see a full seven stops of over exposure and another seven stops of underexposure, an unprecedented Dynamic Range. To take advantage of this, ARRI offers both industry-standard REC709 HD video output as well as the Log-C mode that shows the entire range of the chip's sensitivity, allowing for an extreme range of colour correction options in post. It is used mostly in shooting films along with studio shoots and commercials.

Title-ARRI ALexa Camera

Attribution-ARRI AG

Source-Link-https://commons.wikimedia.org/wiki/File:ARRI_ALEXA_SXT_Plus.jpg

Camcorders

The camcorders are the most user friendly device that can be operated by almost anyone. The semi-professional camcorders like Sony PWM and Panasonic P2 series are in regular use nowadays mostly in news and documentary shoot sectors.

Title-Panasonic Camcorder

Attribution-Mkunert

Source-Link-https://commons.wikimedia.org/wiki/File:Panasonic-AF100.jpg

The ease of working and budget affordability makes it a first choice. The HD quality video images produced without any extra lights are its plus points. One can just point and shoot with these cameras.

Mirrorless & DSLR Cameras

In last few years the DSLR cameras have evolved as a handy medium of capturing still as well as video images simultaneously. The DSLR cameras which were thought to be only still cameras are now a very effective video capturing device too.


Title-Canon DSLR Camera

Attribution-Maksim Sidorov

The qualities of images captured are very high and nowadays most DSLR are providing 1080 pixel quality video images. So any amateur can also shoot great images with much ease. The mirror less cameras are the same as DSLR but in the place of a mirror it comes with a sensor which decides how much light information to catch for the image. Canon 5D, Nikon D750 is most popular players. These cameras like other professional cameras come with interchangeable lenses required for different needs.

Smart Phones

The present day Smartphone's , the one device which replaced almost all other gadgets which used to serve our daily needs starting from clock to compass and T.V to radio has now also evolved as a replacement to the cameras. The everyday developments in Smartphone technology has made Smartphone so capable of filming still and videos that people are now shooting films with them. Pocket friendly device loaded with 20-30 megapixel camera and sensor are the most effective device for shooting. Nowadays editing can also be done on a Smartphone.
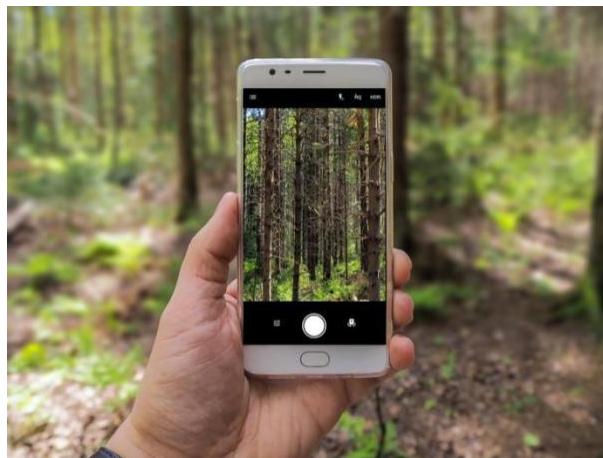
Title-Smartphone Camera

Most Important- Whether indoor or outdoor recording, it is extremely essential to have a white balancing, just before the shooting.

Camera Accessories

Now you are fully aware of different types of cameras, it's now time that you also get to know about other accessories that are required for smooth and better shooting experience.

Most of the compatible accessories come along with the camera itself. The accessories required with a camera such as use of different kinds of lenses and tripods, trolleys, cranes, dolly, rigs and jimmy are also covered in this part.

There are other accessories which are available in the market. The main accessories required for camera operation are lens, battery, microphone, tapes and micro cards or hard disks, headphones.

Lens

Lens is the eye of the camera. The light after falling upon the target subject enters through the lens and produces the image on the image plane. The lens contains an iris which controls the amount of light. The lens is mainly categorized as fixed lens, telephoto lens wide angle lens and normal lens.

Fixed Lens / Block Lens

A fixed lens also known as block lens and also referred as prime lens. The fixed focal length lens (FFL) has a focal length that is not adjustable. Photographers are unable to zoom in and out on a particular subject when using a prime lens. In other words we shoot what our normal eyes see from the specific position. Mostly the block lenses are available in 50mm and 85mm focal length.

Title-Lens

Attribution-fernandozhiminaicela

Source-Link-https://pixabay.com/en/lens-camera-round-technology-team-3095743/

Telephoto lens

A telephoto lens is called so because it brings distant objects nearer to us through zooming on it. A telephoto or zoom lens is made up of number of lenses which helps the cameraman to zoom in or zoom out on a subject while not physically moving but still concentrating on the subject from a fixed point. The lenses with a focal length above 100mm are known as zoom lens. They may come up to 135-300mm.

Title-Telephoto Lens

Attribution-allupinc

Source-Link-https://pixabay.com/en/sony-a7r-camera-mirrorless-dslr-1328082/

Wide angle lens

In photography and cinematography, a wide-angle lens refers to a lens whose focal length is substantially smaller than the focal length of a normal lens for a given film plane. This type of lens allows more of the scene to be included in the photograph, which is useful in architectural, interior and landscape photography where the photographer may not be able to move farther from the scene to photograph it.

Another use is where the photographer wishes to emphasise the difference in size or distance between objects in the foreground and the background; nearby objects appear very large and objects at a moderate distance appear small and far away.

Title-Wide angleLens

Attribution-Capri23auto

Source-Link-https://pixabay.com/en/lens-wide-angle-tokina-photograph-2115686/

Specialist lenses

Other than these 3 types of lenses some lenses come with multi-function such as super telephoto, macro and fisheye shooting modes. They are collectively called specialist lens. Their zoom range may vary from 5mm-2000mm.

Attribution-Monoar

Source-Link-https://pixabay.com/en/camera-lense-photography-zoom-1272791/

Tapes and Storage device

Depending on the cameras the images captured are recorded on tapes and digital storage devices such as memory cards and solid state hard disks. The analogue cameras usually use various kinds of tapes whereas digital cameras use digital recording mediums.

Tapes

The tapes used in video cameras are magnetic tapes on which the images shot are recorded using a rolling magnetic head which writes the visual and audio information on the tapes. There are two types of tapes mostly used in shooting which are quarter inch and half inch tapes, otherwise known as DV tape and BETA tape.

DVcam Sony's variant of the DV (Digital Video) format. Developed for professional use, DVCAM improves quality by increasing the tape speed and track pitch. The increased track size uses more tape because DV tracks are recorded on the diagonal.

In addition, it "locks the audio," which prevents the audio from drifting out of sync with the video. DVCAM uses the same metal evaporated (ME) tape as does DV and DVCAM cassettes can be played in DVCAM and DVCPRO tape decks. DVCAM VTRs can also play and record DV cassettes.

Title-Video tapes

Attribution-Grm wnr

Source-Link-https://commons.wikimedia.org/wiki/File:DV_tape_sizes_2.jpg

Betacam is a high-quality videotape technology introduced by Sony in 1982. Betacam evolved from Sony's Betamax consumer format, but with a large increase in tape speed and using component video signal separation rather than composite video. Betacam was designed for professional TV recording.

Title-Beta tapes

Attribution-Grm wnr

Source-Link-https://commons.wikimedia.org/wiki/File:Beta_tape_sizes_2.jpg

Digital Storage Devices

Most of the present day digital cameras starting from point and shoot to highly professional

filmmaking cameras use digital devices to store recorded visual and audio materials as files in pixel formats. These devices are categorized as solid state hard disks and memory cards. These digital devices have an advantage that unwanted files can be deleted on the spot itself releasing more space for shoot and they are very sturdy as well as handy.

Title-Memory card

Attribution-Adryan R. Villanueva

Source-Link-https://commons.wikimedia.org/wiki/File:Lexar_Professional_1000x_12 8GB_SDXC_UHS-II_Card_(tidied).jpg

Unit Summary

In this unit we learnt about the first basic equipment required for video production that is the camera. We also learnt about different types of camera. We also came across the other camera accessories such as lens, tapes and digital storage devices which are also required for video production.

Assignments

- What is a camera?
- What are different types of camera depending on signal?
- What is the work of a lens?
- A camera can work without lens. True or false?
- Name the different type of lens.
- How mirror less camera is different from DSLR?
- What is the focal length of a fixed length?

Resources

- Mixing secrets for the small studio Senior, Mike.
- Fundamentals of Digital Audio Alan P. Kefauver and David Patschke
- Visual Studio 2013 Cookbook Bruce Johnson
- Audio Effects Workshop Geoffrey Francis
- How to shoot Video that doesn't suck Stockman, Steve, 1958
- The Book of Audacity : record, edit, mix and master with the free audio editor Schroder, Carla

Unit 6 Lights and Camera Supports

Introduction

As we all know light is the main pivotal element behind photography or videography. The light creates images on the sensor of the camera through lenses. The light condition decides the quality of images that will be formed so it should always be kept in mind as to how to use the light according to our needs. Most of the cameras use available ambient light to record subject whereas some need extra artificial lights to create good images. The camera supports such as tripods, trolleys, rigs also are an important part of camera handling. The other camera equipment creates different kind of effect in the image capturing process. In this section you will come across some of these regular used lights and camera supports.

Outcomes

Upon completion of this unit you will be able to:

- Learn about different kinds of lights & the source used in outdoor and indoor shoot.
- Learn about different light accessories used along with the lights for shoot.
- Learn about different kinds of camera supports used.

Terminology

Gels	A gel is a transparent material with different colours which filters the source light and adds to focal variety of effective shooting.
Fluorescent Lights	A kind of lights used for shooting. It will capable of generating up to 100 lumens per watt.
LED	Light Emitting Diode.

Lights

As mentioned earlier the main factor for good images is good light condition. The lights are divided as natural and artificial depending on the source. The main source of natural light is sun whereas the artificial lights are manufactured according to the demand of intensity required. Some of the artificial lights used are soft lights, tungsten and hard lights. Some of the soft lights are fluorescent and LEDs

Fluorescent lights

A fluorescent lamp uses the excitement of low pressure mercury vapour to produce ultra-violet light, in turn causing a phosphor coating inside of the glass tube to glow radiating light in the visible spectrum.

A fluorescent light is much more efficient than an incandescent light, and is capable of generating up to 100 lumens per watt, similar to the output of HMI.

Title-Fluorescent light

Attribution- Christian Taube

Source-Link-https://commons.wikimedia.org/wiki/File:Leuchtstofflampen-chtaube050409.jpg

LED

LED stands for light emitting diode and is a solid-state semiconductor device. Only recently, LED's of sufficient power have become available to make practical LED film lighting possible. LED's are extremely efficient but are still limited in overall light output when compared to any of the other light sources.

LED lights can be daylight or tungsten balanced, sometimes switchable or having variable color temperature. Some have variable color through the entire RGB spectrum, which is something not possible with any other lighting technology. The CRI rating of LED lighting can be over 90.

Some of the hard lights are open face lights, Fresnel lights and HMI. These lights cast very hard intensity of light and shadow.
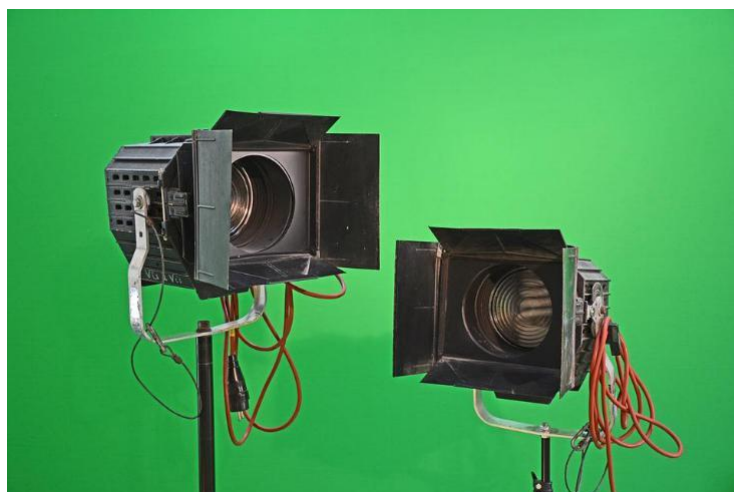
Open Face lights

An open faced lighting fixture is used to create hard light that casts hard shadows. It is not much more than a housing and reflector for the bulb, and provides nothing in between the bulb and the subject.

The commonly known 800W "Redhead" and 2000W "Blonde" are examples of open faced video lights.

Fresnel Lights

A Fresnel lens is a special type of lens which is divided into many concentric circles. It results in a much thinner lens compared to a conventional lens of the same power. This lens evenly throws out the light and allows for the beam to be varied from flood to spot, just by changing the distance between the lamp/reflector unit and the lens. It is also known as Baby lights.

HMI lights

HMI stands for **Hydrargyrum medium-arc iodide** and is a metal-halide gas discharge medium arc-length lamp.

A HMI bulb contains mercury vapour mixed with metal halides. An electrical arc between two electrodes excites the mercury vapour and metal halides resulting in a very high light output and luminous efficiency. HMI lamps are potentially functional between 85 and 108

lumens per watt, up to four times that of conventional incandescent lamps. It almost casts a light of intensity like daylight.

Another kind of light is tungsten/ halogen also known as solar lights. Tungsten light sources are basically related to the same type of incandescent filament bulbs which until recently were common in homes and offices everywhere. These lights lamps operate at a higher temperature than normal incandescent tungsten bulbs, and so they can achieve a higher colour temperature, and higher luminous efficiency. They naturally produce a warm light, but blue colour correction gels can be used to simulate daylight.

Light Accessories

Just getting the appropriate lights while shooting is not enough, you may need some more materials to get the perfect lighting mood and condition. These are called light accessories such as barn doors, gels, cookie, diffuser, flag, umbrella, scrim, silk, reflector, black wrap.

Barn doors

Based on the terminology of video and film, barn doors are not utilized for corral farm animals. Consider them like leaves - 2 to 4 of such, as a rule. Now place the entryways before a light source. They would be seen everywhere in lights utilized for TV, film, or Broadway creations. They would be utilized to shape the light and keep it in a place based on your requirement and mask the other where it is not needed. The specialty is that the equipment is very handy and on won't feel tired on utilizing it. Know that the lights may become hot upon use – so in case if there is a requirement for adjusting the barn doors, utilize gloves before using it. On a creation, people generally forgot to wear gloves and simply move the barn doors - that is an awful thought. It controls the quantum of light turning out.

Gels

Gel are related with many names - so it may be referred as color filter, color gel, lighting gel or simply gel. Regardless of the name, each element performs the same task. Gel is a material that is transparent with a color. Gels are broadly utilized on photography shoots, photography shoots, theater productions, videography shoots and, obviously, in film production. These gels can also be utilized for correcting the color or adding colour to a scene for a dramatic impact. Thin sheets of polyester or polycarbonate are used to make these gels. These can be placed straightforwardly before the lights. Gels won't keep going forever; they blur or the greater part of them melt in view of the extreme warmth from the lights. It is used for colour balancing and bringing some dramatic effect.

Cookie

Cookie is basically a shape that is cut out and is put before a hard light. By hard light we mean a light which is small generally, and that can be focused and utilized to deliver shadows and highlights. So we can use these cut out shapes maybe abstract or geometrical place in front of the light to get such patterns in the background or foreground.

Diffuser

Similar to the gel, a diffuser is a translucent bit of material placed before a light for softening shadows and highlights. Likewise a diffuser is utilized to diminish contrast and to enhance the angle of beam. By contrast here we mean the differentiation among one intensity and another or among the lightest and darkest components of a scene. Diffused light means a light that comes via a diffuser. As compared to the hard uncovered light, the diffused light is more capable of creating softer shadows. It is utilized to lessen contrast.

Flag

Flag is called by different names by photographer such as siders, cutters or gobos. Basically its panel is opaque in nature due to which it is utilized to block light and shadow the subject, camera lens or the background. Likewise it can be utilized to hide lights within a scene.

Reflector

Reflectors are basically of two types. The former type is utilized for lightning the indoors. This reflector is bowl-shaped and is available in different sizes. Once in a while any hard white surfaced materials like thermocols are additionally utilized as reflectors.You can use this type of reflector to shape and intensify the light's beam. For outdoor use the second type reflector is used. These reflectors are basically used to redirect light. They are flat and coloured in white, silver or gold. It is used to redirect and intensify the light beam.

Title-Hand Reflector

Attribution-Katie Chan

Source-Link-
https://commons.wikimedia.org/wiki/File:ExPro_42_inches_Photographic_Light_Reflector.JPG

Title-Light Meter

Attribution-Wolfgang Lonien

Source-7dcp2185798-flash-meter

Link-https://commons.wikimedia.org/wiki/File:Sekonic_L-308S_Flashmate_digital_light_meter.jpg

Another very important and useful device that is necessary for good and proper light intensity and that is **light meter** or **exposure meter**. This small device is used to detect the amount of light falling on the subject and adjust the light condition accordingly.

Camera Support

The camera supports are the equipments used to balance and operate the camera other than handheld. They help in smooth operation and creating camera motion effects. Some of these are known as tripods, trolleys, dolly, rigs, jibs and stabilizers etc.

Tripod

A tripod is a portable three-legged frame, used as a platform for supporting the weight and maintaining the stability of camera. Many a times cameraman uses heavy lenses which makes smooth camera operation difficult in handheld condition.

Title-Tripod

Attribution-

Source-Link-https://pixabay.com/en/tripod-camera-stand-photography-390902/

The tripod serves the purpose. A tripod provides stability against downward forces and horizontal forces and movements about horizontal axes. It also gives proper level and balance to the camera.

Trolleys or Dolly

A **camera dolly** is a wheeled cart or similar device used in filmmakingand television production to create smooth horizontal camera movements. The camera is mounted to the dolly and the camera operator andcamera assistant usually ride on the dolly to push the dolly back and forth. The camera dolly is generally used to produce images which involve moving the camera toward or away from a subject while the camera is moving, a technique known as a "dolly shot."

Title-Round trolley

Attribution-Dan aka jack

Source-Link-https://commons.wikimedia.org/wiki/File:Production_still.jpg

Studio dollies are large and stable and can feature hydraulics. These are the first choice for studio, backlot and location shoots when using professional cameras. A studio dolly usually needs a specialized operator called a "dolly grip", and many are built for the camera operator to ride on the dolly with the camera.

Lightweight dolly systems are simpler, affordable and are best used with lighter-weight cameras. Lightweight systems are usually favoured by independent filmmakers and students because they are easier to carry and operate. These dollies support only the camera, and the operator needs to move alongside. Some lightweight dollies are small enough to be carried in a backpack. Most of the dolly tracks are either straight or circular and semi-circular.

Cranes / Jibs

In filmmaking and video production, a **crane shot** is a shot taken by a camera on a moving crane or jib. Most cranes accommodate both the camera and an operator, but some can be moved by remote control. Camera cranes go back to the dawn of movie-making, and were frequently used in silent films to enhance the epic nature of large sets and massive crowds. Another use is to move up and away from the actors, a common way of ending a movie.

Crane shots are often found in what are supposed to be emotional or suspenseful scenes. A boom arm helps to move it around easily between ordinary setups.

Title-Crane

Attribution-Vssun

Source-Link-https://commons.wikimedia.org/wiki/File:Film_Shooting_From_a_Crane_.jpg

The traditional design provided seats for both the director and the camera operator, and sometimes a third seat for the cinematographer as well. Large weights on the back of the crane compensate for the weight of the people riding the crane and must be adjusted carefully to avoid the possibility of accidents. During the 1960s, the tallest crane was the Chapman Titan crane, a massive design over 20 feet high that won an Academy Scientific & Engineering award. Most such cranes were manually operated, requiring an experienced boom operator who knew how to vertically raise,lower, and "crab" the camera alongside actors while the crane platform rolled on separate tracks. The crane operator and camera operator had to precisely coordinate their moves so that focus, pan, and camera position all started and stopped at the same time, requiring great skill and rehearsal. Present day jibs are remote operated and much easier to use as it allows the access to any height and direction.

Rigs / Stabilizers

A rig is a modular piece of equipment used to extend the usefulness of a camera, whether through accommodating additional shooting styles, allowing for additional gear to be mounted safely, or for smoothing out the motion of the shot. To simplify rig is an equipment which not only gives support to camera but also could include additional gears such as microphone and viewfinder monitor. Most of the rigs are attached to body such as steadicam or shoulder rigs as it stabilizes the camera movement while handheld.

Title-Steadycam

Attribution-

Source-Link-https://commons.wikimedia.org/wiki/File:Steadicam_Operator_John_Fry_with_Master_Steadicam_%26_Arri_Alexa_camera.jpg

Unit summary

In this unit we learnt about different kind of professional and semi-professional lights that are used in day to day shooting or production. Along with the accessories used for various lighting conditions we also learnt about various camera supports such as dolly, jibs and rigs. We can decide which kind of light and camera support we can use according to our shot design.

Assessment

- What is a camera?
- What are different types of cameras depending on signal?
- What is the function of lens?
- A Camera can work without lens. True and False?
- Name different types of lens.
- How mirror less camera is different from DSLR?
- What is the focal length of a fixed length?

Resources

- Mixing secrets for the small studio Senior, Mike.
- Fundamentals of Digital Audio Alan P. Kefauver and David Patschke
- Visual Studio 2013 Cookbook Bruce Johnson
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- The Book of Audacity : record, edit, mix and master with the free audio editor Schroder, Carla

Unit 7 Blocking & Rehearsal

Introduction

Every video production requires proper research, planning, setup and on location decision. Proper camera placement, proper lighting and proper rehearsal of subject could lead to a good production material. Sometimes we have to shoot documentary or news material so it is mandatory to get a proper location idea as to cover the objective as nearly as possible. In case of fiction shoot it is advisable to rehearse your subject more and more so as to give perfect shot in less number of takes.

Outcomes

Upon completion of this unit you will be able to:

- Describe what is blocking
- Identify different kind of shots
- Use different techniques of lighting
- Examine different aspects, faced while shooting.

Terminology

Blocking	Blocking is the process of staging actors in reference to the foreground and background to get a frame.
Establishment shot	Establishment shots are the shot which shows the establishment between the subject and the surrounding.
Close shot	Close shot is the most nearest magnification of the subject being shot which shows the physical and emotional details.
Helicopter Shot	A 3600 shot of the sky or subjects in the high altitude from the ground.
Mid Shot	Shot covering the artist up to his / her waist
Cheating shot	To Sync – with other person's response by the artist in the form of reactions
Panning	Moving The Camera right or left as per requirement.
Arial Shot	Covering the ground from an aeroplane or helicopter or high altitude.

Meaning of the Term "Blocking"

The term blocking came from theatres. In theatre, **blocking** is the precise staging of actors in order to facilitate the performance of a play, ballet, film or opera. In contemporary theatre, the director usually determines blocking during rehearsal, telling actors where they should move for the proper dramatic effect, ensure sight lines for the audience and work with the lighting design of the scene.

Each scene in a play is usually "blocked" as a unit, after which the director will move on to the next scene. The positioning of actors on stage in one scene will usually affect the possibilities for subsequent positioning unless the stage is cleared between scenes.

During the blocking rehearsal, the assistant director, stage manager or director take notes about where actors are positioned and their movements on stage. It is especially important for the stage manager to note the actors' positions, as a director is not usually present for each performance, and it becomes the stage manager's job to ensure that actors follow the assigned blocking from night to night.

In film, the term is sometimes used to speak of the arrangement of actors in the frame. In this context, there is also a need to consider the movement of the camera as part of the blocking process.

Title-Shooting

Attribution- Yerpo

Source-Link- https://commons.wikimedia.org/wiki/File:Premium_Rush_shooting.JPG

Overview of Evolution of Blocking

As we discussed earlier that the term blocking came from stage or theatre, in the theatre the stage is a fixed location and the characters are moving. So the characters have to be placed or staged in such a manner so that each character is clearly visible to audience at each point of movement. No one should overlap the other character. Likewise their entry and exit was also to be kept in continuity which means a character which exits from the left of the stage must come from right of the stage to mark the continuity of movement. So when coming to film making or video production the most of the things remain the same. The director has to plan the shot in such a manner that there should be enough space between characters, their continuity in the frame and their movement as well as entry and exit from one shot to the next. This is part of shot division in a screenplay.

Uses of Blocking

Blocking not only helps the director direct easily but also helps the actors to perform smoothly. Sometimes a motivated blocking helps create a twist in the scene. Blocking not only is fixed with actor and director but also with the camera. The movement of the camera in proper direction is also important. The proper camera and subject movement can create a bigger impact. If the blocking is not proper the transition from shot to shot will be jerky.

Mostly the films or videos are made up of various scenes. These scenes are broken down into shots. Each shot is individual information of place, time and character. It means that we can know what our subject is doing in particular place at a particular time. Each shot can be taken up by the director according to the availability of place, time and character and connect in different manners to build up a scene. But sometimes director also tries to cover the whole scene in one take without breaking them into smaller shots. The various types of shots which are used are establishing shot, long shot, mid shot and close shot.

Establishing shot: An establishing shot in filmmaking and television establishes the scene by showing the relationship between its important figures and objects.It is generally a long or extreme-long shot at the beginning of a scene indicating where, and sometimes when, the remainder of the scene takes place.

Establishing shots were more common during the classical era of filmmaking than they are now. Today's filmmakers tend to skip the establishing shot in order to move the scene along more quickly. In addition, the expositional nature of the shot (as described above) may be unsuitable to scenes in mysteries, where details are intentionally obscured or left out.

Uses of an Establishing Shot

Location: Establishing shots may use famous landmarks to indicate the city where the action is taking place or has moved to, most probably it establishes the whole area where the shooting is going on or where the story is based. It creates an idea in the mind of the viewer about the location of the subject and other things going around in that particular location.

Time of Day: Sometimes the viewer is guided in their understanding of the action. For example, an exterior shot of a building at night followed by an interior shot of people talking implies that the conversation is taking place at night inside that building - the conversation may in fact have been filmed on a studio set far from the apparent location, because of budget constraint or time limitations.

Relationship: An establishing shot might be a long shot of a room that shows all the characters from a particular scene. For example, a scene about a murder in a college lecture hall might begin with a shot that shows the entire room, including the lecturing professor and the students taking notes. A close-up shot can also be used at the beginning of a scene to establish the setting (such as, for the lecture hall scene, a shot of a pencil writing notes).

Concept: An establishing shot may also establish a concept, rather than a location. For example, opening with a martial arts drill visually establishes the theme of martial arts. A shot of rain falling could be an establishing shot, followed by more and more detailed look at the rain, culminating with individual raindrops falling. A film maker is colluding with their audience to provide a short hand learned through a common cinematic cultural background.

Long Shot

In photography, filmmaking and video production, a **long shot** (sometimes referred to as a **full shot** or, and to remove ambiguity it will be called a, **wide shot**) typically shows the entire object or human figure and is usually intended to place it in some relation to its surroundings. These are typically shot now using wide angle cameras. However due to the sheer distance establishing shots and extreme wide shots can use almost any camera type.

Mid shot

In film, a **medium shot**, **mid shot** (MS), or **waist shot** is a camera angle shot from a medium distance. Medium shots are favored in sequences where dialogues or a small group of people are acting, as they give the viewer a partial view of the background and also show the subjects' facial expressions in the context of their body language. Medium shots are also used when the subject in the shot is delivering information, such as news presenters. It is also used in interviews. It is the most common shot in movies, and it usually follows the first establishing shots of a new scene or location.

A normal lens that sees what the human eye see is usually used for medium shots.

Medium shots are divided into singles (a waist-high shot of one actor), group shots, over-the shoulders or two-shots (featuring two people). A medium wide shot, or American shot, shows a bit more of the background but is still close enough for facial expressions to be seen, although these facial expressions would be better seen in a waist-high shot.

Master shot

A master shot is a shot which covers all the characters along with the location or background**.** It is different from an establishing shot because in an establishing shot the whole location or all the characters may not be revealed, just a portion could be used. It may not establish the character to character relation.

Close-upshot

Close-upshot or **closeshot** in filmmaking or in television production, still photography is a type of shot, which tightly frames a person or an object. Close-ups are one of the standard shots used regularly with medium shots and long shots (cinematic techniques). Close-ups display the most detail, but they do not include the broader scene. Moving in to a close-up or away from a close-up is a common type of zooming.

Close-ups are used in many ways and for many reasons. They are often employed as cutaways from a more distant shot to show detail, such as characters' emotions, or some intricate activity with their hands. Close cuts to characters' faces are used far more often in television than in movies[]; they are especially common in soap operas[]. For a director to deliberately avoid close-ups may create in the audience an emotional distance from the subject matter.

Close-ups are used for distinguishing main characters. Major characters are often given a close-up when they are introduced as a way of indicating their importance. Leading characters will have multiple close-ups. There is a long-standing stereotype of insecure actors desiring a close-up at every opportunity and counting the number of close-ups they received. Close-up shots do not show the subject in the broad context of its surroundings. If overused, they may leave viewers uncertain as to what they see. Close-ups are rarely done with wide-angle lenses, because perspective causes objects in the centre of the picture to be unnaturally enlarged. Certain times, different directors use wide-angle lenses, because they can convey the message of confusion, and bring life to certain characters.

Over Shoulder Shot

In film or video, an **over the shoulder shot** (also**OTS**, or **third-person shot**) is a shot of someone or something taken from the perspective or camera angle from the shoulder of another person. The back of the shoulder and head of this person is used to frame the image of whatever (or whomever) the camera is pointing toward. This type of shot is very common when two characters are having a discussion and will usually follow an establishing shot which helps the audience place the characters in their setting. It is an example of a camera angle.

Other than these basic shot or blocking techniques there are two other shots depending on camera movement i.e. Pan shot and Tilt Shot. In a Pan shot the Camera is moved from left to right or right to left to cover a subject or location. Similarly when the camera is tilted from up to down and vice versa the shot is called Tilt shot.

Rehearsal

The **rehearsal** is an activity in the performing arts that occurs as preparation for a performance in music, theatre, dance and related arts, such as opera, musical theatre and film production. It is undertaken as a form of practising, to ensure that all details of the subsequent performance are adequately prepared and coordinated. The term "rehearsal" typically refers to ensemble activities undertaken by a group of people. For example, when a musician is preparing a piano concerto alone in their music studio, this is called "practicing", but when they begin to practice the concerto with an orchestra, this activity is called a "rehearsal". The music rehearsal takes place in a music rehearsal space.

A rehearsal may involve as few as two people, as with a small play for two actors, an art song performance by a singer and a pianist or a folk music duo of a singer and a guitar player. On the other end of the spectrum, a rehearsal can be held for a very large orchestra with over 100 performers and a choir. A rehearsal can involve only performers of one type, as in an a

cappella choir show, in which a group of singers perform without instrumental accompaniment or a play involving only theatre actors; it can involve performers of different instruments, as with an orchestra, rock band or jazz "big band"; vocal and instrumental performers, as with opera and choral works accompanied by orchestra; or a mix of actors, vocalists, instrumentalists and dancers, as with musical theatre.

While the term is most commonly used in the performing arts to refer to preparation for a public presentation or show, the term is also used to refer to the preparation for other anticipated activities.

In field of filmmaking or video production rehearsal not only means the practicing the acting skill for the scene but also practicing the camera and audio parts too to get the perfect take.

Lighting

Lighting is an essential tool for enhancing the video image. The subtle use of light creates atmosphere and mood, dimension, and texture. It can help to convey a plot line, enhance key elements such as set colour or skin tone, and signals the difference between comedy and drama, reality and fantasy.

The subject in a planned shoot can be lit up using various lighting techniques to achieve desirable result. In this unit we will discuss these lighting techniques.

Lighting, as with nearly every other aspect of Film & TV, is an integral part of the filmmaking process. Light can sculpt and describe a scene or character, it can hide or reveal key areas of your frame, it can enhance suspense and evoke emotion. It is as critical in directing the audiences' attention or influencing their emotions as camera movement, acting, music and editing. Ignore it at your own loss.
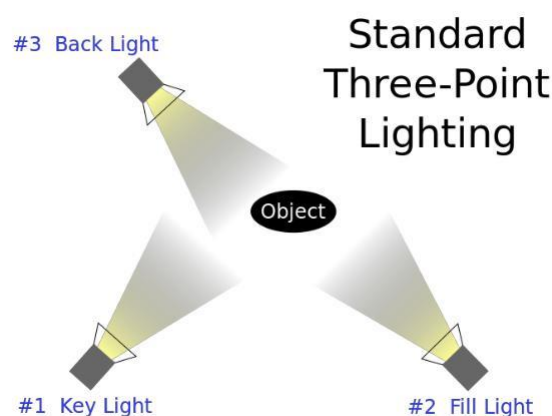
Title-Three point Lighting

Attribution- Theonlysilentbob, **converted** to SVG by tiZom

Source-

Link-https://commons.wikimedia.org/wiki/File:3_point_lighting.svg

Key light

The **key light** is the first and usually most important light that a photographer, cinematographer, lighting cameraman, or other scene composer will use in a lighting setup. The purpose of the key light is to highlight the form and dimension of the subject. The key light is not a rigid requirement; omitting the key light can result in a silhouette effect. Many key lights may be placed in a scene to illuminate a moving subject at opportune moments.

The key light can be "hard" (focused) or "soft" (diffused), and depending on the desired setup can be placed at different angles relative to the subject. When part of the most common setup— three-point lighting—the key light is placed at a 30–60° angle (with the camera marking 0 degrees). In addition to the horizontal angle, the key light can be placed high or low producing different effects. The most common vertical position for the key light is at a 30° angle (i.e. slightly above the eye line; the nose should not cast a shadow on the lips).

A key light positioned low appears to distort the actor's features, since most natural or ambient light is normally overhead. A dramatic effect used in horror or comedy cinematography is a key light illuminating the face from below. A high key light will result in more prominent cheek bones and long nose shadows.

In many cases, the key light is a stage light for indoor scenes, or sunlight for outdoors. A lighting instrument may also be used outdoors to supplement sunlight or as the primary light source with sunlight or skylight serving as fill lighting. Actual lamps, lighting fixtures, can serve as key lights, provided they are of sufficient brightness. They may also appear within the scene as props — in which case they are called "practical's." Similarly, fire, candles and other natural sources of light can be used.

Fill Light

In television, film, stage, or photographic lighting, a **fill light** (often simply **fill**) may be used to reduce the contrast of a scene to match the dynamic range of the recording media and record the same amount of detail typically seen by eye in average lighting and considered normal. From that baseline of normality using more or less fill will make shadows seem lighter or darker than normal which will cause the viewer to react differently, by inferring both environmental and mood clues from the tone of the shadows.

Natural skylight fill is omnidirectional and diffuse, with lower rate of inverse-square fall-off than artificial sources. A common artificial lighting strategy which creates an overall appearance similar to natural fill places the fill light on the lens axis so it will appear to cast few if any shadows from the point of view of the camera, which allows the key light which overlaps it to create the illusion of 3D in a 2D photo with the same single source patterns typically seen with natural lighting where the sun acts as key light and the skylight as fill. The use of cantered near-axis "neutral" fill also prevents dark unfilled voids in the lighting pattern which can occur on faces if cheeks or brows block the fill source.

The positioning of the fill affects the overall appearance of the lighting pattern. When a cantered fill strategy is used the ratio is created by overlapping the key light over the foundation of fill. A key source of equal incident intensity to the fill, overlapping the even fill, will create a 2:1 reflected ratio (1 key + 1 fill over 1 Fill) = 2:1.

Back Light

In lighting design, **backlighting** is the process of illuminating the subject from the back. In other words, the lighting instrument and the viewer face each other, with the subject in between. This creates a glowing effect on the edges of the subject, while other areas are darker. The backlight can be a natural or artificial source of light. When artificial, the back light is usually placed directly behind the subject in a 4-point lighting setup. A back light, which lights foreground elements from the rear, is not to be confused with a background light, which lights background elements (such as scenery).

The **back light** is sometimes called **hair** or **shoulder light**, because when lighting an actor or an actress, backlighting makes the edges the subject's hair glow if the hair is fuzzy. This can create an angelic halo type effect around the head. Television productions often use this effect in soap operas, news presentation, panel discussions, studio based interview where it has become something of a cliché of the genre. It is also sometimes called the **kicker** or **rim light**.

Ambient Lighting

Ambient light means the light that is already present in a scene, before any additional lighting is added. It usually refers to natural light, either outdoors or coming through windows etc. It can also mean artificial lights such as normal room lights.

Ambient light can be the photographer's friend and/or enemy. Clearly ambient light is important in photography and video work, as most shots rely largely or wholly on ambient lighting.

Unfortunately ambient light can be a real nuisance if it conflicts with what the photographer wants to achieve. For example, ambient light may be the wrong colour temperature, intensity or direction for the desired effect. In this case the photographer may choose to block out the ambient light completely and replace it with artificial light. Of course this isn't always practical and sometime compromises must be made.

On the other hand, many of history's greatest photographs and film shots have relied on interesting ambient light. Unusual lighting can turn an otherwise ordinary shot into something very powerful.

Motivated Lighting

Motivated lighting refers to the light in a scene which appears to have a source such as a window, a lamp and fireplace etc. In some cases the light will come from a source visible in the scene and in some cases, it will only appear to come from a source that is visible in the scene.

Shooting

Shooting otherwise known as production stage is the practical part. Now that we have a thorough knowledge about all things needed for a good production starting from a script to camera and lights and audio equipment we have to get in the field to make our production.

For a systematic production along with a good storyboard and shot division we also need a very well planned production design which includes the location details, the artist availability details and time details etc. which would make our work less time consuming and easy.

Before every shoot it is wise to have a location hunt which means the director or one who is in charge of the shoot should visit all the places and confirm them according to the demand of the script. On the other hand the script writer is supposed to collect the data available and improvise it, considering the nature of location; printed materials; experts on the location; time frame and conception of the director producer and the target audience. The kind of location could be both indoor and outdoor. On one side it is to be seen that it justifies the need of the script whereas on the other hand it should also be kept in mind that whether it is possible to shoot in that place with all the production team.

After the location is finalized it comes to the availability of the artist. Sometimes it is impossible to get busy artist for shoot, so getting appropriate dates from them would confirm their availability. If we are shooting documentaries then we have to deal with real life subjects so it is necessary that they should be there according to our shoot planning.

After these two points are ready we have to prepare a production schedule according to these two factors. In other words, we have to plan on which day at which place and at what time we have to shoot the particular part of the script. Sometimes a number of scenes or parts of the story or script is to be held at a particular location, so it will be cost-effective to complete all those scenes at that particular location in one go, so as to not visiting to the same place again and again.

How much to film

For things that don't move, or general shots of scenes or people, shoot at least ten seconds of each shot.

For scenes with people talking or acting, you need to keep the top and tail of your shots. Start the camera a few seconds before the action starts, and leave it running for a few seconds after it ends. This is called pre roll and post roll. If you're working on your own, the best thing to do is to start the camera and check it's recording. The count of ten seconds before and after the action can provide the excess length we require.

If you're working as a team, you can follow some version of this drill:

- Get your shot set up and your actors in place.
- The camera operator says 'Camera set' when they're ready.
- Then the director says 'Silence please'.
- Once everyone's silent, they say 'Standby' and then 'Turn over'.
- The camera operator starts the camera and checks that it's recording, then they say 'Camera rolling'.

- The director counts to ten and then says 'Action' (or they can count the actors in with a hand signal).
- The actors or presenters do their thing, and then the director counts to ten again and says 'Cut'.
- The camera operator stops the camera and the production assistant makes a note of the shot.

Get the location sound

You should always record some sound from the location, without dialogue. With any scene, leave the camera or audio recorder running to get half a minute or so of atmosphere or wild track, also known as room tone. It can help cover up audio problems when you edit. If you're filming at a location with interesting or distinctive sounds, record them separately.

Don't forget to record atmosphere/ wild track, also known as room tone. This is the background sound of the room or location. You need at least half a minute of this: just leave your camera or audio recorder running with nothing happening. This can be really useful when you edit.

Unit summary

In this unit you learned the Basic of blocking, rehearsing, lighting and shooting. The type of shots and kind of lighting was also described. We also learnt the proper procedure for a planned production or shoot.

We discussed how lighting and kind of shot creates different impact on screen. The need of rehearsal and proper planning schedule to manage time and money was also explained.

Assessment

1. Describe the meaning of blocking?
2. Name the different types of shot.
3. Differentiate between master shot from establishing shot?
4. Identify the different kinds of lighting?
5. What is motivated lighting?
6. What is pre roll and post roll?

Resources

- Mixing secrets for the small studio Senior, Mike.
- Fundamentals of Digital Audio Alan P. Kefauver and David Patschke
- Visual Studio 2013 Cookbook Bruce Johnson
- Audio Effects Workshop Geoffrey Francis
- How to shoot Video that doesn't suck Stockman, Steve, 1958
- The Book of Audacity : record, edit, mix and master with the free audio editor Schroder, Carla

Unit-8 Compiling the Concept

Introduction

Post production is the last and most critical piece of film making and TV production. The completing item wants broadcast after this procedure. The post work process may take additional time than pre and production work. The work process depends on indoor sound and video editing studio. But visual editor, illustrations creator, sound recordist and color grading artist have a key part in post production. Numerous mix-ups occurred amid shooting are to be rectified in post production work. The entire yield of the item relies upon the general population occupied with post work.

Outcomes

Upon completion of this unit you will be able to:

Get a hole idea about Post work in video production

- Understand the history & various process of video editing
- Set up your own editing machine
- Explain the different rule of editing and
- Make your own film

Terminology

Digitising:	It is a process to input raw video and audio into computer hard disk in digital format.
Correction:	It is the process to correct the visual clip which was shot in low light or high exposure condition through an engine or tools incorporated with editing software.
Audio Balance:	Audio balance is to arrange the ambience sound, BGM and sound effect in such a manner which is clearly audible to audience.
Mastering:	Mastering the video is the process to give final output of the edited product in high quality for telecast purpose.
Compress:	Compress video is the way to create the final video for preview or upload in social site using a compressor.

Post-Production

Post-production is the third and last significant period of the production procedure. It is frequently alluded to just as post, e.g. "We can deal with that in post".

There are numerous things which can occur in post-production. Normal assignments include:

- Editing video footage
- Editing the soundtrack, including sound effects, music, and so on.
- Adding titles and illustrations
- Colour and introduction correction
- Adding special effects
- Re-shooting certain scenes if required ("get" shots)

Now and again post-production generally direct, comprises of picking and masterminding footage in the right grouping. By and large be that as it may, post-production is a tedious activity taking longer than the genuine production stage.

Post-Production Activities

Post-production starts with the finishing of filming and proceeds until the point when the project is conveyed to the system for the telecast. The three fundamental exercises of post-production are the editing or collecting of video footage; colour correction and the formation of an entire soundtrack or sound adjust.

Editing may start amid production. In single-camera shoots, the film from every day is checked on at a later time by the director, producer, and network in the request in which it was shot. These films are then separated and collected into scenes by the editors. The main full assemble is appeared to the Director, who rolls out further editing improvements and makes the director's cut. From that point, the producer and the system roll out improvements until the point when a finished product is made.

The final cut is given to the sound department, which is in charge of setting up the music tracks or recordings; sound effects; and discourse tracks for final mix into one track. The final mixing of all the sound is called dubbing. Amid this period, the sound architects will recognize the music– that is, select the focuses at which music will be inserted– and musicians will compose and record the music. Sound designers additionally alter dialogue recording for production quality and record new or replaced the dialogues in a procedure called looping. Sound effects are likewise included as of now. The subsequent dubbing session, which can take a few days for a motion picture or only a couple of hours for a multiple camera tape production, can include the blend of 5 to 25 separate sound tracks.

The final phase of post-production is the expansion of transition and effects, for example, scene fade-outs or dissolves, inclusion of titles and credits; making of special visual effects, for example, animations; and color correction.

The overall Post-production Workflow Explained

In present time it's anything but difficult to work in computerized arrange in TV or film production. It relies upon each individual how they orchestrate post production function. Some superior editing software is accessible in the market to work in computerized arrange. Regardless of what camera you are utilizing the software will import any configuration. The workflow will be a real-time preview.

Before examining Post-production workflow how about we see the means you need to experience amid this post work.

Stage 1: Ingesting or Capturing raw files

The first stage in any post-production work is to ingest the film-began, tape-based, or tapeless media records that you shot. Distinctive kinds of media require diverse ingest techniques; for instance, ingesting from tape requires the Log and Capture window, and ingesting from a tapeless format requires the Log and Transfer window.

Amid ingest, you'll as of now be finding a way to sort out your media by picking what media to ingest and by including logging information, for example, cut names and notes. After ingest is finished, you promptly find a way to sort cuts into bins and survey, check.

In the vast majority of the editing studio, they utilize Storage area network to capture diverse format video and alter it in various editing framework. The visual can be gotten to from any PC connected to the capacity gadget. Extra storage room can be included at times amid the work.

In the film, for most activities, low quality visual is utilized for editing and after culmination of work uncompressed visual are connected to give final output.

Stage 2: Rough cut Edit

Editorial development is done when your clips are assembled. Sometimes, it is alluded to as the disconnected alter or the story alters, this is the place the raw media that you have ingested in stage 1 is transformed into an edited program.

A few programs are gathered completely inside editing software, where you can make every one of the titles and effects you require and do any vital sound outline right in your arrangement while you alter. Be that as it may, keep in mind that there are different applications in editing software that you can swing to for specialized errands. For instance, you can make ace layouts in Motion gfx for use as generators from inside editing software, or you can utilize Motion to make communicate illustrations and composites that you would then be able to alter into the editing software Timeline. As you work, you can likewise send particular sound clips from the editing Timeline specifically to Sound editing to do things like eliminate noise, make ambient noise to fix openings, and do balance coordinating on a clasp by-cut premise.

Regardless of whether you utilize one application or many, the greater part of the program's components met up in your altered grouping, controlling your editorial choices as you work to finish the program's content.

Stage 3: Preview for Producer

In case you're chipping away at an undertaking for a customer, successive and particular input is a flat out prerequisite. In case you're working in a directed session, you can just play your undertaking from the editing software Timeline. Nonetheless, there are events when you might work with customers who are remotely found and you need to give an adaptation of the program for their screening at their places. Editing software gives numerous methods for conveying singular clips or whole groupings to customers for remote survey, for example, by means of a QuickTime film or DVD, on the web, or even intelligently in I-Cloud.

Stage 4: Finishing the movie

Subsequent to editing the story on the timeline and finishing the content work, it's time to give the program it's final shape and tweaking, suitably alluded to as wrapping up. In the initial segment of completing, the offline-nature of media in the event that you are utilizing as a part of the project, should be changed over to the most elevated quality form accessible in the first source through the altered grouping. The most ideal approach to do this relies upon how the first media was procured, how you ingested the media, and how painstakingly you dealt with the media amid editorial development.

On the off chance that your offline alter consolidates source media in a few unique formats; it is the time to change over any unmatched clasp perfect to final arrangement settings so the whole program is simple for send out. The format-change ability of the Compressor encourages this procedure.

This is additionally the time when every single impermanent component like placeholder titles, offline effects, and other placeholder media must be supplanted with their final, online-quality renditions with rendering. These components can be made inside the editing software or in conjunction with Motion gfx.

In conclusion, once your succession has been deliberately arranged, your program is prepared for color correction and the final sound mix.

Stage 5: Mastering

Mastering is the way toward giving a final output of your project in various arrangement and quality according to a request from the director. It's simple and less time taking to give final output by request ahead of advanced editing software.

Sometimes, a mixed and unmixed adaptation of the final item as requested by the customer can be given effectively inside less time. A different output without graphics work can likewise be given.

Stage 6: Output and Delivery

Output and delivery are the last stage of the post-production process. As the name infers, it's the process of making the final, playable media that you can hand over to the customer and group of onlookers. Output can take numerous organizations: High quality tape arrange, making a DVD, or compressing your program to a configuration appropriate for web playback.

Post Production Workflow

Establishing a solid workflow can help eliminate time waste, make you more profitable, and result in a better product. This course is designed to teach you about the different steps of the post-production process, as well as how to jump from application to application all the while staying organized. Editing technique is one thing, but proper workflow is what truly elevates editors to pro-status.

Background

Video editing is the process of editing segments of motion video production footage, special effects and sound recordings in the post-production process. Motion picture film editing is a predecessor to video editing and, in several ways, video editing simulates motion picture film editing, in theory and the use of linear video editing and video editing software on non-linear editing systems (NLE). Using video, a director can communicate non-fictional and fictional events. The goal of editing is to manipulate these events to bring the communication closer to the original goal or target. It is a visual art.

Early 1950's video tape recorders (VTR) were so expensive, and the quality degradation caused by copying was so great, that 2 inch Quadruplex videotape was edited by visualizing the recorded track with ferro fluid and cutting with a razor blade or guillotine cutter and splicing with video tape. The two pieces of tape to be joined were painted with a solution of extremely fine iron filings suspended in carbon tetrachloride, a toxic and carcinogenic compound. This "developed" the magnetic tracks, making them visible when viewed through a microscope so that they could be aligned in a splicer designed for this task.

Improvements in quality and economy, and the invention of the flying erase-head, allowed new video and audio material to be recorded over the material already recorded on an existing magnetic tape and were introduced into the linear editing technique. If a scene closer to the beginning of the video tape needed to be changed in length, all later scenes would need to be recorded onto the video tape again in sequence. In addition, sources could be played back simultaneously through a vision mixer (video switcher) to create more complex transitions between scenes. A popular 1970-80s system for doing that was the U-matic equipment (named for the U-shaped tape path). That system used two tape players and one tape recorder, and edits were done by automatically having the machines back up, and then speed up together in synchrony, so the edit didn't roll or glitch. Later, 1980-90's came the smaller beta equipment (named for the B-shaped tape path), and more complex controllers, some of which did the synchronizing electronically.

There was a transitional analogue period using multiple source video cassette recorder (VCR)s with the Edit Droid using Laser Disc players, but modern NLE systems edit video digitally captured onto a hard drive from an analogue video or digital video source. Content is ingested and recorded natively with the appropriate codec which will be used by video editing software In order to control the shot film. HD video is ending up more famous and can be promptly altered utilizing a similar video editing programming alongside similar movie graphic software's. All the clippings of video are sequentially arranged in the time line, on it addition of titles, music tracks, computerized onscreen graphics are done, creation of special effects is made and the completed product is "rendered" into a completed video. The video may then be circulated in an assortment of methods including DVD, video tape, CD-ROM, iPod, QuickTime Movies, , or web gushing..

Linear video editing

Linear video editing is a video altering after production procedure of choosing, organizing and adjusting pictures and sound in a foreordained, sequentially as ordered. Despite whether it was caught by a camcorder, tapeless camcorder, or TV studio recording on a video recording device (VTR) sequence access of content should be done on priority. Mostly linear editing is replaced by video editing.

In the early 1990s until the appearance of PC random access non-linear editing systems in general "linear video editing" was referred as "video editing".

History

Live TV is still basically delivered in an indistinguishable way from it was in the 1950s, albeit changed by present day specialized advances. Before tape, the main method for airing similar shows again was by taping demonstrates utilizing a kinescope, basically a video screen combined with a motion picture camera. In any case, kinescopes (the movies of TV programs) experienced different sorts of picture debasement, from picture twisting and clear sweep lines to relics conversely and loss of detail. Kinescopes needed to be processed and imprinted in a film research center that makes them questionable for broadcasts postponed for various time zones.

The essential inspiration for the improvement of video tape was as a short or long haul authentic medium. Simply after a progression of specialized advances spreading over decades did video tape altering at last turn into a practical production instrument, acceptable with film editing.

Early technology

The foremost generally acknowledged video tape in the United States was 2 inch Quadruplex tape and with a motion of at 15 inches every second. To increase more head to tape speed, four video recording and playback heads were spun on a head wheel crosswise over a large portion of the two-inch width of the tape. (Sound and synchronization tracks were recorded at the edges of the tape with stationary heads.) This framework was known as Quad, for quadruplex account.

The subsequent video tracks were marginally not as much as a ninety-degree point (keeping in mind the the vector expansion of fast spinning heads following over the 15 inches every second forward movement of the tape).

If we see from the origin, video was altered on viewing the recorded track with ferrofluid and cutting it with an razor blade or guillotine shaper and joining with video tape, in a way like editing of the movie. This was a burdensome procedure and as possible generally avoided. If utilized, the two bits of tape to be joined were painted with an answer of to a great degree fine iron filings suspended in carbon tetrachloride, a harmful and cancer-causing compound. This "built up" the magnetic tracks, to view them when seen through a magnifying instrument with the goal that they could be adjusted in a splicer intended for this errand. The tracks were needed to cut amid a vertical follow, not disturbing the ordered odd-field/even-field. The slice likewise must be at a similar point that the video tracks were set down on the tape. As the video and sound read heads were a many inches separated it was almost impossible for physical editing that would work accurately in both video and sound. The cut was made for video and a bit of sound then re-replicated into the right relationship, the similar method like for editing 16mm film with a combined attractive track.

There were various detriments of physically altering tapes. Few broadcasters proclaimed that altered tapes cannot be used again, in a time when the moderately high cost of the machines and tapes was adjusted by the funds associated with having the capacity to wipe and reuse the media. Others, for example, the BBC, permitted reuse of spliced tape in specific conditions as long as it adjusted to strict criteria about the quantity of splices in a given term. The procedure required extraordinary ability, and frequently brought about editing which might roll (lose match up) and each editing requires many minutes for performance, in spite of the fact that this was additionally at first valid for the electronic editing which arrived later.

Introduction of computerized systems

In 1960s a framework to edit Quad tape "by hand" was produced. This was factually only a methods in order to sync two machines playback in such a way that the new shots signal could be "punched in" with a sensible possibility at progress. An issue with this and early PC

controlled frameworks was that the sound track was inclined to endure the artifact in light of the fact that the video of the recently recorded shot would record into the side of the sound track. A business arrangement known as "Buzz Off" was utilized to limit this impact.

Around over 10 years, PC controlled Quad altering frameworks were the standard after production instrument for TV. Quad tape included costly equipment, tedious setup, and moderately long rollback times for every edit and indicated misalignment as not agreed "banding" in the video. Notwithstanding, it ought to be specified that Quad tape has a superior data transfer capacity than any littler arrangement simple tape, and legitimately taken care could deliver a photo strongly similar to that of a live camera.

Title- Linear editing system

Attribution- Channel R

Source-Link- https://commons.wikimedia.org/wiki/File:Linear_suite.jpg

At the point when helical scan video recorders turned into the standard it was never again conceivable to cut the tape physically. Now editing the video turned into a procedure of utilizing two video tape machines, playing back the source tape (or "crude film") from one machine and duplicating only the bits wanted on to a second tape (the "edit master").

The heft of linear editing is done basically, with two machines and an edit controller gadget to exercise control over them. Numerous video tape machines are equipped for controlling a second machine, disposing of the requirement for an external editing control gadget.

This procedure is "linear", as opposed to non-linear editing, since according to the feature of the tape-to-tape duplicating needs that laying of all shots should be done as per the final edited order. On tape if once the shot is placed, nothing can be put in front of it without overwriting whatever is there as of now. On the off chance that totally essential, material can be named by replicating the altered substance onto another tape, since with every copy the picture is corrupted in total, this isn't attractive.

One disadvantage of early video altering strategy was that it was illogical to deliver a raw slice for presenting before an Executive producer. Since Executive Producers are never sufficiently comfortable with the material to have the capacity to view the completed item

from examination of an alter choice rundown (EDL), they were denied of the chance to voice their suppositions when those sentiments could be effectively followed up on. Hence, especially in documentary TV, video was opposed for a significant long time.

Current usage

While PC based video altering programming has been received all through the majority of the business, film, industrial and consumer video enterprises, editing of linear video tape altering is as yet ordinary in TV station newsrooms for TV news production, and production facilities of medium-size who till date did not plan to invest capital in latest technologies.

Non-linear editing system

Title-Non linear Editing System

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Non-linear editing is a form of audio, video or image editing where the original content is not modified in the course of editing – instead the edits themselves are specified and modified by specialized software. A pointer-based playlist – effectively an edit decision list (EDL) – for video or a directed acyclic graph for still images is used to keep track of edits. Each time the edited audio, video, or image is rendered, played back, or accessed, it is reconstructed from the original source and the specified editing steps. Although this process is more computationally intensive than directly modifying the original content, changing the edits themselves can be almost instantaneous, and it prevents further generation loss as the audio, video, or image is edited.

A **non-linear editing system** (**NLE**) is a video (NLVE) or audio editing (NLAE) digital audio workstation (DAW) system that performs non-destructive editing on source material. The name is in contrast to 20th century methods of linear video editing and film editing.

Linear and non-linear editing

Non-linear editing is the most natural approach when all assets are available as files on video servers or hard disks, rather than recordings on reels or tapes—while linear editing is tied to the need to sequentially view film or hear tape.

Direct access

Non-linear editing enables direct access to any video frame in a digital video clip, without needing to play or scrub/shuttle through adjacent footage to reach it, as is necessary with video tape linear editing systems. It is now possible to access any frame by entering directly the time-code or the descriptive metadata. An editor can, for example at the end of the day in the Olympic Games, easily retrieve all the clips related to the players who received a gold medal.

Basic techniques

The non-linear editing method is similar in concept to the "cut and paste" techniques used in film editing or in IT. However, with the use of non-linear editing systems, the destructive act of cutting of film negatives is eliminated. It can also be viewed as the audio/video equivalent of word processing, which is why it is called desktop video editing in the consumer space.

Broadcast workflows and advantages

Video and audio data are first captured to video servers, other hard disk-based systems, or other digital storage devices. The data are either direct to disk recording or are imported from another source (trans-coding, digitizing, transfer). Once imported, the source material can be edited on a computer using application software, any of a wide range of video editing software. For a comprehensive list of available software, see list of video editing software, whereas comparison of video editing software gives more detail of features and functionality.

In non-linear editing, the original source files are not lost or modified during editing. This is one of the biggest advantages of non-linear editing compared to linear editing.

Professional editing software records the editor's decisions in an edit decision list (EDL) that is exportable to other editing tools. Many generations and variations of the original source files can exist without storing many different copies, allowing for very flexible editing. It also makes it easy to change cuts and undo previous decisions simply by editing the edit decision list (without having to have the actual film data duplicated). Generation loss is also controlled, due to not having to repeatedly re-encode the data when different effects are applied.

In comparison with the linear method of tape-to-tape editing, non-linear editing offers the flexibility of film editing, with random access and easy project organization. With the edit decision lists, the editor can work on low-resolution copies of the video. This makes it possible to edit both standard-definition broadcast quality and high definition broadcast

quality very quickly on desktop computers that may not have the power to process huge full-quality high-resolution data in real-time.

The costs of editing systems have dropped such that non-linear editing tools are now within the reach of home users. Some editing software can now be accessed free as web applications; some, like Cinelerra (focused on the professional market) and Blender3D, can be downloaded as free software; and some, like Microsoft's Windows Movie Maker or Apple Inc.'s i-Movie, come included with the appropriate operating system.

Accessing the material

The non-linear editing retrieves video media for editing. Because these media exist on the video server or other mass storage that stores the video feeds in a given codec, the editing system can use several methods to access the material:

- Direct access: the video server records feeds with a codec readable by the editing system, has an Ethernet connection and allows direct editing. The editor previews material directly on the server (which it sees as remote storage) and edits directly on the server without trans-coding or transfer. This method is new.
- Shared storage: the video server transfers feeds to and from shared storage that is accessible by all editors. Media in the appropriate codec on the server need only transferred. If recorded with a different codec, media must be trans-coded during transfer. In some cases (depending on material), files on shared storage can be edited even before the transfer is finished.
- Importing: the editor downloads the material and edits it locally. This method can be used with the previous methods

Edit decision list

An **edit decision list** or **EDL** is used in the post-production process of film editing and video editing. The list contains an ordered list of reel and time-code data representing where each video clip can be obtained in order to conform the final cut.

EDLs are created by offline editing systems, or can be paper documents constructed by hand such as shot logging. These days, linear video editing systems have been superseded by non-linear editing (NLE) systems which can output EDLs electronically to allow auto conform on an online editing system – the recreation of an edited programme from the original sources (usually video tapes) and the editing decisions in the EDL.

They are also often used in the digital video editing world, so rather than referring to reels they can refer to sequences of images stored on disk.

Some formats, such as CMX3600, can represent simple editing decisions only. Final Cut Pro XML, the Advanced Authoring Format (AAF), and AviSynth scripts are relatively advanced file formats that can contain sophisticated EDLs.

Various Formats of Video

DV

Another leap came in the late 1990s with the launch of DV-based video formats for consumer and professional use. With DV came IEEE 1394 (FireWire/iLink), a simple and inexpensive way of getting video into and out of computers. Users no longer had to convert video from analogue to digital—it was recorded as digital to start with—and FireWire offered a straightforward way to transfer video data without additional hardware or compression. With this innovation, editing became a more realistic proposition for standard computers with software-only packages. It enabled real desktop editing producing high-quality results at a fraction of the cost of other systems.

HD

In early 2000, the introduction of highly compressed HD formats such as HDV has continued this trend, making it possible to edit HD material on a standard computer running a software-only editing application.

Avid is still considered the industry standard, with the majority of major feature films, television programs, and commercials created with its NLE systems.[7] Final Cut Pro received a Technology & Engineering Emmy Award in 2002 and continues to develop a following.

Avid has held on to its market-leading position in the advent of cheaper software packages, notably Adobe Premiere in 1992 and Final Cut Pro in 1999. These three competing products by Avid, Adobe, and Apple are the foremost NLEs, often referred to as the A-Team.[8] With advances in raw computer processing power, new products have appeared including NewTek's software application SpeedEdit.

Since 2000, many personal computers include basic non-linear video editing software free of charge. This is the case of Apple iMovie for the Macintosh platform, various open source programs like Kdenlive and PiTiVi for the Linux platform, and Windows Movie Maker for the Windows platform. This phenomenon has brought low-cost non-linear editing to consumers.

4K

As of 2014, 4K Video in NLE is fairly new, but it is being used in the creation of many movies throughout the world, due to the increased use of advanced 4K cameras such as the Red Camera. Examples of software for this task are Avid Media Composer, Apple's Final Cut Pro X, Sony Vegas, Adobe Premiere, VSDC Free Video Editor, and Edius. Open source Video editing software also responds the 4K format.

Unit Summary

In this unit you learned the basic principle of Editing. You will be able to edit your own video using Non linear video editing. You can understand about various processes of Linear and non-linear video editing. You have a basic idea about different format used during editing workflow.

Assignments

1. Explain difference between Linear & Non-linear Video Editing?
2. List the steps to follow during editing?
3. Describe the use of Ambience sound in editing.
4. What is the aspect ratio of DV, HD and 4K video?
5. What is Online and Offline editing?
6. Why color correction is important in Post production?
7. What is the role of Time-code (TC) in editing?
8. What is EDL?
9. Which is easier for you? LE or Non-LE?
10. Name 2 Bollywood film editor who became Director?

Resources

1. http://www.mediacollege.com
2. Video Production by Vasuki Belavadi (Oxford University Press)
3. Television Field Production And Reporting by Fred Shook (PEARSON Education)
4. www.wikipedia.org
5. www.documentmx.com

Unit 9 Crew Members and Equipments

Introduction

Post production activity is the phase where the film actually takes shape. Most people assume that post-production activity ends with editing the film. It involves a lot of other work like sound mixing, colour correction and mastering which required experienced individual to complete the process. After all, we do not produce a video just for ourselves, we may want to distribute it through DVD, compressed video for website or even get it telecast and exhibits.

Outcomes

Upon completion of this unit you will be able to:

- Know about the persons involved in Editing
- Understand the grammar and functions of video editing
- Setup editing machine
- Choose different editing techniques

Terminology

Capture Device:	A hardware or firmware device used to convert analogue video into digital video.
Compressors & Codec's:	Software or firmware used to compress and decompress digital video. Compression makes the file size smaller.
Encoding:	The process of converting digital video into a particular format, for example, saving a video project in MGEG-2 format for DVD distribution.
Layering:	Adding multiple layers of superimposed video.
Transition:	The way one shot changes to the next.
Non Linear Editing:	An editing method which uses computer software to edit the footage.

The Editing Process

Video editing is the process of controlling and reworking video shots to make another work. Editing is typically thought to be one A player in the post-production process — other post-production undertakings incorporate titling, color correction, sound mixing, and so on.
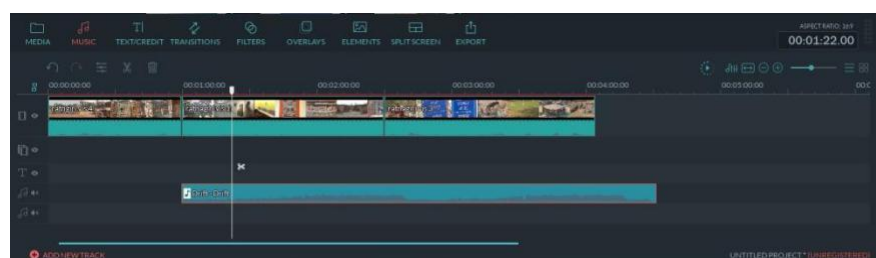
Many people use the term editing to describe all their post-production work, especially in non-professional situations.

- Rearranging, adding and/or removing sections of video clips and/or audio clips.
- Applying colour correction, filters and other enhancements.
- Creating transitions between clips.

The Principle of Editing

There are numerous motivations to alter a video and your editing approach will rely upon the coveted result. Before you start you should plainly characterize your editing objectives, which could incorporate any of the accompanying:

Evacuate undesirable footage

This is the least difficult and most basic undertaking in editing. Numerous videos can be significantly improved by essentially disposing of the imperfect or undesirable bits.

Pick the best footage

It is regular to shoot significantly more footage than you really require and pick just the best material for the final alter. Frequently you will shoot a few variants (takes) of a shot and pick the best one when editing.

Create a flow

Most videos fill a need, for example, recounting a story or providing data. Editing is an essential advance in ensuring the video flows in a way which accomplishes this objective.

Include effects, graphics, music, and so on

This is frequently the "stunning" some portion of editing. You can improve most videos (and have a considerable measure of fun) by including additional components.

Adjust the style, pace or state of mind of the video

A decent editorial manager will have the capacity to create unobtrusive mind-set prompts in a video. Procedures, for example, inclination music and visual effects can impact how the gathering of people will respond.

Give the video a specific "angle"

Video can be custom fitted to help a specific viewpoint, grant a message or serve a plan.

People involved in Post-production

Editor

The editor works under the supervision of the director and executive producer to gather the movie. Particular obligations will include:

I. To gather the footage into progressive cuts until the point when a final cut is achieved,
II. To assist the DP (Director of Photography) with color correction and other post-production effects,
III. To make the output of the final cut to a few organizations.

Assistant Editor

The assistant editor functions as an assistant to the editor, helping him/her with by logging and catching footage, sorting out and overseeing media as a team with the script supervisor's log. Particular obligations will include:

- Logging and capture media.
- Preparing harsh cut alter on timetables for the director.
- Managing media in a joint effort with the script supervisor's log.
- Maintaining an arrangement of reinforcements.
- Assisting with compression and multi-format output

Compositing

Lead Compositor/Visual Effects Supervisor

The lead compositor works under the supervision of the director, DP, and art director and in a joint effort with the editor to outline and execute compositing effects. Particular obligations will include:

I. Supervision of all compositing work,
II. Assist the art director and DP in the innovative and specialized outline of composite shots,
III. To actualize the composite shots

Compositors

The compositors work under the supervision of the lead compositor and the art director to actualize compositing effects. Particular obligations will include:

I. Digital scrubbing and cleaning
II. Implementation of composite shots

Sound/Music

Sound Designer

The sound designer, working in conjunction with the director, is in charge of the ideation and formation of the general soundtrack of the movie. The sound architect regulates the blend of music, dialog, ADR, Foley, and sound effects.

Sound designer's work also includes:

- Realization of sound effects, textures, and landscapes
- Supervision of the mix for different output formats

Sound Composer

The composer composes unique music to be heard in the film, both diegetic and non-diegetic. Particular obligations will include:

I.   Writing music as requested in both pre and
II.   postproduction,
III. Supervising the recording of the music

Mixing Engineer

The mixing engineer, under the supervision of the sound designer, blends the general soundtrack into its last blends for an assortment of yield formats. Particular obligations will include:

I.   Mixing sound in stereo and additionally multi-channel formats, for home framework and theatrical discharge.
II.   Preparing last mix for mastering audio.

Foley Artist

The Foley artist makes sound effcts to go with particular visual items, developments, and sound sources, for example, footsteps or punches. Particular obligations will include: Generating and recording sound to go with particular on-screen sound sources.

Different Types of Video Editing

There are a few diverse approaches to alter video and every technique has its upsides and downsides. Albeit most editors choose computerized non-linear altering for most ventures, it bodes well to have a comprehension of how every strategy functions.

Film Splicing

Actually this isn't video editing, it's film editing. Be that as it may, it is justified regardless of a say as it was the main method to alter moving pictures and theoretically it shapes the premise of all video editing.

Title-Film Splicer

Attribution-DRs Kulturarvsprojekt

Source-Dr. Cattozzo film splicer

Link-https://commons.wikimedia.org/wiki/File:Dr._Cattozzo_film_splic er_(6498607259).jpg

Traditionally, the film is altered by cutting segments of the film and adjusting or disposing of them. The procedure is exceptionally clear and mechanical. In principle, a film could be altered with a couple of scissors and some joining tape, in spite of the fact that in all actuality, a grafting machine is the main down to earth arrangement. A grafting machine permits film footage to be arranged and held set up while it is cut or joined together.

Tape to Tape (Linear)

Linear editing was the first technique for editing electronic video tapes, before editing PCs ended up noticeably accessible in the 1990s. Despite the fact that it is not any more the preferred choice, it is as yet utilized as a part of a few circumstances.

In linear editing, video is selectively copied from one tape to another. It requires at least two video machines connected together — one acts as the source and the other is the recorder. The basic procedure is quite simple:

1. Place the video to be edited in the source machine and a blank tape in the recorder.
2. Press play on the source machine and record on the recorder.

The idea is to record only those parts of the source tape you want to keep. In this way desired footage is copied in the correct order from the original tape to a new tape. The new tape becomes the edited version.

This method of editing is called "linear" because it must be done in a linear fashion; that is, starting with the first shot and working through to the last shot. If the editor changes their mind or notices a mistake, it is almost impossible to go back and re-edit an earlier part of the video. However, with a little practice, linear editing is relatively simple and trouble-free.

Digital/Computer (Non-linear)

In this strategy, video footage is recorded (caught) onto a PC hard drive and afterward altered utilizing specific programming. Once the editing is finished, the completed item is recorded back to tape or optical plate.

Non-linear editing has numerous noteworthy favorable circumstances over linear editing. Most quite, it is an exceptionally adaptable technique which enables you to roll out improvements to any piece of the video whenever. This is the reason it's called "non-linear" — in light of the fact that you don't need to alter in a linear manner.

A standout amongst the most troublesome parts of the non-linear advanced video is the variety of equipment and programming alternatives accessible. There are additionally a few normal video principles which are inconsistent with each other, and setting up a strong editing framework can be a test.

The exertion is justified, despite all the trouble. In spite of the fact that non-linear editing is more hard to learn than linear, once you have aced the nuts and bolts you will have the capacity to do considerably more, substantially speedier.

Live Video Editing

In a few circumstances, multiple cameras and other video sources are directed through a focal mixing console and altered progressively. Live television coverage is a case of live editing.

Live editing is a reasonably expert theme and won't concern a great many people.

Requirement for a Non Linear Edit Suite

To edit video on a PC you will require:

- A source device to play the first tape or circle. Commonly a VCR or camera.
- A PC with at any rate these specs: Intel Core i5 processor/4 GB RAM/Fast hard drive with 1 TB or all the more free space and a devoted illustrations card like AMD Radeon or Nvidia GeForce.
- Note: If you need OK comes about, you'll require significantly higher specs. Some editing programming requires a superior PC to try and work legitimately.
- A video capture device. To capture video from a simple source, (for example, VHS or Video8) you require a device to change the video into an advanced organization. This can be an independent device which connects to the PC or a video capture card which turns out to be a piece of the PC.
- In the event that you are utilizing a source device which yields a computerized flag, (for example, Firewire or USB) you needn't bother with a capture device, yet you do need to ensure your PC has the fitting info accessible.
- Connecting prompts to connect the source device to the capture device or PC.
- Software to control the catching, editing and outputting.
- A video screen (or television).

We'll return to the product on the following page. Before we start, let's look with, the hardware and physical connections. There are different alternatives relying upon your equipment.

Connectors

Title-Firewire Connector

Attribution- Mikkel Paulson

Source-Link- https://commons.wikimedia.org/wiki/File:FireWire_cables.jpg

The main work is to connect your video camera straightforwardly to your PC by means of a computerized link, for example, Firewire or USB. These connections and enable you to "dump" footage straight from the camera to the hard drive. This is a helpful and cheap approach to work. Counsel your camera manual for points of interest.

On the off chance that your camera doesn't have a digital output, however, has simple AV output, you can utilize a capture device.

In the event that your camera doesn't have any video outputs whatsoever, you should utilize a VCR as the source device.

Connection between Computer & VCR

A VCR is utilized for the source gadget, associated with a computer with the assistance of capture card. A video monitor (or TV) is utilized to monitor the videos. Sound can be monitored with the TV speakers, a separate sound framework or with an earphone.

1. If the VCR has at least two AV outputs, utilize one of the outputs to plug as AV input for monitoring. On the off chance that there is just a single AV output, utilize the RF (aeronautical) output rather, and utilize the AV output for the subsequent stage.
2. The second AV output of the VCR plugs into the AV input of the computer's capture card.
3. The AV output of the capture card plugs into the AV input of the VCR.

In this system, footage is played from the VCR to the computer, edited and after that played again from the computer to the VCR (for recording).

Amateur Editing Suite

This suite is meant for editing of home videos, DVDs, television-quality productions, and authoring for internet upload.

Different Editing Software

Choosing which video editing software to utilize isn't simple. There is an enormous range available, from exceptionally fundamental applications, for example, Windows Movie Maker to proficient bundles, for example, Final Cut Pro, ULead Media Studio, Avid and Adobe Premiere.

For many people, the primary imperative is cash. Best editing software is costly and frequently requires an extravagant computer to run adequately. Clearly the more cash you can spend the better, however you can accomplish sensible outcomes with ease software.

Exceptionally modest or free software (e.g. Windows Movie Maker) has a tendency to be exceptionally restricted and to some degree unfeasible. In the event that you are at all genuine you should spend some cash.

Note that numerous capture gadgets and cameras accompany their own editing software, or maybe a constrained adaptation of an expert bundle. This can be a financially savvy approach to begin.

Working method of Editing Software

Mainly editing software does the basic three things:

1. Capture
2. Edit
3. Output

This implies the software controls the capturing (recording) of the footage, gives an approach to edit the footage, and enables the completed item to be output to a recording device, for example, a VCR or DVD.

On the off chance that you like, you can utilize isolate software for catch or output, yet at first, you will presumably think that its more helpful to utilize a similar program for all assignments.

What is a project?

The term "project" may vary one non linear editing software to another. A project is a compilation of different elements like- video clips, audio clips, titles, gfx, animations, sound effects, still images etc from start to finish.

The project likewise incorporates data about how these components are orchestrated in the edit. As a result, a project comprises of all the individual components and directions on how they are assembled. When you make a video project, you import or catch the components you require, at that point mastermind them in the request you need (including effects and different treats on the off chance that you like).

What to Look For in Editing Software

1. Make beyond any doubt it is good with your hardware and operating system.
2. Check the catch, import and fare alternatives. Ensure it can deal with the configurations and determination you need to utilize.

3. Does the software take into account layering and effects? What other propelled highlights does it have?
4. Is there some other software packaged with the bundle (e.g. sound editing)?
5. Is it perfect with other regular software (e.g. Adobe Photoshop)?

Digitising/Capturing Video in NLE

Once your edit system is set up effectively, you have to record (catch) the footage from the source machine (e.g. camera or VCR) onto the PC's hard drive. The catch procedure goes this way:

Turn everything on and dispatch the video catch software. Precisely how this functions will rely upon your software, yet by and large you will have a menu choice to open a catch window.

Press "play" on the source machine. In the event that fortunes is your ally the catch window will demonstrate the photo originating from the source. If not, counsel your software enable record to perceive what you to need to do.

Search for a record or catch in the catch window. Essentially click this catch to record (similarly as you would press the record catch on a VCR). Continue recording until the point that you have all the footage you need. As a rule you will need to catch just the footage you are probably going to require, however it is smarter to catch more footage than less — you can dispose of undesirable clips later.

When you have caught every one of the footages, spare the video file(s) to your hard drive.

The Editing Workspace

Once you have done your capturing of footages, you can ready to start your project.

Almost every professional/amateur non linear editing software have same type interface like- project window, monitor window, Timeline, effects controls etc. But the terminology may be varied.

The most straightforward approach to organize components on the course of events is to move them from the project window. You would then be able to modify the components, for instance, trim video clasps to make them shorter or decrease the volume of sound clasps. You can adjust components as much as you prefer and review the outcomes previously finishing them.

Any great software bundle will likewise enable you to include different layers of video, sound and graphics which can be mixed and superimposed to make different effects.

Before you start editing you should read the manual of that software carefully.

Creating Video output

Since you have wrapped up your artful editing and you have your timeline all concluded, you are prepared to output the video record. The two most normal approaches to do this are:

1. Encode the video to a computerized arrangement, for example, MPEG-2 and record it specifically to DVD or other optical disk.

2. Output the video through your PC's video card to a recording device, for example, a VCR.

Once more, you should counsel your software/hardware manual for particular guidelines.

Unit summary

In this unit you learned the process of Editing. Able to know the role of all the members involved in editing. How to install an editing machine. Various technical term used during the editing process.

Assessment

1. What is the role of Editor & Asst. Editor in Post production?
2. What is the main work of a Compositor?
3. Describe the job of Foley Artist.
4. What is Live editing?
5. Why a monitor is important during editing?
6. What is Transition?
7. Why a clip shows offline on timeline during editing?
8. What is the most general purpose of editing software?
9. What is the minimum system configuration required for a professional editing work?

Resources

1. http://www.mediacollege.com
2. Video Production by Vasuki Belavadi (Oxford University Press)
3. Television Field Production And Reporting by Fred Shook (PEARSON Education)
4. www.wikipedia.org
5. www.documentmx.com

Unit-10 Editing & other things

Introduction

Editing is so important to the visual storytelling process because it duplicate the manner in which the mind sees. We all edit reality with our eyes and mind. The art of editing lies therefore in creating illusion and new realities, new relationship and controlling emotional responses. No matter in which software you are doing the editing work, it's always the mind game. The final product should be communicative and informative. Editing is to be done in mind, software is the tool only.

Outcomes

Upon completion of this unit you will be able to:

- Get a whole idea about Editing using OPENSHOT Video Editor
- Understand the tools and project setting
- Learn about color correction
- Final output in different format
- How to make promotion and publicity of your own film

Terminology

Effect:	In addition to the many clip properties which can be animated and adjusted, you can also drop an effect directly onto a clip.
Transition:	A transition is used to gradually fade (or wipe) between two clips
Color grading:	Itis the process of altering and enhancing the colour of a motion picture, video image, or still image either electronically, photo-chemically or digitally.
Audio balance:	Re-arranging the audio track i.e. voiceover, bgm and ambience track in such a manner that is clearly audible to the viewers.

About Open Shot Video Editing Software

OpenShot Video Editor is an open-source video editor, available on Linux, Mac, and Windows platform. You can create stunning videos, films, and animations by using OpenShot Video Editor. It has a user friendly interface andflexible set of features.

System Requirements

Every Video editing system needs large memory, advance CPUs, and fast hard disks. Here are the basic system requirements to run Open shot Video Editor:

- 64-bit Operating System (Linux, OS X, Windows 7/8/10)
- Multi-core processor with 64-bit support
- 4GB of RAM (16GB recommended)
- Minimum 500 MB of hard-disk space for installation
- Optional: Solid-state drive (SSD), if utilizing disk-caching (and an additional 1 TB of hard-disk space)

Main Features

- It's a Cross-platform software that Supports Windows, MAC OS X, and Linux.
- It Supports multiple video, audio, and image formats
- You can create attractive curve-based Key frame animations
- It supports desktop integration (drag and drop support)
- It has Unlimited tracks / layers
- Clip resizing, scaling, trimming, snapping, rotation, and cutting options are available in this software.
- It has Video transitions with real-time previews options.
- Compositing, image overlays, watermarks are easily can be done.
- Title templates, title creation, sub-titles can be done here.
- It supports 2D animation (image sequences).
- 3D animated titles are possible with effects.
- It has SVG friendly facility to create and include vector titles and credits.
- It can Scroll motion picture credits.
- Like any other editing software it has advanced Timeline options that include Drag & drop, scrolling, panning, zooming, and snapping.
- Time-mapping and speed changes on clips (slow/fast, forward/backward, etc...) is easily can be done.
- You can mix and edit audio.
- Digital video effects, and color correction options including brightness, gamma, hue, greyscale, chroma key (blue screen / green screen), and many more are available in this software.

Main Window
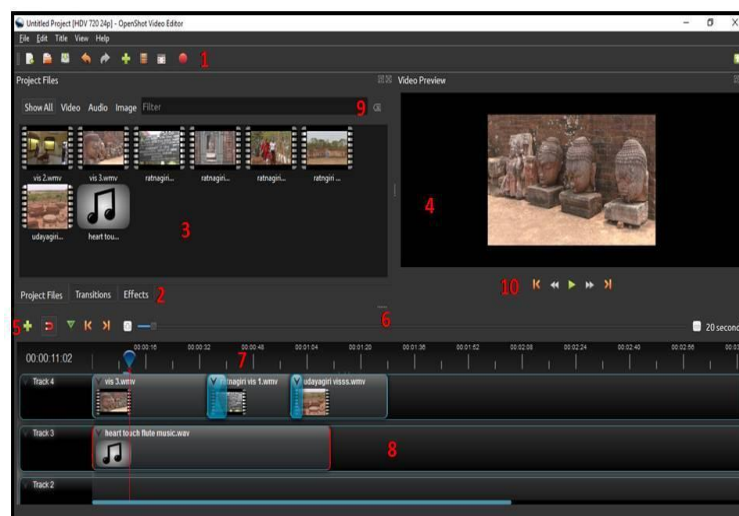
Sr.	Name	Interpretation
1	Main Toolbar	Contain buttons to open, save, export your project
2	Function Tabs	A switch between project files, Transition and Effects
3	Project Files	It shows all video, audio and image files.
4	Preview Window	Playback video will show here.
5	Edit Toolbar	It contains buttons that is used for adding tracks, snapping, markers and jumping between markers.
6	Zoom Slider	This will adjust the time scale of the timeline.
7	Play-head/Ruler	This shows the current playback position.
8	Timeline	This shows the each track, each clip, transition, effects, titles and graphics.
9	Filter	It is used for finding, what you are looking for.
10	Playback arrows	It shows the play, pause, rewind, forward, jump to start, jump to end arrow to control the playback.

Keyboard shortcuts to work faster

Shortcut	Action
Ctrl+H	About OpenShot
Ctrl+M	Add Marker
Ctrl+Shift+T	Add Track
Ctrl+W	Add to Timeline
Ctrl+B	Animated Title
Ctrl+P	Choose Profile
Ctrl+C	Copy
Delete	Delete Item
Backspace	Delete Item
Ctrl+D	Details View
Ctrl+E	Export Video
L	Fast Forward
F11	Fullscreen
Ctrl+F	Import Files
Ctrl+End	Jump to End
Ctrl+Home	Jump to Start
Ctrl+N	New Project
Right	Next Frame
Ctrl+Right	Next Marker
Ctrl+O	Open Project
Ctrl+V	Paste
Space	Play/Pause Toggle
Up	Play/Pause Toggle
Down	Play/Pause Toggle
K	Play/Pause Toggle
Ctrl+Shift+P	Preferences
Left	Previous Frame
Ctrl+Left	Previous Marker

Shortcut	Action
Ctrl+I	Properties
Ctrl+Q	Quit
Ctrl+Y	Redo
J	Rewind
Ctrl+S	Save Project
Ctrl+Shift+S	Save Project As...
Ctrl+A	Select All
Ctrl+Shift+A	Select None
Ctrl+K	Slice All: Keep Both Sides
Ctrl+L	Slice All: Keep Left Side
Ctrl+J	Slice All: Keep Right Side
Ctrl+G	Toggle Snapping
Ctrl+X	Split Clip
Ctrl+Shift+D	Thumbnail View
Ctrl+T	Title Editor
Ctrl+Z	Undo
=	Zoom In
–	Zoom Out
Ctrl+Scroll	Zoom In/Out
Ctrl+Middle Button	Scroll Timeline

How to Import Files to the Project

| Name	Functions
Drag and Drop	Drag and drop the files from your file manager (file explorer, finder, etc...)
Right Click->Import Files...	Right click in the Project Files panel, choose Import Files...
File Menu->Import	File menu->Import Files...
Import Files Toolbar	Click the Import Files... toolbar button (on the menu) top

Quick operation Manual

It is very to operate and use Open shot Video Editor. It is very easy to make a five minutes output from your images or videos that you have shot previously.

   a. Importing Files(Photos & Music)
   b. Working in Timeline
   c. Adding Background Music to create mood
   d. Adding titles
   e. Finalising your project
   f. Export your project

a. Importing Files(Photos & Music)

Before we can start making a video, we have to import records into OpenShot. Intuitive a couple of pictures (JPG, PNG etc...) and a music record (most configurations will work) from

your Desktop to OpenShot Video Editor. Make sure to drop the documents where the arrow is indicating.
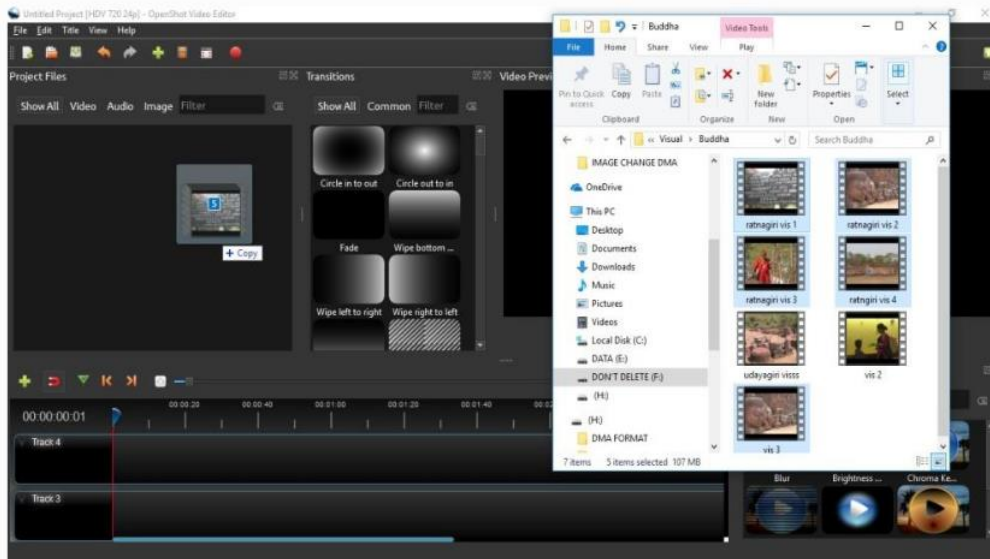
b. Working in Timeline
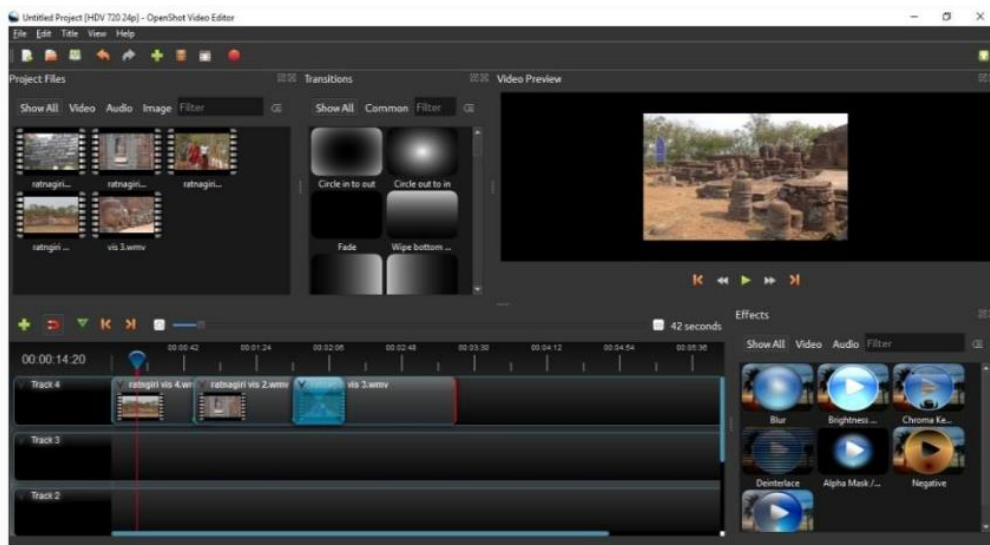
Next, drag each visual onto the timeline. The timetable speaks to your last video, so arrange or sort your photographs in whatever grouping you need them to show up in your video. In the event that you cover two clips, OpenShot Video Editor will naturally make a smooth transition between them, showed by blue rounded rectangles between the clips. Keep in mind, you can improve the clips the same number of times as required by essentially moving them.

### c. Adding Background Music to create mood

To influence your photograph to slide indicate additionally intriguing, you have to include some music. You ought to have imported a music record in stage 1. Tap on the music

document, and drag it onto the timeline. In the music is too long, get the correct edge of your music clip, and resize it littler.


d. Adding titles

Including text and titles in a video is a vital part of video editing, and OpenShot accompanies a simple to utilize Title Editor. Utilize the Title menu (situated in the main menu of OpenShot video editor) to dispatch the Title Editor. You can likewise utilize the keyboard shortcut Ctrl+T.
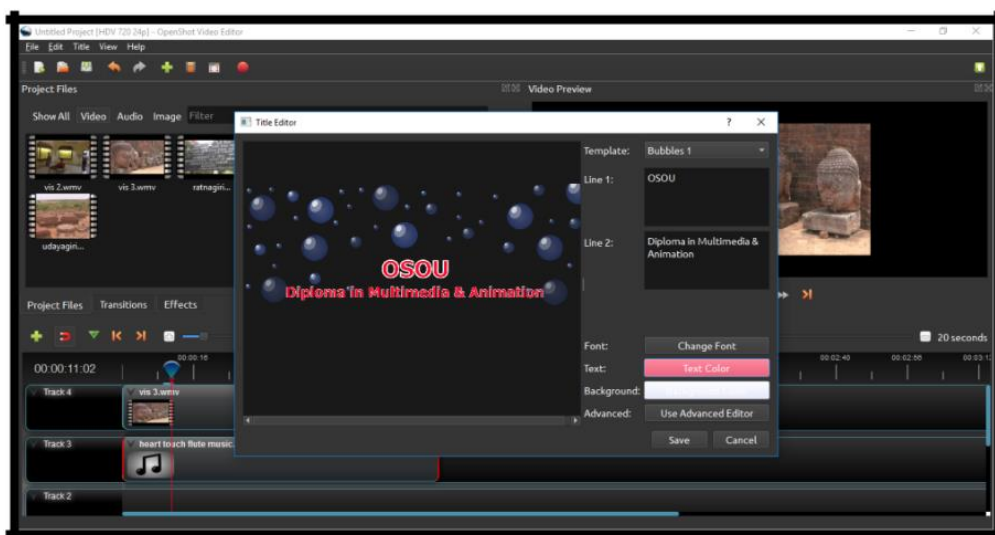

e. Finalising your project

To preview what our video looks and sounds like, click the Play catch under the preview window. You can likewise stop, rewind, and fast-forward your video venture by clicking the relating buttons.
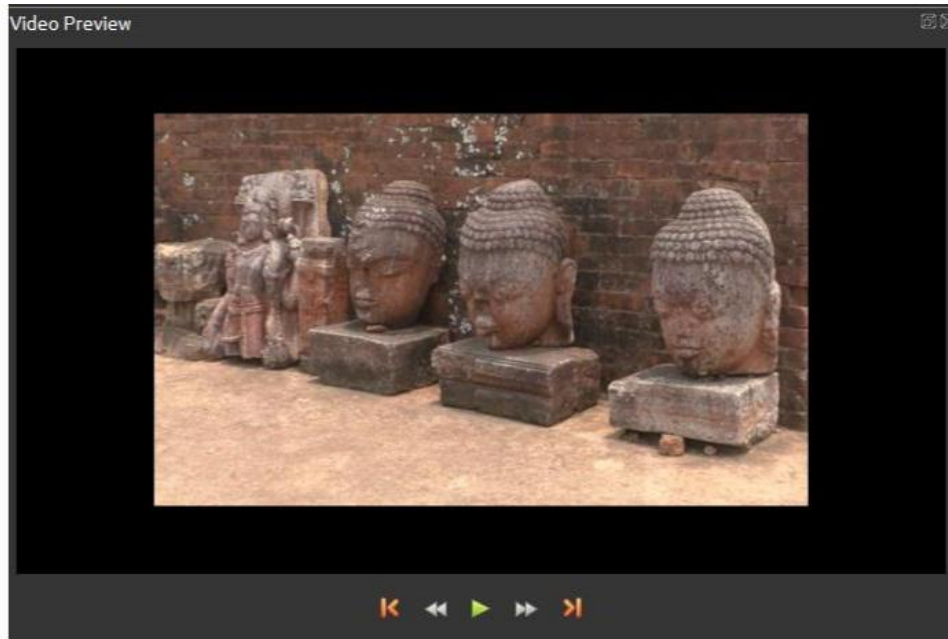
f. Export your project

When you are content with your photograph /video is ready, the subsequent stage is to export your video. This will convert your OpenShot venture into a solitary video document, which will take a shot at most media players, (for example, VLC) or sites, (for example, YouTube, WhatsApp and Facebook etc...).

Click on the Export Video icon at the highest point of the screen (or utilize the File > Export Video menu). Browse one of the numerous preset export choices, and click the Export Video button.
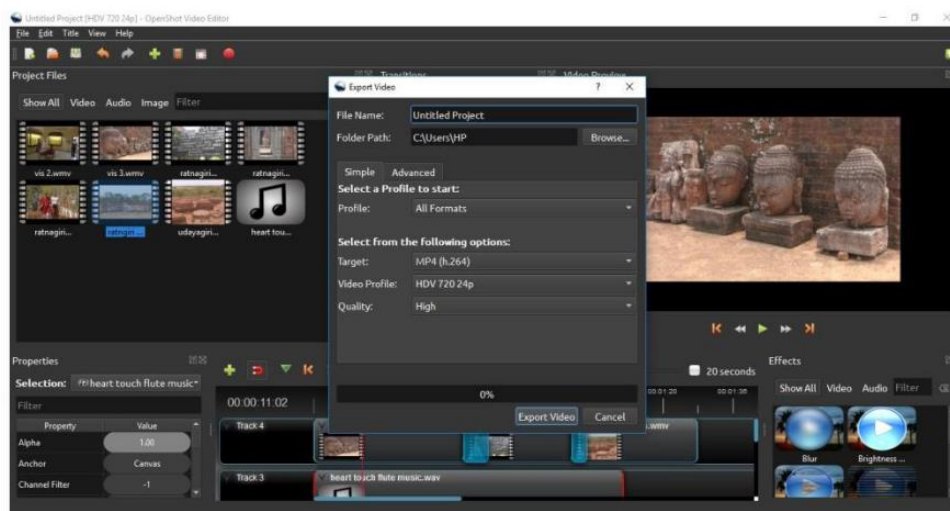
Now you have an essential understanding of how OpenShot functions. Importing, Arranging, Previewing, and Exporting. Read whatever is left of this learning material for a more point by point understanding of OpenShot software.

Color grading

Color grading is the process of adjusting and improving the color of a motion picture, video picture, or still picture either electronically, photo-chemically or carefully. Color grading envelops both color and the age of imaginative color effects. Regardless of whether for dramatic film, video dispersion, or print, color grading is by and large now performed carefully in a color suite. The prior photo-chemical film process, known as color timing, was performed at a photographic research facility.

Title-Coor grading

Attribution-MichaelMMR

Source-Link-https://commons.wikimedia.org/wiki/File:Michael_Martinez_doing_color_correction_on_a_DaVinci_Resolve_Panel.jpg

Motion Tracking

When attempting to separate a color adjustment on a moving subject, the colorist customarily would have expected to physically move a mask to take after the subject. In its most basic shape, motion tracking programming computerizes this tedious process utilizing calculations to assess the motion of a gathering of pixels. These techniques most part gotten from match moving techniques utilized as a part of special effects and compositing work.

Digital Intermediate

Digital intermediate (regularly condensed to DI) is a motion picture completing process which traditionally includes digitizing a motion picture and controlling the color and other picture attributes. It regularly replaces or increases the photochemical planning process and is generally the last creative adjustment to a motion picture before distribution in theaters. It is distinguished from the telecine process in which film is scanned and color is controlled right

on time in the process to encourage editing. However the lines amongst telecine and DI are persistently obscured and are regularly executed on similar equipment by colorists of a similar foundation. These two stages are commonly part of the general color administration process in a motion picture at different focuses in time. A digital intermediate is additionally generally done at higher resolution and with more noteworthy color loyalty than telecine exchanges.

Albeit initially used to depict a process that began with film scanning and finished with film recording, digital intermediate is likewise used to portray color adjustment and color grading and even last acing when a digital camera is utilized as the picture source and/or when the last motion picture isn't yield to film. This is because of late advances in digital cinematography and digital projection innovations that endeavor to match film origination and film projection.

In traditional photochemical film completing, an intermediate is delivered by presenting film to the first camera negative. The intermediate is then used to mass-deliver the films that get distributed to theaters. Color grading is finished by shifting the measure of red, green, and blue light used to uncover the intermediate. This tries to have the capacity to supplant or increase the photochemical way to deal with making this intermediate.

The digital intermediate process utilizes digital apparatuses to color review, which considers substantially better control of individual colors and zones of the picture, and takes into account the adjustment of picture structure (grain, sharpness, and so on.). The intermediate for film generation would then be able to be created by methods for a film recorder. The physical intermediate film that is an aftereffect of the recording process is now and then additionally called a digital intermediate, and is normally recorded to internegative (IN) stock, which is naturally better grain than camera negative (OCN).

One of the key specialized accomplishments that made the transition to DI conceivable was the utilization of the 3D look-up tables (otherwise known as "3D LUTs"), which could be utilized to imitate how the digital picture would look once it was imprinted onto discharge print stock. This expelled a lot of talented mystery from the film-making process, and permitted more noteworthy opportunity in the color grading process while decreasing danger.

Publicity

Anybody with a camera, PC or advanced cell can make a film today. To collect production cash, you can sidestep organizations completely and go directly to the general population by means of sites. It's likewise no longer extraordinary to do dramatic appointments and different types of distribution, from celebration positions to overseeing download and DVD deals, all alone and exposure.

However frequently, the professional writers and best faultfinders whom each filmmaker needs to achieve feel awkward managing direct. Setting up a relationship (one of the foundations of advertising) makes desires, and these media professionals must don't hesitate to react sincerely to a film, regardless of whether that reaction is negative. They consider

irreconcilable circumstances important and will make a special effort to maintain a strategic distance from them. A different publicist gives an attractive unbiased support zone.

So in a perfect world, you should contract a professional publicist or dole out somebody to speak to you as a "whiskers" or go-between. In the event that you can't, tread delicately in any direct collaboration, particularly with prominent professional media. Endeavor to see the experience from their point of view and spotlight on genuine reasons why your task may be specifically noteworthy. Be exceptionally particular about how and why you approach them.

Regardless of whether you've employed a professional publicist, what you do unsupervised and all alone—particularly through postings on social media and funding sites—impacts the general advertising result. And it won't be useful.

Like film production, attention has its own particular peculiar rationale. It can be particularly disappointing and exhausting. Equipping yourself with a general understanding of some of reputation's subtle riddles is a decent method to take full advantage of your assets, regardless of how rare.

Unit summary

In this unit you learned the whole process of editing using OpenShot Editing Software. You will understand the various tools visual effect and transition.You can understand the process of colour correction. You have a got a basic idea about what steps should be taken for the publicity of a TV program.

Assessment

- Make your own project setting in OpenShot start making a short film.
- Shoot an interesting story in your mobile in HD format and start editing using OpenShot editing software.
- Make a sepia color sequence using color grading in OpenShot.
- Try to make an "End Scroll" like Hollywood film using title tool.
- Make a montage sequence using BGM and ambience sound.
- Take some production photos and make a publicity plan for your film.
- Make a promo video using photographs of on location shooting.
- Make a list of recent Blockbuster Bollywood film using unique strategy for huge publicity i.e. Dangal of Amir Khan Production.

Resources

1.   http://www.mediacollege.com
2.   Video Production by Vasuki Belavadi (Oxford University Press)
3.   Television Field Production And Reporting by Fred Shook (PEARSON Education)
4.   www.wikipedia.org
5.   www.documentmx.com

Unit-11 Transmisssion, Distribution & Rating

Introduction

Distribution is the important part of the Television Industry and Movie Business, it is the way a financier or a film producer gets back their returns.India is the fastest growing cable & satellite market in the world, with exciting growth for Television industry as well as Distribution Company.

Globally the broadcasting & distribution sector is moving from analogue to digital. DTH operators have already invested over 15,000 crores in India.

Outcomes

Upon completion of this unit you will be able to:

- Get a hole idea about Film &TV Program Distribution
- Understand the process of transmission system in India
- Learn about Digital and Analog signal
- Get full idea about Digital satellite TV
- How to calculate TRP in TV channels in India

Terminology

Distributor:	A person who distributes the film through the theatres is called film distributor. The distributor buys the "distribution rights" from the producer, mostly in the very beginning itself or sometimes after previewing the final cut.
Exhibitor:	A person who owned theatre is called an Exhibitor.
TRP (Television Rating Point):	is a tool provided to judge which programmes are viewed the most. This gives us an index of the choice of the people and also the popularity of a particular channel. For calculationpurpose, a device is attached to the TV set in a few thousand viewers' houses for judging purpose.

Distribution

Film or TV distribution is the way toward making a TV program movie accessible for review by an audience. This is ordinarily the undertaking of a professional film distributor, who might decide the marketing strategy for the film, the media by which a film is to be displayed or made accessible for survey, and who may set the discharge date and different issues. The film might be displayed specifically to the general population either through a movie theater or television, or personal home survey (counting VHS, video-on-demand, download, television programs through broadcast syndication). For business ventures, film distribution is generally joined by film promotion.

At the point when a film is at first produced, an element film is regularly appeared to audiences in a movie theater. Commonly, one film is the highlighted presentation (or highlight film). Prior to the 1970s, there were "twofold highlights"; commonly, a high caliber "A photo" leased by an autonomous theatre for a single amount, and a lower-quality "B picture" leased for a level of the gross receipts. Today, the main part of the material appeared before the component film consists of sneak peaks for upcoming movies (otherwise called trailers) and paid advertisements.

Transmission

The standard release routine for a movie is controlled by a plan of action called "discharge windows". The discharge windows framework was first considered in the mid 1980s, on the very edge of the VHS home stimulation showcase, as a procedure to shield distinctive cases of a movie from contending with each other, enabling the movie to exploit diverse markets (cinema, home video, TV, and so forth.) at various circumstances.

In the standard procedure, a movie is first discharged through movie theatres (showy window), at that point, after roughly 16 and one-half weeks, it is discharged to VHS and VOD services (entering its video window). Following an extra number of months, it is normally discharged to Pay TV, and roughly two years after its dramatic discharge date, it is influenced accessible for free-to-air to TV.

A concurrent discharge happens when a movie is made accessible on numerous media (cinema, DVD, internet...) in the meantime or with next to no distinction in timing.

Synchronous discharges offer incredible points of interest to the two consumers, who can pick the medium that most suits their requirements, and production studios that lone need to run one showcasing effort for all discharges. The other side, however, is that such distribution endeavours are regularly viewed as trial and in this way doing get generous investment or promotion.

Cinema proprietors can be influenced genuinely on the off chance that they need to share their chance window, particularly toward the start of the movie lifecycle, since, as indicated by Disney; around 95% of all box office tickets for a film are sold inside the initial a month and a half after introductory distribution.

A straight to video (or straight-to-DVD or straight-to-Blu-ray contingent upon the media whereupon the movie is influenced accessible) to discharge happens when a movie is discharged on home video groups, (for example, VHS, DVD, and so forth.) without being discharged in theatres to start with, accordingly not thinking about the "showy window".

Because of solid DVD deals, Direct-to-video discharges likewise made higher progress and have turned into a gainful market of late particularly for independent moviemakers and companies.

Internet look into is still new with regards to the film distribution platform. The volume of downloaded movies is hard to discover yet none thinks about to the considerably more problematical revelation of their root.

Internet investigate is still new with regards to the film distribution platform. The volume of downloaded movies is hard to discover yet none looks at to the considerably more problematical revelation of their root.

Various Methods of TV Transmission

There are a few kinds of TV transmission systems and that are:

1.   Analogue Terrestrial TV
2.   Digital Satellite TV
3.   Cable TV

Advance technologies:

1.   Digital terrestrial TV (DTTV)
2.   High Definition Television (HDTV)
3.   Pay-per-view
4.   Video-on-demand
5.   Web TV
6.   IPTV

1.   ANALOGUE TERRESTRIAL TV

The term refers to the modes of television broadcasting, which is not involved with satellite transmission or via underground cables.The main non-terrestrial method of conveying TV signals that not the slightest bit relied upon a signal beginning from a conventional terrestrial source started with the utilization of communications satellites amid the 1970s of the twentieth century.

Simple TV encodes the image and sound data and transmits them as a simple signal in which the message transmitted by the telecom signal is made out of amplitude as well as frequency varieties and tweaked into a VHF or UHF bearer.

The simple TV picture is "drawn" a few times on the screen (25 in PAL framework) all in all each time, as in a movie film, paying little heed to the substance of the image.

2.   DIGITAL SATELLITE TV

Satellite television will be television signals delivered by methods for communications satellites and received by satellite dishes and set-top boxes. In numerous zones of the world it gives an extensive variety of channels and services, regularly to zones that are not serviced by terrestrial or cable suppliers.

Satellite television, like different communications relayed by satellite, begins with a transmitting radio wire located at an uplink facility which has large uplink satellite dishes, as much as 9 to 12 meters (30 to 40 feet) in width what results in more accurate pointing and increased signal quality at the satellite.

The uplink dish is indicated to a specific satellite and the uplinked signals are transmitted inside a specific frequency range, in order to be received by one of the transponders tuned to that frequency range on board that satellite, which 'retransmits' the signals back to Earth however at a different frequency band, a process known as "translation", used to evade

interference with the uplink signal, typically in the C-band (4– 8 GHz) or Ku-band (12– 18 GHz) or both.

The down linked satellite signal, very weak in the wake of travelling the immense distance, is collected by a parabolic receiving dish, which reflects the weak signal to the dish's focal point where is a "down converter" device called LNB (low-noise block) that is essentially a waveguide that accumulates the signals, amplifies the relatively weak signals, filters the block of frequencies in which the satellite TV signals are transmitted, and converts it to a lower frequency range in the L-band range.

The evolution of LNB was a need, so the plans for micro strip based converters were adjusted for the C-Band exploiting its central outline that was the concept of a block for down conversion of a range of frequencies to a lower, and technologically more easily handled block of frequencies, the IF - intermediate frequency.

Title-DigitalTVSet top Box

Attribution-Source-Pepito5

Link-https://commons.wikimedia.org/wiki/File:Tuner_DVB-T_Cabletech_URZ0083.jpg

The upsides of utilizing a LNB are that cheaper cable could be utilized to connect the indoor receiver with the satellite TV dish and LNB and that the technology for handling the signal at L-Band and UHF was far cheaper than that for handling the signal at C-Band frequencies.

The shift to cheaper technology from the 50 Ohm impedance cable and N-Connectors of the early C-Band frameworks to the 75 Ohm technology and F-Connectors allowed the early satellite TV receivers to utilize what were in reality modified UHF TV tuners which selected the satellite television channel for down conversion to another lower intermediate frequency centred on 70 MHz where it was demodulated. This shift allowed the satellite television industry to change to a much more commercial large scale manufacturing one.

The satellite receiver demodulates and converts the signals to the coveted shape (yields for television, sound, data, etc.) and once in a while, the receiver includes the capability to unscramble or decrypt; the receiver is then called an Integrated Receiver/Decoder or IRD.

The cable connecting the receiver to the LNB must be of the "low loss" type, RG-6 or RG-11 and should not be utilized the standard RG-59 cable.

3. CABLE TV

Cable Television or Community Antenna Television (CATV) is a framework for distribution of audiovisual content for television, FM radio and different services to consumers through settled coaxial cables, maintaining a strategic distance from the traditional arrangement of radio broadcasting antennas (broadcast television) and have across the board utilize, mainly through the pay-TV services.

Technically, the cable TV involves the distribution of various television channels received and processed in a central location (known as head-end) to subscribers inside a community through a system of optical fibre or potentially coaxial cables and broadband amplifiers.

The utilization of different frequencies allows numerous channels to be disseminated through a similar cable, without discrete wires for each, and the tuner of the TV or Radio selects the coveted channel from among all transmitted.

A cable television framework starts at the head end, where the program is received (and some of the time began), amplified, and after that transmitted over a coaxial cable system.

The architecture of the system appears as a tree, with the "storage compartment" that carries the signals in the lanes, the "branches" carrying the signals for buildings and, finally, the "arms" carrying the signals to individual homes.

The coaxial cable has a bandwidth capable of carrying a hundred television channels with six megahertz of bandwidth each; however the signals decay quickly with distance, hence the need to utilize amplifiers to "recharge" the signals periodically to help them.

Backbone trunks in a local cable system frequently utilize optical fibre to limit noise and eliminate the requirement for amplifiers as optical fibre has considerably more capacity than coaxial cable and allows more projects to be carried without signal lost or commotion including.

The majority of the TV tuners can directly receive the cable channels, which are usually transmitted in the RF (radio frequency) band, be that as it may, numerous projects are encrypted and subject to a tariff itself and in such cases, you should install a converter between the cable and the receiver.

New technologies

1.   DIGITAL TERRESTRIAL TV

Digital Terrestrial Television (DTTV or DTT) is an execution of digital television innovation to give a more prominent number of channels and additionally better nature of picture and sound utilizing aerial broadcasts to a conventional antenna (or aerial) rather than a satellite dish or cable connection.

The measure of data that can be transmitted (and consequently the quantity of channels) is specifically influenced by the modulation method of the channel.

The modulation method in DVB-T is COFDM with either 64 or 16 state Quadrature Amplitude Modulation (QAM). When all is said in done a 64QAM channel is fit for transmitting a more noteworthy piece rate, however is more helpless to impedance. 16 and 64QAM can be joined in a solitary multiplex, giving a controllable degradation to more imperative program streams. This is called hierarchical modulation.

New advancements in pressure have brought about the MPEG-4/AVC standard which will empower two top notch administrations to be coded into a 24 Mbit/s European terrestrial transmission channel.

DTTV is gotten through a digital set-top box, or coordinated accepting gadget, that translates the flag got by means of a standard aerial antenna, nonetheless, because of recurrence arranging issues, an aerial with an alternate gathering (ordinarily a wideband) might be required if the DTTV multiplexes lie outside the bandwidth of the initially introduced aerial.

2. HDTV

The HDTV is transmitted digitally and thusly its execution for the most part matches with the presentation of digital television (DTV), the innovation that was propelled amid the 1990s.

Albeit a few examples of top notch television have been proposed or actualized, the present HDTV guidelines are characterized by ITU-R BT.709 as 1080i (intertwined), 1080p (progressive) or 720p utilizing the 16:9 screen design.

What will be of enthusiasm for the not so distant future is top notch video, through the successors of the DVD, HD DVD and Blu-Ray (is normal that the last one will be embraced as a standard) and, subsequently, the projectors and LCD and plasma televisions sets and additionally retro projectors and video recorders with 1080p determination/definition.

Top notch television (HDTV) yields a superior quality picture than standard television does, in light of the fact that it has a more noteworthy number of line determination.

The visual data is somewhere in the range of 2 to 5 times more honed in light of the fact that the holes between the output lines are smaller or undetectable to the bare eye.

The bigger the extent of the television the HD picture is seen on, the more noteworthy the change in picture quality. On littler televisions there might be no perceptible change in picture quality.

The lower-case "I" attached to the numbers indicates interweaved; the lower-case "p" means progressive: With the entwined scanning method, the 1,080 lines of determination are isolated into sets, the initial 540 interchange lines are painted on a casing and after that the second 540 lines are painted on a moment outline as far as odd and considerably number. If there should be an occurrence of the progressive scanning method at the same time shows each of the 1,080 lines on each edge, requiring a more prominent bandwidth.

3. PAY-PER-VIEW

Pay-per-view (frequently condensed PPV) offers a framework by which a television group of onlookers can buy events to view on TV-monitors by means of private broadcast of that occasion to their homes.

The telecaster demonstrates the occasion in the meantime to everyone requesting it (rather than video-on-demand frameworks, which enable viewers to see the occasion whenever) and can be acquired utilizing an on-screen direct, a mechanized telephone framework, or through a live client benefit delegate.

Events frequently incorporate feature films, sporting events, adult content movies and "uncommon" events.

4.   VIDEO-ON-DEMAND

Download and streaming video-on-demand frameworks give the client a substantial subset of VCR functionality including pause, fast forward, fast rewind, slow forward, slow rewind, and jump to previous/future frame and so on. These functions are called trap modes.

For plate based streaming frameworks which store and stream programs from hard circle drive, trap modes require additional handling and storage on the piece of the server, since particular documents for fast forward and rewind must be stored.

Memory-based VoD streaming frameworks have the upside of having the capacity to perform trap modes straightforwardly from RAM, which requires no additional storage or CPU cycles on the piece of the processor.

It is conceivable to put video servers on LANs, in which case they can give extremely fast response to clients. Streaming video servers can likewise serve a more extensive group through a WAN, in which case the responsiveness might be diminished. Download VoD administrations are functional to homes furnished with cable modems or DSL connections.

5.   WEB TV

Web TV or TV on the Internet is the transmission of a program through the Internet. It can be known "typical" TV channels or channels particularly intended for the Internet. Presently a day greatest individuals have web in their smart phone. They are extremely user friendly to observe any video content on you tube or some other stage.

Web TV, in an improved frame, is simply the provision of video and sound over the Internet and the best approach to help the transmission changes from the monitor of a PC using an iPod or a cell phone to the TV set on the off chance that one have the decoder.

6.   IP TV

The current introduction of Television over Internet Protocol innovation, commonly known as IPTV, made a revolution on the distribution networks for TV signals, permitting dispose of a significant number of the issues related with a distribution network in view of coaxial cables, specifically those related with the degradation of signal, impedance, signal levels, and limit of the transmission of the channel's band.

Additionally, because of IP (Internet Protocol), will be conceivable the combination of a few interfaces in a multi-benefit unit and the communicate and distribution of assorted and changed administrations on a similar network, which previously required separated foundation, including: TV signals, telephone benefit and broadband Internet get to, setting a stage we know today as Triple Play.

Basically, the triple play concept isn't altogether new on the grounds that, as far as administrations, there are a few years prior that are accessible a few solutions joining a blend of TV administrations, telephony and Internet get to.

Studies demonstrate that the stir rate (intentional abandonment of administration) of the offer triple play endorsers is significantly lower than that watched when the voice, information and TV are sold on a non-convergent way.

Another factor is the advance in get to innovations and stages for bundle telephony and video. A variation of ADSL (unbalanced digital endorser line), known as ADSL2+, speaks to an adjustment in the viable performance of Internet connection on the first organization, not to mention the later advancements, for example, VDSL (high-piece rate DSL).

The entrance over optical fibre in its more famous shape, known as PON (passive optical network), mirrors a considerably all the more brave path, brought about noteworthy interests in that innovation, looking for fast Internet access, voice and multi-channel of top notch TV union.

Advance in video distribution frameworks is on the much too. As of late, various innovations and advancements in the business of equipment and software frameworks for the TV business have begun to TV once again IP (otherwise called IPTV).

The main driver is incorporated stages consisting of set-top-boxes, servers and video content protection framework (DRM - digital rights management), together with suitable tools, middleware and charging, permit the provision of an assortment of TV benefits in a few arrangements, for example, streaming, video on demand and time-shifted TV, in view of a combination of fundamental IP networks and DSL or optical access frameworks.

In this context, the sophistication of calculations for compression of video signals has an applicable part. Systems, for example, MPEG-4 AVC (propelled video coding), for instance, empowers the transmission of signals in top quality TV over IP networks.

The look for a system to offer different play-based (double, triple, fourfold and so forth.) is an irreversible phenomenon in the communications business yet in the meantime it forces gigantic difficulties - especially as far as selection of innovation stages, control and regulation - opens an enormous horizon of conceivable outcomes, both free market activity.

RATING

Television content rating systems will be systems for assessing the content and announcing the reasonableness of television programs for youngsters, adolescents, or grown-ups. Numerous nations have their own particular television rating system and nations' rating forms shift by local priorities. Projects are rated by the association that deals with the system, the broadcaster, or the content producers.

A rating is typically set for every individual scene of a television arrangement. The rating can change per scene, system, rerun, and nation. In that capacity, program ratings are normally not significant unless when and where the rating is utilized is said.

Television rating point for estimation objects is a gadget connected to the TV set in a couple of thousand watchers' homes for judging reason. These numbers are dealt with as an example from the general TV proprietors in various geographical and demographic sectors. It records

the time and the program that a watcher watches on a specific day. At that point, the normal is taken for a 30-day time span, which gives the viewership status for a specific channel.

Television Rating Point (TRP) is an instrument gave to judge which programs are seen the most. This gives us a record of the decision of the people and furthermore the prevalence of a specific channel.

For count purpose, a gadget is connected to the TV set in a couple of thousand viewers' houses for judging purpose. These numbers are dealt with as sample from the general TV owners in various geographical and demographic sectors.

The gadget is called as People's Meter. It records the time and the program that a watcher watches on a specific day. At that point, the normal is taken for a 30-day time span which gives the viewership status for a specific channel.

Unit summary

In this unit you learned the whole process about Distribution of TV program. You will understand the various transmission systems in our country. You can understand the process of calculating TRP. You have a basic idea about traditional and modern method of calculating TRP.

Assessment

1. Explain difference between Terrestrial TV and Digital satellite TV
2. How to connect your TV set with digital setup box?
3. In which format digital setup box encode signal receive from satellite?
4. Through which cable you will connect your TV with HD Digital setup box?
5. What is VOD? How it works?
6. What is the function of People's Meter?
7. What is TRP and how it has been calculated?

Resources

1. http://www.mediacollege.com
2. Video Production by Vasuki Belavadi (Oxford University Press)
3. Television Field Production And Reporting by Fred Shook (PEARSON Education)
4. www.wikipedia.org
5. www.documentxm.com

યુનિવર્સિટી ગીત

સ્વાધ્યાયઃ પરમં તપઃ
સ્વાધ્યાયઃ પરમં તપઃ
સ્વાધ્યાયઃ પરમં તપઃ

શિક્ષણ, સંસ્કૃતિ, સદ્‌ભાવ, દિવ્યબોધનું ધામ
ડૉ. બાબાસાહેબ આંબેડકર ઓપન યુનિવર્સિટી નામ;
સૌને સૌની પાંખ મળે, ને સૌને સૌનું આભ,
દશે દિશામાં સ્મિત વહે હો દશે દિશે શુભ-લાભ.

અભણ રહી અજ્ઞાનના શાને, અંધકારને પીવો ?
કહે બુદ્ધ આંબેડકર કહે, તું થા તારો દીવો;
શારદીય અજવાળા પહોંચ્યાં ગુર્જર ગામે ગામ
ધ્રુવ તારકની જેમ ઝળહળે એકલવ્યની શાન.

સરસ્વતીના મયૂર તમારે ફળિયે આવી ગહેકે
અંધકારને હડસેલીને ઉજાસના ફૂલ મહેંકે;
બંધન નહીં કો સ્થાન સમયના જવું ન ઘરથી દૂર
ઘર આવી મા હરે શારદા દૈન્ય તિમિરના પૂર.

સંસ્કારોની સુગંધ મહેંકે, મન મંદિરને ધામે
સુખની ટપાલ પહોંચે સૌને પોતાને સરનામે;
સમાજ કેરે દરિયે હાંકી શિક્ષણ કેરું વહાણ,
આવો કરીયે આપણ સૌ
ભવ્ય રાષ્ટ્ર નિર્માણ...
દિવ્ય રાષ્ટ્ર નિર્માણ...
ભવ્ય રાષ્ટ્ર નિર્માણ

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