



“Emerging Technologies: Endless Possibilities on a Budget”

Evolution of the Arts in a Digital World Symposium - Session No. 4 Notes
January 27, 2021

CASE STUDY – MIAMI ART STRONG

- When additional expenses are not possible, creativity can help bridge that gap.
- Last year, everything was shut down due to the pandemic. What could the Arts industry do remotely, completely digitally, and without cost?
- Together through collaboration, Miami Art Strong was created, this started as a bi-weekly zoom meeting and networking session about how to make promotional projects.
- Within the first week, there were 50 companies affiliated with the project. There are now over 100 affiliations.
- We need to leverage priceless things such as: time, brainpower, experience, talent, work, connections, and enthusiasm to create promotional material.
- The video that the project put out had more than 30,000 views in one day.
- Yes, economic resources are important, but many other things are more important than technology and budget.
- It is not always about revenue; rather it is about creating experiences.

HOW TO TURN YOUR PHONE INTO A PROFESSIONAL VIDEO SOLUTION

In 2021, phones have 4K screens, great speaker quality, and come equipped with 5G technology for streaming.

- People are less interested in watching low-quality videos.
- Tech is now cheaper and more widely available.

Rafael's Recommended Products:

- **FiLMiC Pro (\$14.99)**
 - A video app that allows you to adjust colour balance, contrast, exposure, colour saturation, frame rate, to match your phone to a professional camera.
 - Free tutorials to learn how to use the app.
- **Mounts and Stands**
 - **TwistGrip Clamp by Manfrotto (\$44.88)**
 - Stands (Variable Price)
 - Attach your phone to a tripod. Using the clamp, you can attach your phone to a table or other surfaces.
 - A smooth, steady shot will make your video look better.



- Using mounts and stands allows you to have consistent shots and it makes it easier to film repeat shots.
- **Lighting Kit**
 - **Three-Light Kit** (\$470)
 - Bi-colour LEDs that have warm and cold tone lights.
 - Backlighting helps separate the subject from the background.
 - Front lights are used to illuminate the subject in front of the camera. They make the subject look their best.
 - Use lighting to create and control the contrast and depth in the frame.
 - By using coloured LED lights inside the two background booths, Rafael makes the booths visible on camera and allows the space look more three dimensional and less flat.
 - Use a lighting kit to compensate or enhance the light coming from existing light sources in your filming location, such as windows and lights already in the room.
 - **Desktop Light** (\$129 each)
- **Audio Kit**
 - **Two-Mic Audio Kit** (\$320 total)
 - Fit your phone with 2 pro microphones and you can monitor the audio with headphones.
 - People are more forgiving about a low-quality video but less forgiving about bad audio.
 - Lavalier microphones (Lav mics) are typically attached to the speaker's lapel and are closer to the subject's mouth as opposed to the camera's built-in microphone. Using a secondary lav mic allows you to move the camera, in this case, your phone, more freely.
- **Lenses for Phones**
 - **Criacr Lens Kit** (\$22.99)
 - Uses a clamp to attach to your phone.
 - Gives you a few more options for depths in your shot.
 - **Moment Lenses** (\$30 - \$400)
 - Instead of a clamp, may need a dedicated case to attach the lenses.
- **Online Courses**
 - **LinkedIn Learning** (formerly Lynda.com) – (\$30/month)
 - Check your local library for access to LinkedIn Learning.
 - Rafael recommends some of the video editing tutorials offered.



- Knowledge is Power!

QUESTIONS:

Are there any additional apps or software that needs to be uses with these gadgets?

- If they need additional software, the gadgets will come with them.

Do the recommended lenses work for all types of phones?

- It is likely that that they work with most phones. Check the product descriptions to make sure your phone is compatible.

MULTI-CAMERA TRANSMISSIONS FOR THE WEB

- One video angle can be limiting. Incorporate more than one angle.
- Live presentations can benefit from pre-recorded video.

Atem Mini Pro ISO (\$895)

- How to incorporate live enhancements during the pandemic?
- This board controls audio input, transition buttons, buttons to change the settings, settings for monitoring.

Benefits:

1. It allows you to receive 4 different sources through HDMI. In Rafael's demonstration, he used four cameras:
 - Camera 1 (Face Cam)
 - Camera 2 (Camera used to show the switchboard)
 - Camera 3/Source Video (Computer)
 - Camera 4 (Phone)
2. Comes with an array of video transitions (hard cuts, dissolves, wipes, digital video effects, fade to black to start and stop your transition.
 - Fade to black is great to use to end a stream because it will fade audio and video together.
3. Use pre-produced graphic overlays: watermarks, lower third (great for names), larger graphics for context or a call to action, full-screen graphics for announcements.
4. Can create picture-in-picture; embedding one video source into another one.



5. Audio inputs - can connect two microphones directly and can input an audio mixer.
6. Multi-camera monitoring tool - it has the four video inputs, can monitor audio, can see the graphics, recording status, internet fluctuations, the preview, and the programming that is being shown live to your audience.
7. Recording capabilities - can record the resulting transmission, the audio input, and the four video inputs, in an isolated manner.
8. Streaming Capabilities - can feed the transmission to a computer via USB or the switcher can stream directly to social media.

QUESTIONS:

Do you know of any technology out there that would allow people to sing/play music together without time lags between participants?

- Unfortunately, no.
- The time lag depends on your internet connection i.e., bandwidth.
- Hopefully, this infrastructure will improve once the pandemic is over. It is quite overloaded now because of the high demand.

Would the lav mic that Rafael is using be good for putting on instruments to record audio?

- Microphones are like ears. The lav mic is great for speaking because it is close to your mouth, but on an instrument like a trumpet or trombone, the mic would be in the wrong direction since it would be pinned to the musician's lapel.
- It would also be too close for string instruments and you would get the noise of the finger movements.
- Something like a Blue Yeti mic would be better because it could be positioned three to five feet away from the musician. You would get you better sound and the mic would pick up on the reverb of the room.
- A combination of both a lav mic and a Yeti mic would probably be best.

Can the equipment setup shown in your demo be used remotely during a live stream?

- Yes, you can, using software called TeamViewer. You can gain remote access to another computer.

INTERACTIVE VIDEO

- A gamified video experience.
- For most TV shows and movies, they follow a linear path and tell a story that has a beginning, middle, and end.
- Today, thanks to computer technology, we can incorporate buttons into videos that will offer a different experience every time you 'watch' the video.



- We can now create branching narrative structures and the view can choose their own path.
- Interactive video can present a lot of information in an engaging way.

- **Eko** (Free!)
 - User friendly and easy to use.
- In addition to conventional filmmaking skills, the interactive video will require:
 - Graphic design
 - User Experience (UX) design
 - How long should the buttons appear, how many choices should be presented, how long should each video segment be?
 - Extensive pre-production
 - Do I need specific shots that need to be wider to accommodate the buttons? Do my viewers need extra time to read the button options?

DATA-DRIVEN PERSONALIZED VIDEOS

- Dedicated video with the watcher's name, donation amount, pictures of them, and other specific and meaningful information related to them.

- **Idomoo** (Variable Price)
- Things to consider:
 - A different production workflow. There are four steps to creating a personalized video:
 - Create an Excel spreadsheet that will collect information about your audience.
 - Produce template video with placeholder information that will be populated by the data in the spreadsheet.
 - Use Idomoo to assign which column corresponds to which placeholder.
 - Upload your spreadsheet to Idomoo.
 - Data is the key to succeed.
 - Successful personalized videos depend on the database you can build.
 - It does not matter how good you are at video production.

360-DEGREE VIDEO

- **360 Video Kit** (\$950 +\$499)
 - The headset is a head-mounted TV display.
 - A great option to present a first-person perspective of visually rich events or environments.
 - The video enclosure has six cameras that capture your surroundings. They use a stitching method in post-production to put the six views together.
 - Can view this experience using a VR headset or your phone.
 - The program is responsive to your phone's built-in gyroscope and you can navigate by scrolling with your finger or by physically moving your phone.



- **3DVista**
 - A program that Rafael uses to embed other media such as static pictures, buttons, labels, and music into his VR experiences.
- Things to consider:
 - Apply theatre strategies when directing on-camera talent.
 - **C**orporal expression and choreographed movements
 - Things need to happen around the camera.
 - A long, interesting scene tends to work better than a fast-paced montage.
 - Venues with an abundance of light tends to work best such as concert halls, theatres, and outdoor spaces.
 - These cameras do not currently work well in low light.

QUESTIONS:

How does a video stand out when there is already a saturation of high-quality content available for free? What are some of the key performance indicators you use to measure the success of your projects?

- Key performance indicators (KPIs) need to be unique to each project.
 - Example: A free video would not have ticket revenue as a KPI.
- Perform AB tests - have two videos produced with minor changes and test and see which one does better.
- In terms of making your videos stand out, you should appeal to the niche market that mainstream media ignores.
- Online content disrupted the TV industry because people were able to watch what they want when they want.
- Produce content that you are passionate about.
- You also do not need a million followers to be successful.
 - Example: Facebook is no longer promoting the number of followers you have, rather, it is promoting traction and engagement with your content. You do not need 1000 followers. It is better to have 100 followers where the majority will buy and engage with your content rather than thousands of people who follow and do not engage.

What apps do you recommended for video editing that are free and easy to use?

- **iMovie**. It is an app where you can migrate your video from your phone to your computer. You can continue the editing process on your computer using iMovie or move the project to **Final Cut Pro**.
- **Adobe Premiere Rush** also has tools you can use on your phone and then you can drag the project to your computer and continue editing with **Adobe Premiere Pro**.

What camera are you using?



- A Sony α7S III
- It is a mirrorless camera that is a powerful device for low-light conditions.
- For this symposium session, the camera is connected to the Atem Mini Pro, which is connected to the computer, which is connected to Zoom.

What is one piece of advice that you would give to enhance the storytelling aspect of any video project?

- People do not relate to numbers and graphics as much as they do to other people.
- Find a character through which you can explore the story.
- Example: Rafael worked on a project where a musician fellow and a child played instruments together. The audience got to see the performance from two different angles, and they could connect the two characters.
- Through a story, an audience can better interact with the information, statistics, and graphics you are showing them.

Do you have a quick guide on how to embed a video on your presentation/enable picture in picture?

- With the Atem Mini Pro, there are buttons that will allow you to enable picture in picture.
- You can switch which corner you would want to have the picture-in-picture. It is just a matter of routing the video stream.

Have you found any ways to give videos a feel of being physically present in a space beyond 360 or VR? Whether it is directional audio, using handheld shots, etc.

- Rafael films a lot in the New World Centre. It is a beautiful building, and he tries to find different spots in the building where he has not shot an interview or a performance.
- Find a different angle or a different room. Do not take for granted knowing the place.
- You might know the building well, but your audience may not. Show that to your audience. Be excited and share your passion.