THE WOW FACTOR

LEVEL UP YOUR VIRTUAL EVENT PRODUCTION







TABLE OF CONTENTS

What Goes Into the Production of Your Event?	04
The Basics of Video Quality	07
The Basics of Audio Quality	10
Production Equipment - Standard	12
Production Equipment - Prosumer	13
Production Equipment - Professional	19
Editing Software	23
When to Level Up	24
Getting Started	26



A LITTLE HISTORY...

Remember back in the olden days of this decade, when everyone was stuck inside, desperate for some kind of connection? When all you really needed for a successful virtual event was a built-in video camera and microphone in your laptop, a decent internet connection, and a slide deck?

Breaking news: Those days are behind us.

It's estimated that in 2025, the average adult's attention span is 8.25 seconds. As advances in technology, such as generative AI, and the relative ease at which putting together an interesting, engaging presentation has grown by leaps and bounds, a Death By PowerPoint presentation isn't going to cut it anymore for virtual events; your attendees will get bored and bail out. Don't lose your audience to your competitors by doing the same old thing time and again - that's SO 2020! It's time to level up your production once again, leave the right impression, and convert attendees into loyal customers who spread the word about how awesome your events are.

We decided it's time for **us** to level up this production guide with the latest and greatest - broken down by levels of virtual event production: standard, prosumer, and professional. Let's upgrade your event production!





WHAT GOES INTO THE PRODUCTION OF YOUR EVENT?

Producing a wow-worthy virtual or hybrid event that truly wows your audience takes a strategic blend of **content**, **people**, **and technology** - all working together. Creating immersive experiences that grab attention and drive participation are the name of the game.

CONTENT

Dynamic speakers on trending topics, powerful storytelling, and surprising value takeaways are your event's foundation. Top-of-line equipment and production value won't matter if your audience is bored to death. Keep your eyes on the prize as you update your production: buzzworthy content!





PEOPLE

Your brilliant content needs brilliant delivery. Success depends on the people who bring your event to life: awesome speakers, a competent production team, hosts and moderators, and a solid support team backing you up. A Q&A session can get out of hand quickly without skilled moderators at the helm



WHAT GOES INTO THE PRODUCTION OF YOUR EVENT?

TECHNOLOGY

Once your content and team are taking shape, it's time to dig deep into the technology infrastructure that supports your event vision. At every step, your tech should ensure **reliability**, **accessibility**, and **audience engagement** at every step.

SOFTWARE

Look for a flexible event delivery system capable of supporting the video, audio, and backend tech you need to keep your event on track from start to finish. Additionally, your software should include these features for maximum ROI:



- » REGISTRATION
- **» EVENT RECORDING MANAGEMENT**
- » ENTERPRISE-GRADE SECURITY
- » REPORTING, ANALYTICS, AND AUDIENCE INSIGHTS
- **» INTEGRATED AUDIENCE ENGAGEMENT TOOLS**
- **» BUILT-IN ACCESSIBILITY CONFIGURATIONS**
- » LIVE EVENT/BROADCAST CONTROLS
- **» EASY ACCESS FOR BOTH ATTENDEES AND PRESENTERS**
- » SEAMLESS HYBRID EVENT SUPPORT



WHAT GOES INTO THE PRODUCTION OF YOUR EVENT?

HARDWARE

High-quality production hardware is essential for delivering professional, polished events that hold your audience's attention.

AUDIO



Audio clarity is crucial! Attendees are more likely to tolerate imperfect video far longer than poor sound.



Today's audiences expect more than a grainy webcam feed. Broadcastquality cameras that synchronize seamlessly with your audio set up is essential.



While it may sound straightforward, video production involves much more than propping up a smartphone and hitting "record." There are numerous technical variables that factor into the final quality of your broadcast. Here are four core video fundamentals to master:

RESOLUTION

Resolution refers to the total number of pixels displayed on a screen. The higher the resolution, the clearer and sharper the image - a crucial factor when competing for digital attention. A resolution represented by a single number (such as "4K or 1080p) represents the number of vertical pixels.



Standard Definition (SD) 720x480: Low res - not recommended

High Definition Resolution (HD) 1280x720: Minimum acceptable quality for live streaming

Full High Definition (FHD) 1920x1080/2K-2048x1152: Current standard for most virtual events

Quad High Definition (QHD) 2560x1440: Great clarity; ideal for hybrid events

Ultra High Definition (UHD) known as 4K-3840x2160: Broadcast-level quality; becoming more available for virtual and hybrid productions



FRAME RATE

Frame rate refers to how many frames (images) are displayed per second in a video stream. Measured in frames per second (fps) this impacts how natural motion appears on screen.

30fps is the current standard for live steaming and webinars. **60fps** is good for anything involving movement.

ADAPTIVE BITRATE STREAMING

Essential for maximizing the experience of your attendees regardless of their device, it automatically adjusts the resolution based on the viewer's internet bandwidth.

This solves for buffering issues and mobile compatibility

ASPECT RATIO

Aspect ratio is the video's height and width proportions. It affects how your content appears across different devices and platforms. Aspect ratio and video resolution are besties.

The most common aspect ratios are 16:9 (wide screen-default for most platforms) and 9:16 (vertical - mobile-first and social media clips).

IT'S ALL CONNECTED

Attendees don't think in terms of "frame rate" or "aspect ratio," they'll just notice if your event looks and feels professional. Understanding these fundamentals helps you create a fluid, immersive, and accessible experience for everyone, regardless of bandwidth or device.



WHICH RESOLUTION IS BEST?

The "best" resolution is dependent on two key factors:

- The viewer's device, and
- The strength and stability of their internet connection.

Here's how that typically breaks down:

- Mobile Devices Standard Definition or HD (720p) often looks fine and loads faster - great for viewers on the go or with limited data plans.
- Laptops and Desktops These can support Full HD (1080p) or even 4K (UHD) for larger displays, but require faster, more stable internet connections.
- Conference Room or Hybrid Stages For large-scale in-person screens or LED walls, aim for 4K (UHD) to maintain sharpness and visual impact.

VIDEO. LIGHTING. AND AI

Some platforms now use predictive Al algorithms to optimize resolution and content delivery timing, especially for hybrid events with global audiences.

Similarly, platforms like Microsoft Teams now offer built-in lighting correction tools powered by AI - automatically adjusting brightness and tone for your environment.



LIGHTING: THE UNSUNG HERO OF VIDEO QUALITY

Even with a high-end camera, your video quality will suffer without good lighting. A well-lit setup gives your camera the boost it needs to properly render definition, depth, and detail - especially for speaker-centric sessions. Here are a few tips for best lighting practices:

- Face the Light Place your primary light source in front, facing the speaker.
- Steer Clear of Overhead Fluorescents Nobody likes those when they're NOT on camera - they create harsh shadows. Opt for soft, diffused lighting instead.
- Balance Warmth and Tone Match the lighting temperature with your camera's white balance to avoid a washed-out or unnatural appearance.

THE LATEST IN LIGHTING

Lighting technology has come a long way since the early days of the humble webcam; it's easier than ever to deliver content and look fantastic doing it. Here's what works well for virtual events:

- Ring Lights Great for head-on webcam setups; look for models with adjustable color temperature (2700K-6500K) and brightness suited to your environment.
- **Softbox Lights** Ideal for presenters using a DSLR camera or creating a more broadcast studio look.
- LED Panel Lights Compact, adjustable, and versatile; great for side angles or adding ambient backlighting.
- Portable Key & Fill Kits Mobile lighting with battery-powered options are becoming standard. Great for hybrid and on-the-go presenters.



THE BASICS OF AUDIO QUALITY

In a virtual environment, audiences are FAR more forgiving of low-res visuals than they are poor sound. Muffled, choppy, or inconsistent audio can lead directly to your audience pulling the plug.

QUALITY

Audio quality refers to how accurate, clear, and pleasant your sound is when played through a participant's device - whether it's a laptop, smartphone, headphones, or speakers. There are three major factors that affect this:

BANDWIDTH

The amount of data your internet connection can handle at once.

- SD Audio Typically sampled at 44.1kHz, this is considered the baseline for streaming platforms.
- HD Audio Sampled above 44.1 kHz, (commonly 48 kHz or 96 kHz), offering richer detail. 48 kHz audio is increasingly the default, blending clarity and staying optimized for internet delivery.

BITRATE

Measured in kbps, bitrate is how much data is sampled every second. The higher the bitrate, the more audio detail is preserved. If you're using music, sound effects, or voiceovers in your event, aim for 192 kbps or higher.

SAMPLING RATE

Measured in kHz, sampling rate refers to the number of data pieces used per second. Common values are:

- 44.1 kHz Standard audio for most streams and recordings
- 48 kHz Professional standard for video broadcast
- 96 kHz+ High-res audio, mostly used for music production or archival recordings.



THE BASICS OF AUDIO QUALITY

AI AND AUDIO: GAME CHANGER

Al came for audio, too. Al-enhanced audio has offered listeners some big upgrades, including:

- Noise Cancellation Built into several platforms, including Teams, Al filters out background noise.
 Freedom from the landscaper's leaf blower!
- Voice Isolation Focuses the mic on human speech, suppressing everything else. Great improvement for panel discussions or shared spaces.
- Al Audio Leveling Automatically balances speaker volume levels to prevent sudden spikes or dips in loudness between presenters.
- Spatial Audio An emerging trend, spatial audio creates an immersive, directional soundscape.





A Hollywood budget isn't necessary to look and sound great - there's a path forward no matter where you're starting from. We're breaking it down into the three tiers mentioned earlier: Standard, Prosumer, and Professional.

STANDARD: THE BASICS - STUFF YOU PROBABLY ALREADY HAVE





Ideal for: Solo presenters, low-stakes webinars, small group meetings.

- Internal Microphone (built-in) Internal mics tend to give a thin, "canned" sound. It's doubtful you want to sound like you're speaking from a bathroom stall, and for live events this can wear out your audience quickly.
- Built-In Webcam Most laptops include an HD (720p or 1080p)
 webcam. It works in a pinch, but often lacks depth, lighting control,
 or crisp detail.
- Built-In Speakers or Basic Headphones: Standard, but often prone to feedback or unclear output in group settings.

Upgrade Tips:

- Use Wired Headphones Wired headphones, such AirPods or Logitech H390, will help avoid Bluetooth lag and reduce echo.
- Your Position Position yourself facing a natural light source for improved video clarity, even with a built-in webcam.



NEXT - BEYOND THE BASICS: THE PROSUMER SETUP

PROSUMER: THE SMART SETUP FOR SERIOUS PRESENTERS

Ideal for: Recurring webinars, panel discussions, remote speakers, and mid-sized hybrid events.

This is the setup many event pros rely on. It's relatively affordable, yet dramatically improves the quality of your sound, video, and overall presence.

Blue Yeti X Microphone

Beginner-friendly, affordable USB mic with plug-and-play, broadcast quality audio out of the box. Offers adjustable pickup patterns (Cardioid, Omni, Bidirectional, Stereo) for solo or group settings. Best for quiet recording environments.

Shure MV7

USB/XLR hybrid mic for highquality vocals and flexible use. Less sensitive to background noise. Built-in digital processing (DSP) automatically adjusts tone and levels. Great for noisier environments, offers consistent quality, and pro-level controls



AI AUDIO ADD-ONS

Software like NVIDIA Broadcast or Krisp AI can enhance your mic by removing background noise and leveling your mic in real time.



PROSUMER TIER CON'T

PROSUMER MICROPHONE ACCESSORIES

Everything you need to support audio clarity, comfort, and control.

MIC STANDS

Suspension Holders

Typically mounted to a desk or stand. Adjustable, keeps the mic off the desk, reducing vibration and helping keep sounds such as tapping the stand from being picked up and heard by your audience. Best for on-camera presenters, webinar hosts.



Desktop Mount

Compact, portable, and easy to set up, designed to sit on a desk or tabletop. Affordable and easy to use, however, vibrations and sounds can be picked up on the audio and it sits at a fixed height and angle. Best for panelists, laptop users, and mobile kits.





PROSUMER TIER CON'T

PROSUMER ACCESSORIES MIC STANDS CON'T

Floor Mount

Traditional floor stands you're familiar with, typically used for studio or larger presentations. Stable and height adjustable, but can be harder to transport, and is less ideal for a close-up webcam or desktop. Best for musical performances, hybrid events, and standing presenters.



Suspended from overhead or rigging or ceiling mounts - offers a clean camera shot as the mic stays out of frame. Professional studio aesthetic. Installation is complex and requires equipment such as rigging and mounts. Best for hybrid event stages, panel discussions.







PROSUMER TIER CON'T

PROSUMER ACCESSORIES MIXERS: WHEN AND WHAT TO USE



Do you need a mixer? The answer depends on your event. Sound mixers become essential when:

- You're managing multiple microphones or audio sources, e.g., panelists, pre-recorded clips.
- You want real-time control over volume, EQ, and transitions.
- You're producing a hybrid or live-streamed event with a professional broadcast feel.

Event a small mixer can make your audio smoother and more polished.

THREE OPTIONS FOR DIFFERENT BUDGETS

- Behringer Xenyz Q502USB (~\$60) Compact, beginner-friendly with basic EQ and mic preamp. Great for solo presenters or twoperson setups.
- GoXLR Mini (~\$150) Designed for steamers and virtual presenters. Includes voice EQ, mute buttons, and easy-to-use faders for quick control.
- RØDECaster Duo (~\$500) Pro-grade digital mixer/interface for hybrid events and panels. Built-in sound pads, multi-channel control, and Bluetooth connectivity.



PROSUMER TIER CON'T

PROSUMER VIDEO CAMERAS





External HD Camera

Most laptop webcams max out at 720p, which limits you in terms of clarity and polish. For virtual and hybrid events that demand a more professional look, opt for an external HD camera. It's an easy upgrade with a big impact.

Look for cameras that support 1080p resolution, with good low-light performance and autofocus. Consider a model with built-in ring lights - a great choice for solo presenters.

THREE OPTIONS FOR DIFFERENT BUDGETS

- AnkerWork PowerConf C200 (~\$80) Full HD (1080p), dual mics, adjustable field of view, and a built-in privacy shutter. Great for webinars and Teams calls.
- 2. **Logitech Brio 4K** (~\$160) Shoots in up to 4K, offers HDR, autofocus, great in low-light. A top-level webcam for pros.
- 3. **OBSBOT Tiny 2 Al-Powered PTZ Cam** (~\$270) 4K resolution with Al auto-framing and gesture controls ideal for presenters who move or need dynamic tracking.



PROSUMER TIER CON'T

PROSUMER LIGHTING EQUIPMENT

Lighting is a make-or-break element for your video presence. Whether you're hosting a virtual keynote or moderating a hybrid panel, good lighting makes sure you're seen clearly and look professional without harsh shadows or awkward glares.



Ring Lights - Named for their shape, ring lights offer even, front-facing light that softens facial shadows and highlights features. They're easy to install, relatively affordable, and are best suited for solo setups.

Background & Fill Lighting - Accent lights or LED panels softly illuminate your background, create depth, and help you avoid appearing as if you're floating in a void.



If you're ready for the big leagues, here's an overview of the equipment you'll want to consider:



Lavaller Mic

Also called lapel mics, these remote microphones are ideal for that high quality "micless" look and can often be hidden in clothing. Lavalier mics are best suited for when one or multiple people talk in a room where there's a wide shot of the speaker(s).





Single-ear Mic

Great for broadcasts where the person's clothing doesn't allow for lavalier mics and they need to move around. The in-ear component also allows direct communication between the production team and the microphone wearer.

Boom Mic

Often referred to as overhead mics, these are best used to capture dialogue in a room where people are moving or where the mics cannot be hidden. Boom mics frequently need a member of the production team to hold and move them.





If you're ready for the big leagues, here's an overview of the equipment you'll want to consider:



HD Cameras

HD cameras are widely available and shoot in 1920x1080 (16:9 aspect ratio)

Pros: Affordable, smaller file size, uses

less processing power,

Cons: Lower resolution quality

compared to 4K.



4K cameras



4k cameras are rapidly becoming more accessible, shooting in 3840x2160.

Pros: High quality resolution, puts the "pro" in your professional event video production.

Cons: Cost, file size, and storage needs can constrain resources, and your audience may not actually see the difference based on the device they are using to consume your content.



Special effects

Here's where you can really be an attention grabber. Adding special effects with specialty cameras will up your game. A few to consider:

- Ronin A camera leveler, helpful for creating smoother footage of moving subjects.
- Steady Cam
- Auto tracking cameras





Multi-camera angles

The ability to switch seamlessly back and forth between your speakers/presenters.

- Best for events with multiple speakers.
- Adds visual interest.
- Improves accessibility A broadcast utilizing a live signer needs their own dedicated camera so they are seen at all times.

Lighting Studio

- Multiple people in one room.
- Demonstrations think product demos.
- · Performances.





Production Hardware

Audio mixer for multitrack sound. Your multitrack mixer will help capture and blend sounds from more than one area. For example, a panel discussion in a larger room, interviews, etc.

Production Software

The ability to switch seamlessly back and forth between your speakers/presenters.

- Best for events with multiple speakers.
- Adds visual interest.
- Improves accessibility A broadcast utilizing a live signer needs their own dedicated camera so they are seen at all times.



ProTools software is the industry standard. Pro Tools makes creation fast and fluid, providing a complete set of tools to create, record, edit, and mix audio.



Adobe Audition is a solid runner up, but note: Audition is for audio mixing only. Adobe Premier Pro is needed for video graphics and movies.



VISUAL EDITING SOFTWARE

Need to add an intro visual?
Want to display the person's name when they appear?
You'll need visual editing software to add graphic elements to your broadcast. These include:

- Intro or title visual: Slide, video or image that introduces your show, event of topic.
- Chyrons/Lower 3rds Graphic elements that help you to tell the story and are usually in the lower third portion of the screen.
 Commonly used for titles of the person that is speaking, this area can also be sued for breaking news.
- Closed Captioning If you're doing live closed captioning you'll need software that adds the copy to the screen as it's being entered into the system.



DaVinci Resolve

Used for editing, color correction, visual effects, motion graphics, and audio post-production.



Stage 10

Used for live streams, Stage 10 gives you the ability to control your mix in live feeds, incorporate social media into the event and easily add graphics/interactive products.



WHEN TO LEVEL UP



PEOPLE

VIPs - Got Very Important People on the list? Level up your production for:

- Executives
- Celebrities
- Politicians & World Leaders
- Conferences

EVENT

Hosting a Biggie? Level up for:

- Big Announcements
- Conferences
- Music production or entertainment when the quality of the visuals or the sound matters, be sure to level up your production. Music should use condenser microphones, which give a richer tone and pick up more reverberation from the room; this gives it more of a live production feels.



WHEN TO LEVEL UP

BRAND

If this is your business having professional production matters. The impression you leave will have a direct impact on your bottom line.



ROI

Don't just do it for the sake of doing it. Ask yourself:

- Does it make sense
- Do you get back what you put in?
- Does this elevate your brand?

Examples of good ROI

- Increased viewership
- Lead generation
- Staying longer
- Sharing content more often
- Increased sales



GETTING STARTED

- The smartest way to start: work backwards. What would you like the end result to be? What are your goals? What is your expected ROI?
- Invest in your equipment.
- Test different setups Invest time and effort into setup and testing. Setting up equipment takes longer than you think and once all the equipment is set up, you may have to adjust where the equipment is physically located. Lighting can be especially challenging; it requires multiple angle tests to remove shadows and ensure the person is well lit and so is their background.
- Software can only get you so far Your audio editing or mixing software will be able to tweak the volume and add stylization to your vocals, but having quality recordings to work off of will ensure that you have the best possible sound.
- Do a dry run Always do a dry run of your equipment to make sure that everything is of the quality you're looking for, and test your speaker's/presenter's microphones before going live!



THANK YOU

We hope you found this guide useful and good luck for your future events!

