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Complete Guide:

Virtual Events Technology

It's no news by now that in order to continue planning and producing events in the current event landscape, we need to think long term, be agile, decisive, adapt and pivot. Knowing that doesn't make it any easier because we all know some things are easier said than done. This pivoting to events has felt like uncharted territory for many event planners, as many as 74% of us, new in the field or veterans alike. As many as 93% of event planners believe that virtual events are to be embraced, however many are still in the debating phase, wondering if it's really such a good idea for their organization. Many others jumped right in, figuring things as they went, learning new technology, making a few mistakes along the way but kept getting up and moving along. Those are the pioneers among us, some of the first to embrace this new way of doing events, developing new procedures, conquering and settling into this new reality, all the while preparing the way for others to follow. Since March 14th when we first launched and produced our very first Virtual Events, we've done that many times over for our trusted clients that allowed us to guide them and help take their in-person gala or fundraiser event virtually.

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hi there!

Anca Is the founder and event producer behind Tree-Fan Events – a boutique event production agency that is offering consultation, experience design and production management for live events. Anca has worked in event productions for over twenty years and has extensive experience and knowledge in the areas of technical event productions, event design and management and will walk you through the entire production planning process with the highest level of standards to design a perfect and seamless event.

Anca Trifan
CMP & Founder

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about TREE-FAN EVENTS

Tree-fan Events is a woman-owned boutique event production agency that is offering technical consultation, experience event design and production management for live events. We are client-focused and service-minded and believe in quality over quantity.
Our core values are: integrity, consistency, trust, respect, safety, goodness, creativity, speedy response time and problem solving.
We produce events of all sizes for a number of esteemed local and national clients.

We also produce the **"EVENT AV & LIGHTING: demystified" PODCAST** geared towards event planners and really anyone working under any capacity in the event industry dealing with Audio Visual, Lighting and Technology. Each monthly episode, aired on the 10th of each month on all major podcasting platforms, we aim to demystify the world of audio visual and lighting and reveal exactly what those audio-visual tech professionals are really talking about! We share with our listeners insightful tips, strategies, and tactics which will help you plan and execute successful events of all types and sizes!
Stay tuned for our next episode!

00/ Virtual Events: Overview

This below is **The Most Complete & Comprehensive Guide** that we put together for everyone that's new at pivoting in-person event experiences to virtual events. We hope you find it helpful!

Complete Guide: Virtual Events Technology

00/ Live Broadcasting vs. Video Conferencing

01/ Virtual Events: Basics

02/ Virtual Events: Hosting

03/ Virtual Events: Planning

04/ Virtual Events: Have a Game Plan

05/ Virtual Events: Engagement

06/ Virtual Events: Data

07/ Virtual Events: Platforms

08/ Virtual Events: Technical Details

09/ Virtual Events: Live Streaming

10/ Virtual Events: Encoders

11/ Virtual Events: Streaming Checklist

12/ Virtual Events: Lessons Learned

00/ Virtual Events: Live Broadcast vs Video Conference

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Photo Source: The AV Department

00/ Virtual Events: Live Broadcast vs Video Conference

The word "live streaming" is often used as an umbrella and a catch-all term when it comes to the video space, a term that can encompass anything from a Zoom meeting over wifi on your laptop to an Instagram concert streamed over your phone's network. The first piece of advice for anyone thinking about virtual events is to determine if your live stream is better suited as a video conference, a live broadcast, or a mix of the two.

Questions to Ask Yourself to Help you Better Decide:

- **Are you trying to reach a defined audience, or is it a wider scope?**
- **Does it have to be limited to a few people in a secure way, or can it be available to everybody?**

Live Broadcast vs Video Conference

Live Broadcasting

Offerings:

- An optimized experience for a one-to-many audience
- Improved visuals
- Better storage, sharing, and management
- More reliability and scalability for large audiences

Video Conferencing

Offerings:

- Optimized for one-to-one (or one-to-some) video interaction
- Can be tricky to access and secure for viewers
- Has limited quality A/V outputs
- Is not built for long-term storing or sharing

Source: Vimeo

01/ Virtual Events: Basics

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Photo Source: The AV Department

01/ Virtual Events: Basics

A virtual event is any organized event that takes place online rather than in a physical location and where individuals experience the event and its content in a virtual environment, rather than in an in-person gathering.

Types of Virtual Events

01. Webinars

= a web-based seminar (web + seminar = webinar) where attendees from around the world can join in and listen to one or more speakers who present their content live or via pre-recorded materials and it can happen live or on-demand, as a pre or post-recording. The defining feature of webinars is their interactivity and audience engagement, as they are all about two-way communication and allow for audience contribution via polls, Q&A and more.

02. Webcasts

= a live video stream of an event or conference and is designed to reach large audiences of thousands with a TV/studio-like quality to it and it allow you to bring a psychical event to life, providing a one-way flow of information.

03. Live Fundraising Auctions

= a live video stream of an event or conference and is designed to reach large audiences of thousands with a TV/ studio-like quality to it and it allow you to bring a psychical event to life, providing a one-way flow of information.

04. Virtual Conferences & Seminars

= built around a live, complex agenda that includes keynotes, sessions, and breakouts, and can include multi-session content and community engagement tools, allowing attendees to view keynotes in real-time, build their own agenda from relevant, on-demand content, and interact with other attendees.

05. Internal/External Hybrid Events

Internal = town halls, sales kick-offs, company-wide events, training events, department meetings, and more, for organizations that span countries, even continents where employees are not all gathered in the same place.

E**xternal** = large user conferences or industry-based conferences with high levels of video productions so the virtual attendees are provided with the same value and a similar event quality and experience as the in-person ones.

02/ Virtual Events: Hosting

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Photo Source: Marvin Meyer on Unsplash

02/ Virtual Events: Hosting

Much like any event, hosting a virtual event involves a lot of planning and preparation. Regardless of whether you're running a virtual conference or a virtual fundraiser, you can follow these simple steps to ensure the success of your virtual event.

03/ Virtual Events: Planning

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Photo Source: Tree-fan Events

03/ Virtual Events: Planning

Event Planning, in-person or virtual, comes down to fundamentals and they both work together with the rest of your marketing to reach and engage your audience, as well as give you a round picture of ROI and interest.

04/ Virtual Events: Have a Game Plan

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Photo Source: Ben Kolde on Unsplash

04/ Virtual Events: Have a Game Plan

All events come with logistical challenges so as you plan, use your standard planning processes, tips and tricks to create and execute a great virtual event. Treat your virtual event planning the same way you would treat an in-person event, putting yourself in your attendee's shoes. Here are some questions to ask yourself to avoid any hiccups during your virtual event.

05/ Virtual Events: Engagement

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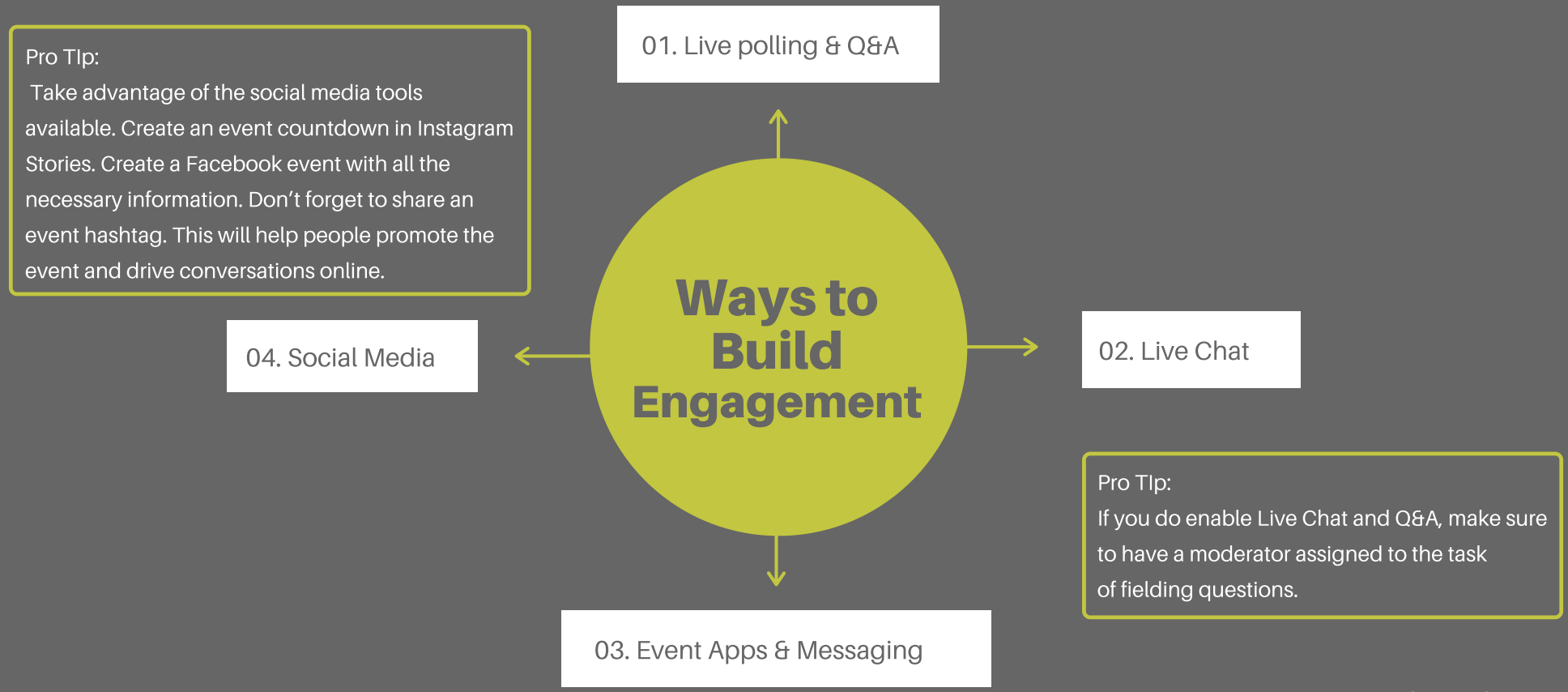
Photo Source: Austin Distel on Unsplash

05/ Virtual Events: Engagement

In-person events are built for engagement and 80% of event planners worry about recreating that type of engagement for virtual events. While it needs to be more intentional, there are still a few opportunities for engagement during virtual events. Polling and live Q&A during sessions, enabling the live chat during a virtual event, social media is another great tool to leverage and with the use of a hashtag having attendees post pictures of favorite takeaways, their home office setups, etc. Also, engagement tools provided in the form of event technology with messaging capabilities in a mobile app can allow attendees to meet each other virtually, collaborate, exchange ideas and socialize.



Source: Cvent

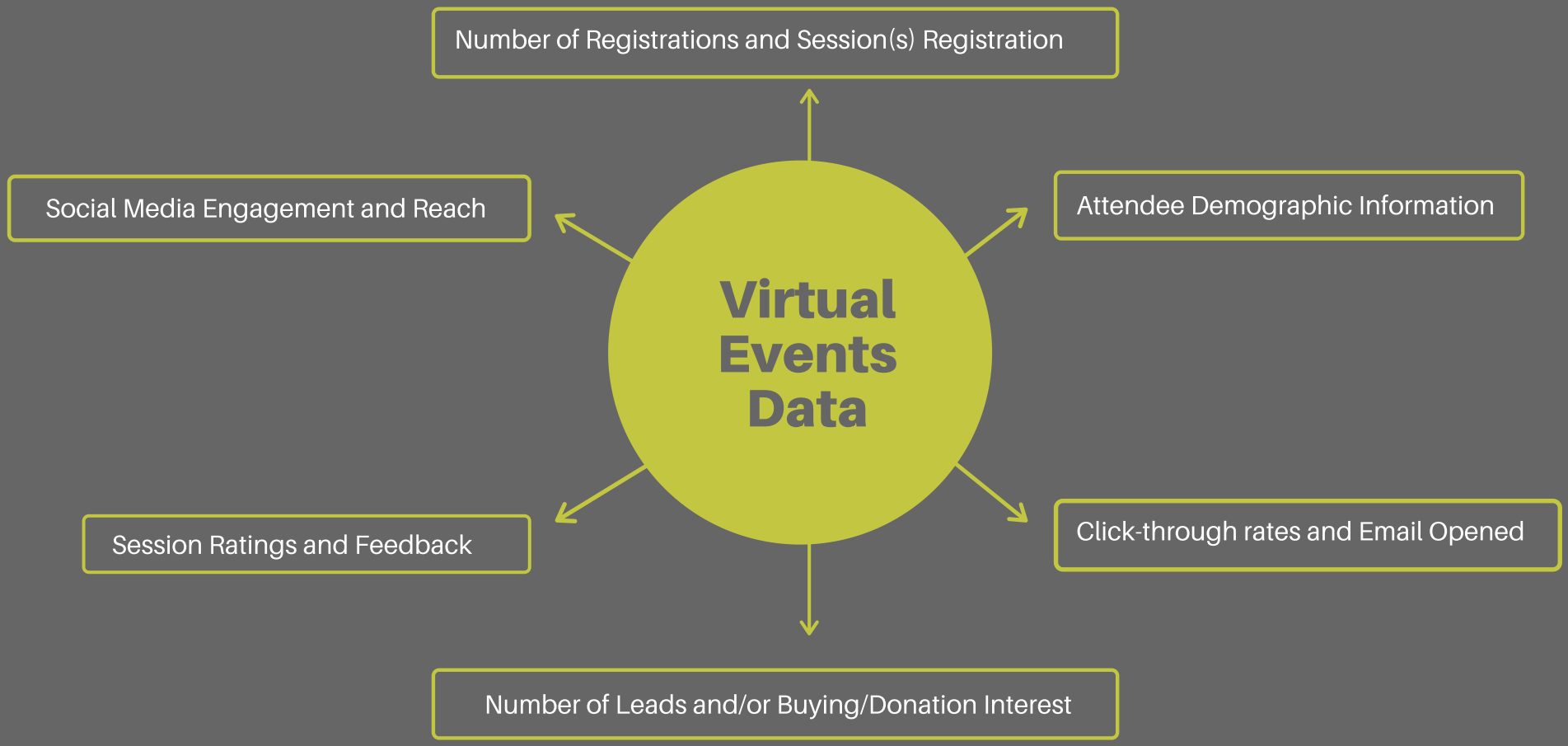
06/ Virtual Events: Data

Complete Guide: Virtual Events Technology

Photo Source: Campaign Creators

06/ Virtual Events: Data

Data gathered during Virtual Events can still be used to qualify leads, prove event success, and improve the next events.



Source: Cvent

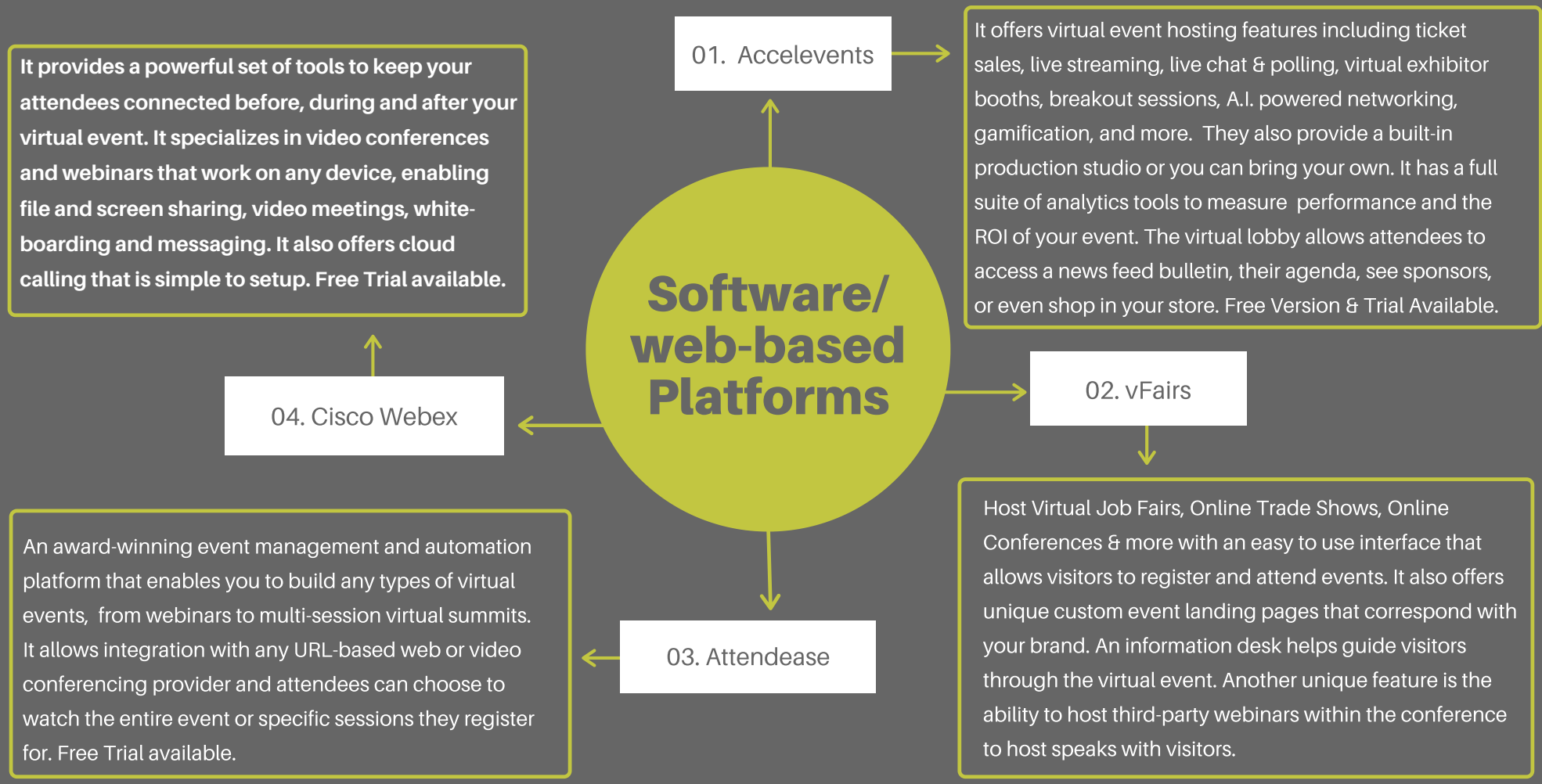
07/ Virtual Events: Platforms

Complete Guide: Virtual Events Technology

Photo Source: Brooke Lark on Unsplash

07/ Virtual Events: Platforms

As with all interactive technology, virtual events allow you to hold meetings with a engaged audience to find success and achieve your goals. The very best technology would be challenging to select, as many different features appeal to different consumers. Here are some of the most popular virtual event software platforms to try for your next virtual event.



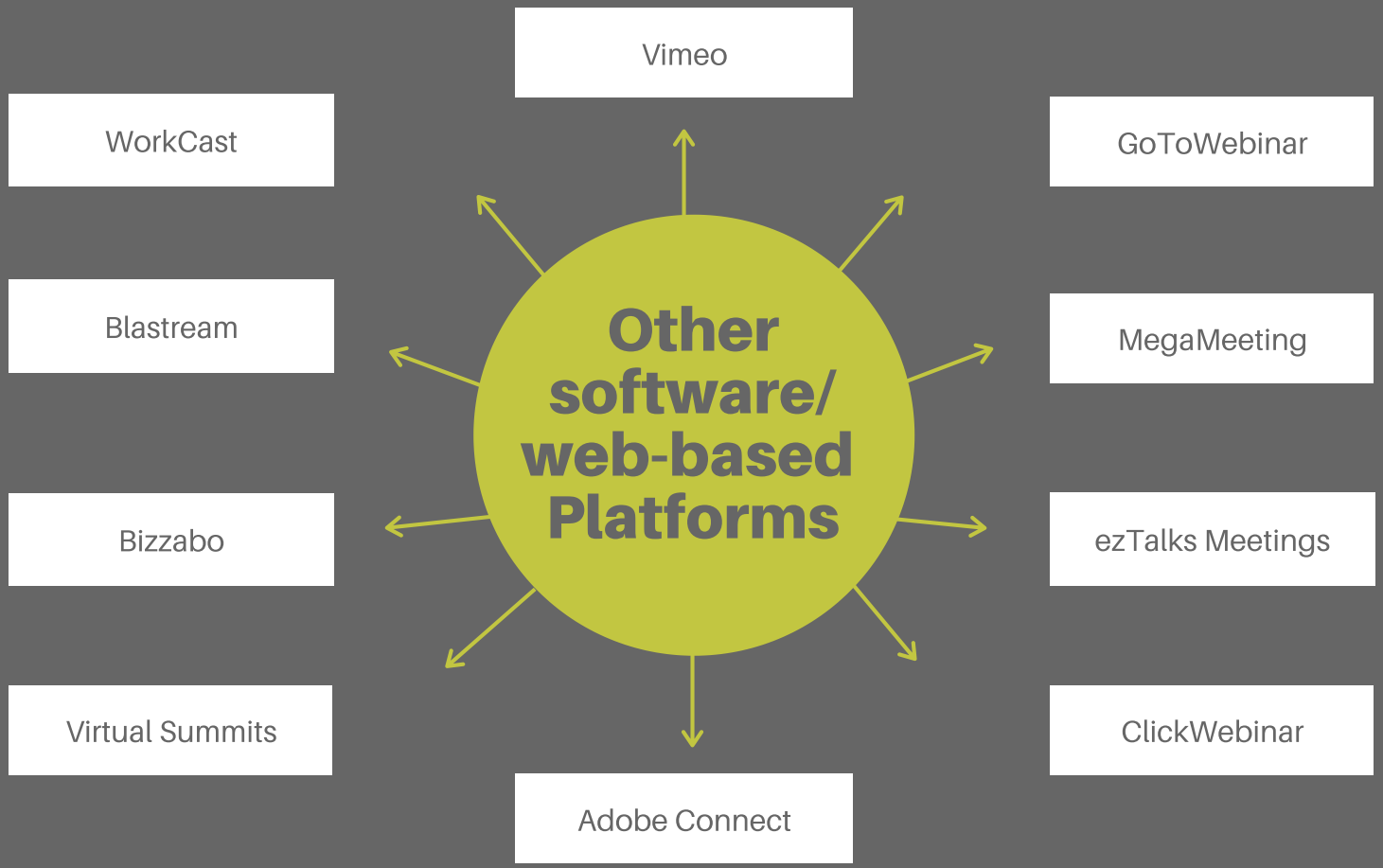
Source: VOIPpreview

07/ Virtual Events: Platforms - cont.

As with all interactive technology, virtual events allow you to hold meetings with a engaged audience to find success and achieve your goals. The very best technology would be challenging to select, as many different features appeal to different consumers. Here are some of the most popular virtual event software platforms to try for your next virtual event.

07/ Virtual Events: Other Platforms

There are hundreds of available platforms to choose from and we won't be able to cover in detail all the software or web-based conferencing platforms out there but here's a list of more for your consideration and personal research.



Source: SourceForge

08/ Virtual Events: Technical Details

Complete Guide: Virtual Events Technology

Photo Source: The AV Department

08/ Virtual Events: Technical Details

If physical events have hitches, virtual events have glitches. Virtual events rely heavily on technology and making sure your checked all the boxes for the following technical must-haves will ensure your event is semless.

The professional technical team ready to run and execute your Virtual Event smoothly (Technical Producer, Live Stream Tech Support, Video Technician, Sound Engineer, Lighting Technician, Stage Manager and Camera Operators that understand the narrative of the event in order to capture and produce the right shots). Also, have an IT professional on call to answer any login technical issues that might occur before or during the webcast.

A fast and reliable dedicated hardwired internet line and a way to access the Ethernet access point. The internet line must have no upload restrictions or firewall issues and you will need at least 1.5x as much uplink bandwidth as your stream's bitrate.

A a central video control location for your stream with audio monitoring in a separate room for keeping accurate sound levels and tonal quality throughout the stream.

A video streaming solutions software along with an external hardware encoder (unless you have a very strong computer with high CPU that is capable and able to encode your live stream).

A a sound system package that includes Lavalier/Headset handheld microphones for your Speaker, Presenter, MC, Benefit Auctioneer etc. and a few audience boom microphones

You will also need a live video streaming production system package tested, re-tested and ready to go (HD cameras, video encoder, video switcher, preview video monitors, in-room sound and audio monitors for live stream sound monitoring, stage lighting, backdrop, speaker teleprompter, speaker timer, etc.)

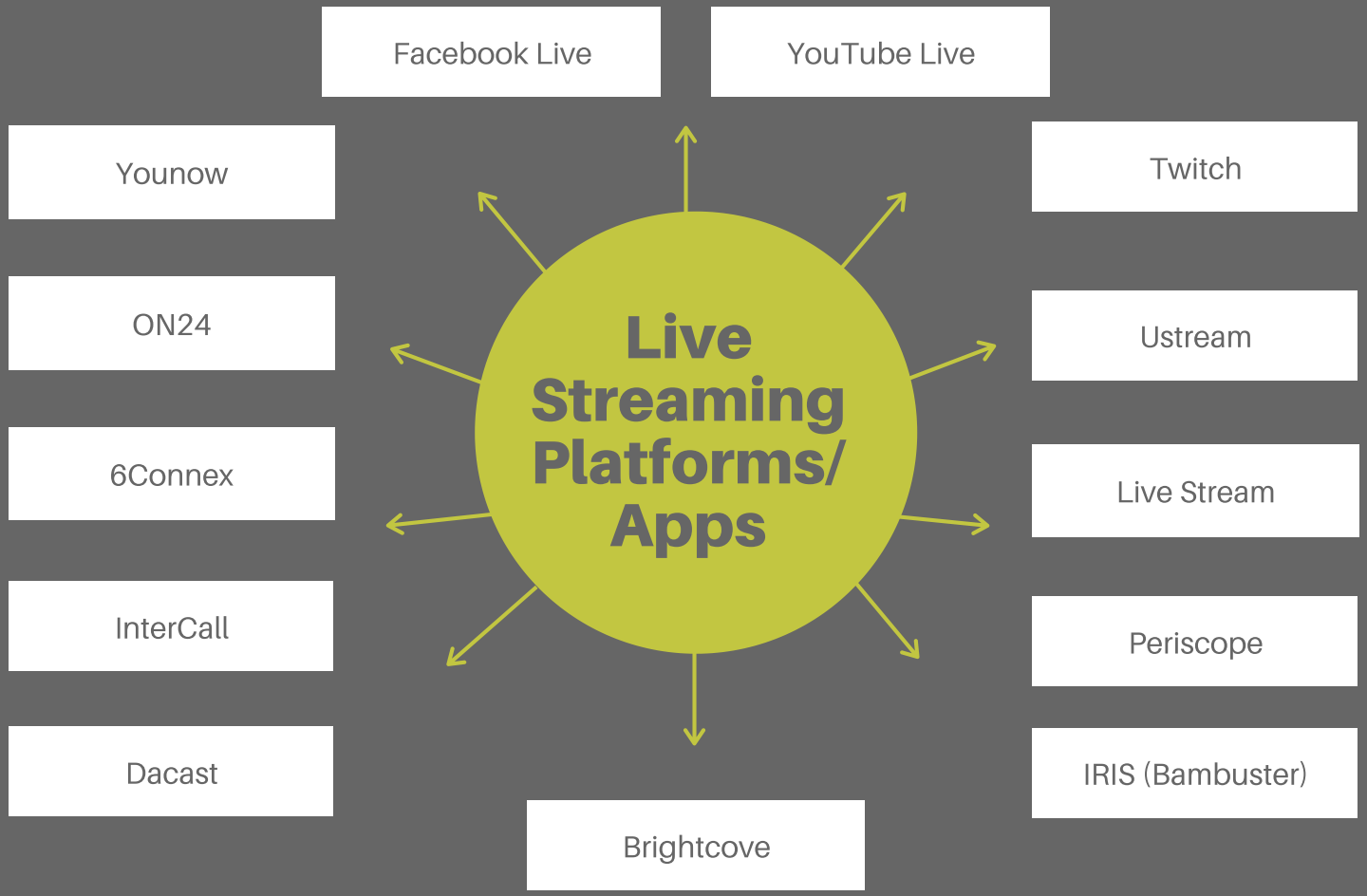
09/ Virtual Events: Live Streaming

Complete Guide: Virtual Events Technology

Photo Source: The AV Department

09/ Virtual Events: Live Streaming

The dramatic growth of second screen technology and hybrid meetings has permeated nearly every meeting and event, and should be top of mind for all future programming. Below are the top Live Streaming Platforms/Apps.



Source: Wondershare

09/ Virtual Events: Live Streaming - cont.

Here are the top most popular live streaming software platforms that we'll go into more detail on.

Source: Wondershare

10/ Virtual Events: Encoders

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Virtual Events Technology

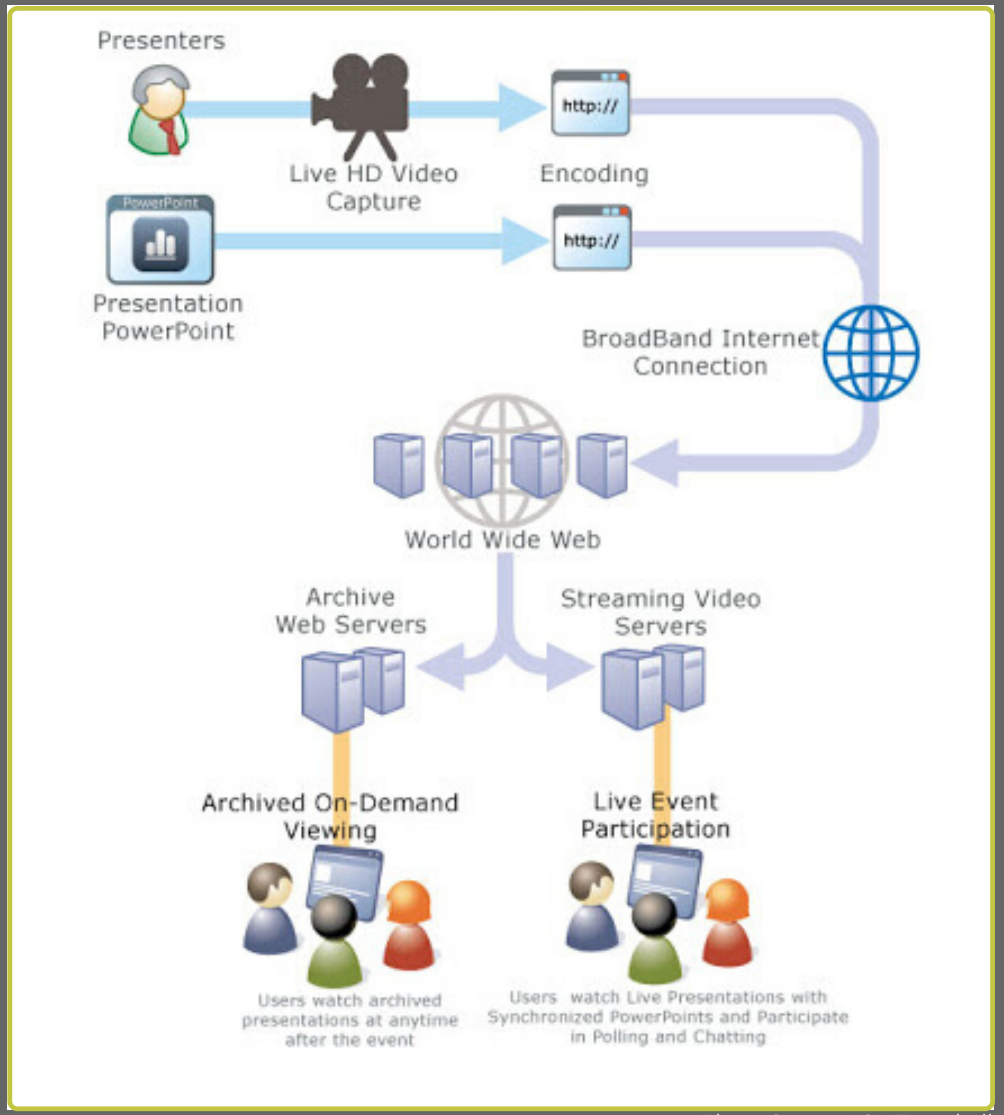
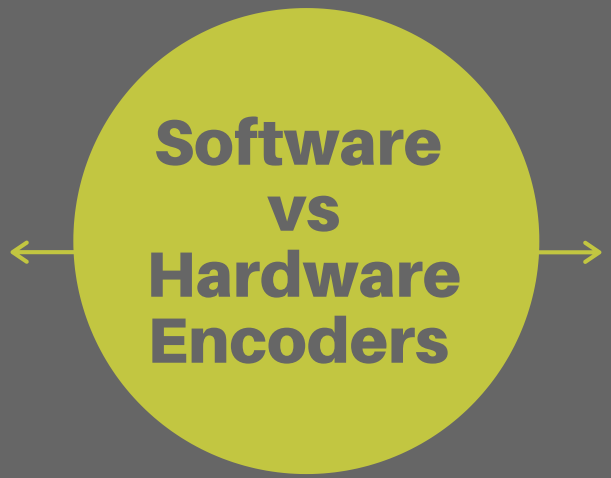


Photo Source: ICV Townhall

10/ Virtual Events: Encoders

In essence, encoders are devices that convert data from one format to another. They can be either hardware or software-based. Either way, encoders are essential to converting the video feed from your camera to streamable data. To format live content, do secure video upload, and stream it properly, you need to convert that content into codecs with an encoder. Regardless of your streaming goals, this is true for all kinds of live streaming. Below are the two different types of encoders.



Hardware Encoders

Pros:

Hardware encoders are dedicated processors that use a designed algorithm to encode video and data into streamable content. These encoders can come in smaller, portable boxes or larger permanent fixtures and are specialized specifically for encoding which gives them an advantage over software encoders. That being said, the video quality of hardware encoders is usually pretty fixed., without much room to adjust the video quality which means some of the older encoders could have older codecs which renders them inflexible, compared to software encoders. Overall, they are much faster and do offer a much lower latency than their software counterpart.

Cons:

Given their higher price-point, mainly professional broadcasters tend to use hardware encoders. You won't find any free hardware encoders, though you can find some for as low as $100. Pro-grade encoders, however, are much more expensive.

Software encoders

Pros:

These are programs that run on a computing device. For example, this device could be your laptop or a desktop computer. The quality of the software encoders is great in terms of software vs hardware. In addition, you can tweak or change most aspects of the codecs (compressors/decompressors) to get the bitrate and video quality you desire. Unlike hardware encoders, you can easily update encoding software when a new version or upgrade is available. This type of encoders can be appealing to broadcasters for their low cost and customization features and it can be a great option for new broadcasters who want to learn more about encoding.

Cons:

However, software encoders lack the overall latency speed that hardware encoders offer. In large part, that's because a computer runs multiple programs at the same time, and therefore can't devote all of its resources to encoding.

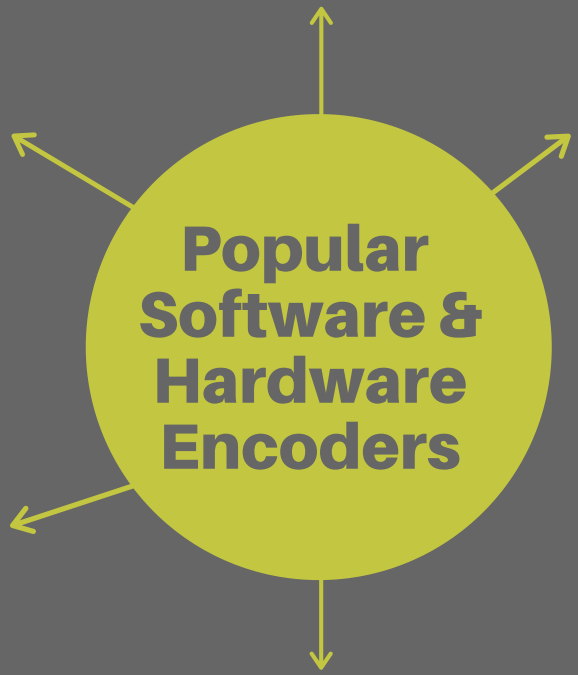
Source: Dacast

10/ Virtual Events: Popular Encoders

Virtual events rely heavily on technology. Attendance won't be possible without the use of computers or mobile devices.

When it comes to hardware encoders, Teradek VidiU is one of the most popular options. It allows you to live stream via the web, which means you don't actually need a PC. Other Teradek models include the Cube, Beam, Clip, and T-Rax which are all built for different uses and projects.
For example, the Teradek Beam is a long-range encoder that can transmit data from up to 2,500 ft. away. This feature makes it ideal for live broadcasts in the field.

OBS Studio is one popular option, particularly if you are seeking for a free software encoder. OBS offers encoding software for game recording and live streaming. It supports mixing between multiple sources and is accessible for new broadcasters.



Telestream Wirecast is one of the best professional level (for pay) software encoders on the market. It has features that cannot be imitated elsewhere. For example, live switching, picture-in-picture, and transitions make this an appealing option for serious broadcasters. In addition, Wirecast offers some great sports features to enhance any live sports broadcast. For example, you can insert scoreboards, live replays, and even real-time scoreboards with Wirecast encoding software.

One of the leading innovators in all-in-one live video encoders,wWith a complete set of multi-camera production capabilities and extensive integration with broadcast operations, the NewTek TriCaster has multiple encoding models to fit your every project and need. Some popular models include the TriCaster 40, 455, 855, 8000 and if you can't afford it, you can't go wrong using one of these to monetize and produce your content.

Adobe Flash Media Live Encoder used to be the standard when it came to (free) encoding software, however that is no longer the case as it is being depreciated by Adobe.

Source: Dacast

11/ Virtual Events: Streaming Checklist

Complete Guide: Virtual Events Technology

Photo Source: The AV Department

11/ Virtual Events: Streaming Checklist

As you plan and use your standard planning processes, tips and tricks to gather information, create and execute a great virtual event, below are some questions to help you create your Streaming Data Sheet.

12/ Virtual Events: Lessons Learned

Complete Guide: Virtual Events Technology

Photo Source: Unsplash

12/ Virtual Events: Lessons Learned

Length matters

Where in-person events can take from 1 hour to 3, 4 depending on how much time has been allocated for the pre-event cocktail and post-event entertainment, when it comes to Virtual Events, we've learned that keeping your main program to 30 minutes or less is best, with 10-15 minutes of Pre-Cast and 5 minutes of Post-Cast with a maximum of 45 minutes tops of total event length time. Why that is important? Your audience at home is easily distracted, most likely is multi-tasking or trying to, and they're already pre-conditioned to Facebook and Instagram Stories that last a very short amount of time and if you're trying to engage them for to long, the chances are you're going to lose them no matter how captivating your content is.

Content is King

Content has always been King, this is not news and in the light of the first point, your content needs to be short, focused, engaging, inspiring and captivating. That's not a lot to ask at all, right? However, having great content is not some new concept in the world in general or in our industry, but right now is more important than ever before. It is a crucial element of a Virtual Event and the one-size-fits-all approach will no longer suffice. Instead, a focus on creating unique, high-quality and utterly authentic content that is entertaining, captivating and interesting for your online audience will get you the crown in this new reality of virtual events.

Lessons Learned (so far)

Collaboration is Queen

If content is king, collaboration must be the queen in launching and producing a successful Virtual Event. As we first started the process of pivoting many of our spring fundraising events to virtual, we knew we needed partners to make this successful from all points of view, not just technically which is our main expertise. We needed communication experts, fundraising experts, online bidding experts and so on. Even without our team, we needed to shift roles and collaborate in new ways to make sure we're not duplicating efforts and instead all our efforts are directed towards the common goal and we're not overlapping projects and tasks, especially imperative as all of our team started working remotely for the very first time. Using productivity tools to stay on task and appropriate channels to facilitate open and continuous dialog with our entire team and our clients, which has enabled us to relay relevant event information and communicate updates as each event evolved. Don't be afraid to over-communicate and over-collaborate during this time.

12/ Virtual Events: Lessons Learned - cont.

Always have a back-up plan

When we first launched our very first Virtual Event in Portland Oregon, the COVID-19 was just becoming a public health concern and there were no crowd-size restrictions in place just yet and so we were able to pivot this annual breakfast fundraiser into a virtual event from the client's own offices with featured performances, guest appearances, community leaders and a live fundraising appeal. That changed mightily fast and the very next day a new restriction was put in place by the Oregon Governor Kate Brown, and our next in-person event that was scheduled to happen that very weekend was pivoted to virtual in two day's time. While that next fundraising event launched virtually exceedingly fast, the event was extremely successful and raised a record-setting amount of over $600000. Members of the auction planning committee comprised the small live studio audience with two bidding assistants managing the online silent auction, the special appeal donations, and live auction bids while a live MC and Benefit Auctioneer took the stage.

...cont.

The very next Virtual Auction Event had to change gears yet again in light of the shelter in place orders that went into effect at that time and with the support of our client and amazing partners who once again adapted and pivoted their gala event to a virtual auction live streamed from our AV Partner's Portland Studio all the while following all the social distancing and new updated group size restrictions in place, ensuring everyone was at least six feet apart. That speaks to the importance of having back-up plans which is critical for a virtual event's success in our day-to-day reality that is changing fast with a lot of factors that are outside of our control. What might seem like a fool-proof idea today, could be almost impossible to execute tomorrow.

Lessons Learned (so far)

Test and Re-Test Everything

Run-throughs and Test-throughs are not a new concept in our industry of producing Live Events. In the light of Producing a Virtual Event, there are a few additional elements that as an event planner you've probably never had to worry about. Without much onsite IT support or your typical office or venue internet infrastructure setup, making sure that you've got the adequate and reliable dedicated internet connection, a way to access the Ethernet access point and your internet line has no upload restrictions or firewall issues can be a daunting task. Testing the streaming platform(s) for undiscovered issues, testing all the new technology you're using, testing and running through all your content, slides or videos, simulating the actual live event before you go live, looping all off-side presenters and speakers in, making sure everyone is comfortable with this new technology will ensure that your Virtual Event will run smoothly during the day of your event. This might sound like a lot of testing to be had for just one event, but testing is critical to your Virtual Event's success and I can not stress enough the importance of testing.

CHEERS TO A GREAT VIRTUAL EVENT!

Complete Guide: Virtual Events Technology

"I can't change the direction of the wind, but I can adjust my sails to always reach my destination." - James Dean