



PrePARE: Best Practice Recommendations for Virtual Meetings

Luc Rubinger¹, Seper Ekhtiari^{1,2}, Aaron Gazendam¹, Mohit Bhandari^{1,2}

1. Division of Orthopaedics, Department of Surgery, McMaster University, Hamilton, ON
2. OrthoEvidence, Burlington, ON

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This guidelines document is laid out in four sections, aimed to represent the four phases of the meeting cycle:

Pre-planning considerations, **Planning**, **Accomplishing** conference goals through execution, gauging **Response** and **Engaging** the target audience for future cycles.

Overview

The impetus for the Best Practice Guidelines for Virtual Meetings stemmed from the COVID-19 pandemic. With many meetings and conferences moving to online platforms in a short period of time, and the uncertainty around the feasibility and responsibility of in-person meetings in the future, this document is timely and needed. It brings together the perspectives of a multitude of stakeholders and partners to work toward the common goal of developing and implementing a coordinated and integrated approach to planning, executing and evaluating virtual meetings across medical and academic institutions. Enhanced access to integrated, high-quality and efficient virtual meetings will establish a new norm as an effective alternative for innovative health research, education and information dissemination.

These Best Practices were proactively established in response to the scant evidence and guidance on the topic. In the context of academic meetings and conferences, there is the aforementioned growing need for a set of guidelines secondary to the COVID-19 pandemic. In addition, there remain growing environmental and economic challenges that large academic and medical conferences face, thus further justifying these guidelines. Moving forward in the era of growing utility and utilization of virtual conferencing these guidelines will serve as a benchmark and standard for conferences in medical and academic fields.

Scope, purpose and target audience

The Best Practice Recommendations for Virtual Meetings are the result of an extensive review of the literature, grey-literature, private and public sector documents, expert consultation and stakeholder surveys. The document provides a synthesis of best practices across the continuum of meeting types and will serve as a framework for medical and academic communities as they adapt, develop and implement remote and virtual conferencing strategies.

The Best Practice Recommendations for Virtual Meetings reflect the most critical topics in providing and disseminating effective meetings, are based on expert and key health system stakeholders. They are for use by professional health/academic groups throughout the country, as well as health system policy-makers, planners, funders, industry and administrators.

Method: development and update process

Identification of key topics and core reference guidelines

Criteria were established to guide the selection of best practice recommendations for the virtual meeting guideline. It was determined that, to be considered for inclusion, recommendations had to meet the following criteria:

- be supported by the literature available and/or be considered essential to delivering best practice
- be integral to driving important change to current healthcare conferencing practices
- reflect the full continuum of virtual meetings moving forward

Initially, the scope and content of the project was defined by evaluating existing literature on virtual healthcare and academic meetings and conferences. This scoping review allowed conceptualization of the methods and sections of these best practices below. 'The Copernicus Alliance Online Conference Guidelines for Virtual Conferencing' (2) and the 'ACM Presidential Task Force on What Conferences Can Do to Replace Face to Face Meetings, "Virtual Conferences, A Guide to Best Practices"' (3) were both used as foundational documents.

Synthesis of best practice recommendations

These best practice guidelines were developed from a scoping review of peer-reviewed literature, grey literature and lay-literature. Given the recent systematic review on the topic by Spilker *et al.* from the education realm of peer-reviewed research, we heavily utilized the referenced documents therein.⁽⁴⁾ The systematic review did not review MEDLINE or Embase databases, therefore these two databases were scoped for relevant, non-duplicate articles. For lay articles, Google was searched, and results were reviewed and indexed for themes that contributed to the development and verbalisation of the recommendations herein. See search strategies in Appendix 1.

For each segment, or cycle phase, of the best practice guidelines (Pre-plan, Plan, Accomplish, Response and Engage) (Figure 1), relevant recommendations from previously published documents or, if necessary, new recommendations were drafted based on expert panel opinions and/or stakeholder surveys.

Using this Document

This guidelines document is laid out in four sections, aimed to represent the four phases of the meeting cycle: Pre-planning considerations, Planning, Accomplishing conference goals through execution, gauging Response and Engaging the target audience for future cycles (Figure 1). Akin to the *Plan, Do, Study, Act Cycle* of quality improvement interventions, this document is meant to drive meaningful initial and subsequent interventions in the meetings of the medical and academic community. Each of the recommendations in this document are *italicized* with the explanations below. A checklist for planning virtual conferences can be found in Appendix 2.

The levels of evidence that comprise this document are a compilation of nonexperimental descriptive studies (e.g. case studies) and expert committee reports, opinions and/or experience of respected authorities, and lay articles. This document is written in non-academic language to represent the subject matter and the overarching themes of the reference documents used for its synthesis.

0.0 Background and Rationale for Best Practice Guidelines in Virtual Conferencing

Scientific collaborations that come out of conference meetings can be more novel, cross-disciplinary and more frequently cited than projects between two researchers in the same institution.⁽⁵⁾ Virtual conferences are more than an alternative to conventional face-to-face events. With the COVID-19 pandemic forcing healthcare associations, and otherwise, to re-evaluate the need for international travel and ‘cross-border-contamination’, the role for virtual conferencing is expanding. There has also been a recent and developing trend in certain corners of academics with specific concern for greenhouse gas emissions resulting from traveling to conferences and meetings.⁽⁶⁾ Technological capabilities are no longer a hindrance and people are now well acquainted with online environments. Saving time, energy and money are other benefits that come with online conferencing. In fact, these economic benefits can be shared by many of the stakeholders in the conferencing realm. In addition, due to their inclusive character, virtual meetings can attract international participants for local events. Virtual meetings will allow universities and healthcare associations to increase their outreach, international collaborations and position their research on an international stage.

0.1 COVID-19

As concern over COVID-19 set in, the global community began to rethink large gatherings. Most university classes have moved online, and some of the world’s largest companies are instituting mandatory telecommuting policies. The novel (2019) coronavirus has already reshaped the way we work, and it will also change how we do conferences, a trillion-dollar international industry in which millions of people participate each year across all business and education sectors.

As measures to combat the spread of COVID-19 continue many communities are considering hosting their annual meetings either exclusively through an online platform (so-called “virtual meetings”) or as “hybrid meetings”, which provide for online participation while also allowing meeting participants to attend in person. Given the uncertainty about whether large in-person gatherings will be permitted, advisable or even responsible later into the summer of 2020 and even beyond, many meetings are being converted and scheduled to be held as virtual-only meetings.

0.2 Environmental

International air traffic increased significantly during the last decades and represents one of the largest sources of greenhouse gas emissions on the planet. Academic researchers represent some of the highest emitters in this category of air travel, primarily as a result of emissions from flying to conferences, project meetings, and fieldwork.⁽⁷⁾

Healthcare associations, affiliated universities and affiliated physicians and surgeons thrive on the exchange of knowledge and cooperation between their own members and members of other educational and research institutions. While physical attendance of conferences or projects meetings during business trips help develop and foster academic research, collaboration and learning – this must be balanced against the commitment to reduce overall institutional carbon emissions. Hence, The University of Zurich launched the project Virtual Conference on “University Air Miles Reduction” in 2017 in order to discuss this dilemma and try to identify alternative solutions. ⁽⁶⁾ Moving to full virtual or hybrid scientific and academic conferencing was a main implementation goal.

0.3 Economic

As mentioned above, the annual international conference industry runs a tab of upward of a trillion dollars. This number encompasses all industries, including healthcare, and points to the impact that transitioning to virtual meetings can have economically. While there is lack of

formal evidence, virtual and online conference tend to cost less in attendance fees, and certainly less to organize and execute than traditional face-to-face meetings. With that said, there are many perspectives to take into account when discussing the economic ramifications of moving a meeting to a hybrid or full virtual setting. Furthermore, there are many monetary and non-monetary, and externalities (both positive and negative) that must be addressed when discussing the economic impacts of moving the conferencing industry virtual.

0.3.1 Participants/Institutions

There can be economic benefits for both the attendee of the meeting and their home institutions, outside of the usually cheaper attendance fees for online or virtual conferences. Savings in terms of travel expenses, room and board are transferred to either the attendee, if the conference is privately funded, or to the institution, if institutionally funded. Further to this point, there is less application time and administrative burden for institutions to vet and cover meeting attendance expenses incurred remotely. There are also non-traditional costs of attending meetings for international attendees and their respective institutions; these include travel visas and considerations around time zones.

0.3.2 Organizers

Organizing and executing a full or hybrid virtual conferences can be more cost-effective than a face-to-face conference. The organizer stands to save a great deal on event costs such as brick-and-mortar facilities, food and beverage, and travel fees. Further cost savings can be had with decreased speaker compensation rates, event specific costs such as large audiovisual (AV) setups and logistics, and operational manpower. Along with these cost savings come a decrease in the revenue organizers stand to earn from virtual meetings as attendees and industry will likely not assign the same monetary value to a virtual conference compared to a conventional one. However; this decreased revenue does not need to translate to decreased profit given the large potential for cost savings.

0.3.3 Opportunity cost

The economic concept of opportunity cost can be defined as the loss of potential gain from other alternatives when one alternative is chosen. While difficult to attach a monetary value in this context, the opportunity cost of both the attendees and organizers of a face-to-face conference can be steep. The opportunity cost of attending an in-person meeting in a remote location for example would be the time and effort lost in transit, and general time away from other research and clinical endeavors, and away from family or non-academic endeavors, that could have yielded value. The opportunity cost of organizing and holding an in-person meeting, instead of a virtual conference, would be the value that could be gained from utilizing the sometimes immense monetary, human and resource capital in another way; for example, diverting that capital towards bolstering research or clinical programmes.

0.3.4 Positive externalities lost

Positive externalities are consequences of a commercial activity that affect other parties without this being reflected in the cost of the goods or services involved. There is a great deal of pride, clout and monetary benefit that can be associated with being the host site of a large, face-to-face, national or international conference. This is true not only for the host healthcare practitioners or university/institution, but also for the geographic location in which the conference is held. The reputational benefits of the host group and institution, and the economic benefits to the local

hospitality services in the host city are only some of the positive externalities that will be lost when moving towards more virtual meetings.

0.3.5 Goodwill

There are two definitions for the term ‘goodwill’. First, and most obvious being—a friendly, helpful, or cooperative attitude. Secondly, in accounting terminology, goodwill represents the intangible asset of the established reputation of a business regarded as a quantifiable asset on said businesses’ balance sheet after it is bought or sold. While there is no buying, or selling, of the healthcare and academic conferences we are discussing, both these definitions can be made relevant. The movement of a conference to a hybrid virtual, or full virtual model will ultimately be seen by the consumer or attendee of the meeting as cooperative and in good faith; not only for the environmental and pandemic reasons above, but it will be seen as offering a flexible and accessible alternative of the product to those less capable to attend. This goodwill built with the conference-goer community can be viewed as an intangible asset that may be leveraged by the organizers down the road. A full accessibility section is discussed below.

Meeting Cycle and Associated Recommendations

1.0 Pre-plan

The pre-planning phase of a virtual meeting is arguably the most important, and deliberate phase of the meeting cycle. This phase represents the initial foundation that is laid out for the virtual meeting that is to be planned and executed. This foundation consists of defining the audience, which is likely similar to previous face-to-face meetings held by medical or academic associations.

1.1 Organizing Committee

Define the organizing committee as early as possible, with multiple stakeholder groups represented.

The move to virtual meetings involves retooling and repurposing the things that organizers and participants normally do in generic face-to-face conferences into new vehicles and new forms of communication. Conferences inevitably rely on human capital and organization; thus, the roles of the organizing committee members are standardized when moving to a virtual format. With that said, much of the roles and responsibilities of some of the committee will be developing ideas and methods for shifting the previously physical matters of the conference to the virtual environment. Incorporating new committee members from different stakeholder groups, such as various attendee groups (faculty, students etc.) and industry (both tech and industry specific to the conference), will allow the more targeted and responsive planning of a successful virtual conference with meaningful virtual events and networking.

1.2 Defining Target Audience

1.2.1 Defining audience and their goals

Define target audience based on objective measures, especially based on various association memberships.

Utilize association membership data and contact information, and stakeholder surveys early to define attendee goals and priorities for the future meeting. The value of having a defined target population at the outset of meeting planning allows the organizing committee and future involved parties (such as event planning and tech stakeholders) to have a reference of the future attendees and their needs.

1.2.2 Accessibility

Assign a committee member as an Accessibility Chair to establish and oversee best practices of accessibility at given virtual meeting for the given target audience.

There are many aspects to consider when discussing accessibility to virtual conferences. Some of the focuses of accessibility considerations of certain virtual conferences can be determined through the aforementioned stakeholder surveys.

1.2.2.1 Economic

Monetization of meeting attendance for various target attendee groups should be contextualized as an accessibility issue.

Depending on the target population of the planned meeting, the monetization and fees applied to meeting attendance, and post-hoc uploaded meeting materials may preclude some members of the community from attending. The range of people for whom conference attendance can become more feasible with a decreased upfront cost: people from low- and middle-income countries, people from any country but who may not have access to the research funding that allows them to attend, people with disabilities, learners who may not be able to secure time off easily. Further to this point, in the era of COVID-19 and the resultant global economic struggles, attempting to turn a substantial revenue from a cash-strapped participant pool may preclude some from accessing the conference. A full monetization section is discussed below.

1.2.2.2 Technological

Work with technological event planners to allow various levels of hardware, software and connectivity levels to participate.

It is important to consider the levels of technology, both hardware (computer, microphone, video capabilities) and connectivity (software, internet capabilities) when planning a virtual conference. While it may dictate the level of participant involvement in social aspects of the conference, various levels of connectivity should be offered to attendees. This will offer those with varying levels of technological connectivity to still participate in the knowledge translation intended through the conference.

1.2.2.3 Visual accessibility

For all pre-recorded, and demonstration sessions, audio description for the visually impaired should be offered where possible.

Closed captioning is a resource that offers accessibility to those visually impaired but also serves as a resource for highly technical demonstrations delivered over the web. While somewhat resource intensive, closed captioning where possible allows contextualization of certain video elements for the viewer and can potentially increase retention of information as the material is conveyed through multiple methods.

1.2.2.4 Auditory accessibility

Captioning of all audio content should be sought.

Programs exist to provide automated captioning, that can be edited by live hosts to ensure accuracy with technical or industry nomenclature. Providing subtitles, or closed captioning, of content will improve the accessibility not only for those that are hearing impaired, but also for those whose primary language is not the language the meeting is delivered in.

1.3 Type of Meeting

The early definition of the type of meeting is integral to its success, with focus on achieving translation of desired knowledge and engaging the target audience.

Among the main benefits of conventional meetings are personal interactions or contact, and networking. In addition, individuals get to experience new places and cultures that cannot be replicated online.(8) Technology cannot fully replace the power of direct interaction. Physical conferences will always hold value and are important, but they could be reduced, and participation can be prioritized. Simply, there are four ‘types’ of meetings: conventional, hybrid, full virtual or asynchronous.

1.3.1 Conventional Meetings

A conventional face-to-face conference with additional remote presentations and live broadcasting is currently status quo for most modern medical and academic conferences.

1.3.2 Full Virtual Meeting

A full virtual meeting is one that is meticulously curated by event organizers and is viewed, and participated in, by attendees remotely with no brick-and-mortar or conventionally planned events

1.3.3 Hybrid Meeting

When it is feasible and responsible from an economic and public health perspective, conferences may choose to move to a hybrid model. A recurring theme in the literature is the idea of a local ‘hub’, or ‘front porches’ for virtual conferences. This model operates as many small conventional sub-conferences locally, and true virtual conferencing from a home or office setting, with all participants viewing and interacting with the same virtual content. Local hubs allow for strong local social interactions and idea sharing while limiting air travel. This model allows for the meeting organizers to have a presence in the local areas that the meeting is being broadcasted from. Furthermore, it allows conference organizers to maintain a level of quality assurance. Lastly, this model allows participants to commit to physically distancing themselves from their daily routine to actively and wholeheartedly participate in the conference proceedings, with some added positive economic externalities implicated therein.

1.3.4 Asynchronous Meeting

Asynchronous meeting structure is a legitimate fallback option for meetings without the social resources, capital, or time to transition to a virtual layout.

Medical and academic associations may choose to forgo synchronous meetings altogether and focus only on their asynchronous published papers, pre-recorded videos, and provide interaction through asynchronous question and answer segments. This model eliminates an essential element of a conference: the real-time social interaction among participants. Eliminating this component or replacing it with interactions with long temporal intervals is essentially, falling back to a publications-only model.

2.0 Plan

The planning phase of a virtual meetings is the most cumbersome of the meeting cycle. This phase represents both the large and small decisions about the shape and format of the virtual meeting that is to be executed. This planning consists of formulating a comprehensive registration and scheduling process, deciding the types of virtual events that will be held within the conference, the technological characteristics of the event, and how the event will be monetized and marketed.

2.1 Registration

It is strongly recommended that virtual meetings have individualized robust registration processes for each participant to ensure proper content and technological planning, and monetization of the event.

Consider participant hardware registration where possible to provide cybersecurity

Robust data collection during the registration process of virtual meetings is integral to the success of the conference. Firstly, the individualized nature of the registration allows accurate collection of individual participant data, ranging from time zone data to preferences for session content and delivery. Additionally, a robust registration process allows organizers to protect the product that they are delivering; with participant specific registration the monetization of the conference is built in. The registration process should include asking participants to register their hardware (the device from which they will view and interact with the conference). This can be done any time before the conference begins and allows organizers to protect against disruption and hacking.

2.2 Scheduling

2.2.1 Duration and Density of the meeting

When converting a meeting to virtual from a conventional format, the duration and density should remain consistent, while being informed by the defined target audience and registration data

The duration of a conference would be defined as the number of days or weeks that the conference organizers would choose to continue to release novel media, whether it be pre-recorded or live. Conversely, the density of the meeting refers to the concentration of the release of the media within the duration of the meeting. Virtual meetings do not have the benefit of physical displacement from participants' 'regular' routine, thus synchronous virtual events must encourage attendees to prioritize and value participation and discourage the asynchronous viewing of media. It is generally recommended that conferences maintain their structure when transitioning to the virtual environment, while adjusting based on data gathered from participants. In subsequent conferences this structure should be tailored based on post-hoc evaluations and data analysis.

2.2.2 Time Zone

Timing of live plenary sessions of the meeting should be based on registration data to maximize viewership and engagement.

Mindful scheduling of breaks around mealtimes in various largely populated times zones is key to maintaining engagement.

Planning of a virtual meeting in a singular or multiple specific times zones is one of the great challenges that will face organizers. The choice of time zone(s) to operate within should be a committee level decision and be heavily based on pre-planning and registration data collection; this will inform organizers of locations and needs of participants. If the meeting is choosing to use a hybrid model, the time zone of choice should be the same as the 'central' hub. Organizers should choose to define the time zone of the meeting, but strategically plan the timing of plenary sessions to maximize viewership and engagement. Plenary sessions could be viewed asynchronously, as a group, by those well outside of the main operating time zone of the meeting, with virtual interactions facilitated by organizers to increase engagement. The resultant variability of accessibility that time zone selection imparts on those well outside of the time zone can be reflected in the pricing scheme of the meeting.

2.2.3 Scheduling

Web-based, modifiable and frequently updated meeting scheduling should always be used

Development of a user-friendly online schedule for the meeting is integral to the success and participant satisfaction of a meeting. Online and application-based schedules are frequently used by large conventional conference organizers. An online schedule that allows organizers to frequently update and curate the schedule with links and event material permits on-the-fly flexibility. This schedule will also provide multiple avenues to remind attendees of conference events – via email, calendar applications, text messages etc. With the possibility of virtual disruptions that are different than those of the conventional conference, having a quality scheduling application will allow participants to easily navigate the breadth of conference events.

2.3 Speakers

2.3.1 Speaker selection

Use financial capital to attract the best speakers for each event, as the cost will be at a discount relative to an in-person speech

Given the decreased operating costs of virtual conferences as outlined above, and the decreased time, travel and opportunity costs burdening the speakers, it is ideal to use that financial capital to attract the 'best' speakers on the topic of the conference.

2.3.2 Speaker support

A robust and comprehensive speaker support document is recommended to aid in adaptation of speakers' topics and talks into high yield virtually deliverable speeches.

Focus on speaker and panelist preparedness, from a delivery and technological perspective, leading up to the meeting.

Ensure speakers have access to high quality hardware, software and internet connectivity for optimal virtual content production

The support of speakers and moderators is important to maintain a level of quality of virtual content produced and provided to attendees. Provide speakers with educational tools to transfer their existing talks to a virtual format. Speakers will be limited, to a degree, in how they can interact with their virtual audience, thus, providing ample time and resources for preparation is important. Organizers should also make presenters aware, and help with the acquisition, of hardware, software and connectivity requirements.

A preparation document should include instructions for conduct during content delivery such as the importance of a professional setting to give talks – quiet, undisturbed, simple background, with good technology on hand, having the camera eye level, and focusing on the camera. The preparation document should also outline conduct expected of speakers and moderators in responding to attendees and participants of the given conference event. When resources are available, it is important to offer help to presenters with content creation and offering them ‘practice’ runs, to test their talks. Practice runs could also serve as a video of the presentation as a backup should there be any technical problems in the live session. Further, some of this pre-recorded footage could be used, with permission of the speaker, as a marketing tool. A sample speaker preparation document is provided in Appendix 3.

2.4 Attendees

Like organizers and speakers, attendees of healthcare and academic meetings are generally unfamiliar with virtual meetings. It is vital that conference organizers provide attendees with enough resources in advance of the conference to ensure that participants can access the desired events and that expectations are managed.

2.4.1 Meeting Requirements

Explicit hardware, software and connectivity recommendations for attendees should be delineated early in the planning and registration process

To maintain the quality of participant experience, recommendations or requirements of hardware, software and internet connectivity should be made. While requirements would keep the quality of all content high, especially small group sessions that involve attendees virtually networking with video and audio components, there can accessibility issues with strict technical requirements. Recommended technological setup for attendees would be a private computer with up-to-date operating systems and video and microphone capabilities. Access to the software platform utilized by the conference should be provided.

2.4.2 Attendee Manual

A concise attendee deliverable is recommended to set expectations and norms of virtual participation

It is valuable for attendees to have a reference document for the expectations and code of conduct in the virtual conference setting. These expectations can range from participation levels for each room/event at the conference, to “how to” instructions for the various software utilized in the conference events. Furthermore, this can be an avenue for organizers to provide attendees with pre-conference content materials for review, to add to the value and education of the virtual events. A sample attendee recommendations document is provided in Appendix 4.

2.5 Types of events within meetings

Given documented engagement issues within virtual conferencing circumstances, it is recommended that virtual meetings bias towards small group sessions of no more than 30 people.

Mix of live and recorded content can be utilized to allow for scheduling, and decreased facilitator and organizer burden.

The past experience of meeting organizers should inform the choice of events included in their meetings; below are recommended session types and their considerations.

2.5.1 Plenary sessions

A broadcast video communication channel that reaches a large audience is utilized, with supplemental concurrent or post-hoc platforms to support topical discussion among participants

All participants are encouraged to attend plenary sessions that can contain administrative announcements, keynote addresses, and panels. Plenary sessions are typically not run in parallel to other sessions, and they should be of interest to all participants based on the themes of the conference itself. The curation and participation in these sessions is integral in delivering the major themes of the conference. The communication is generally one sided in the sense that only a small group of people need to interact virtually. A broadcast video communication channel that reaches a large audience is then utilized. Supplemental concurrent, or post-plenary session virtual communication platforms should be planned ahead of time to support topical discussion among participants without interfering with the general broadcasted session.

2.5.2 Paper/Breakout sessions

Paper or break-out sessions, like at most large conferences, run in parallel and can be grouped based on topic or theme. These can be run as pre-recorded lectures with discussions after with the keynote speaker, or as synchronous live events that are hosted and moderated. These events are typically smaller, and hosts can involve participants at different intervals in question and answer segments or otherwise. Meticulous scheduling of these sessions, for ease of navigation and access is a key to conference success. Presenter preparedness is also a key to success, as they must have a clear understanding of how and what content to prepare for their session, and what technologies they need to master to lead the session to properly involve participants.

2.5.3 Workshops/Small group sessions

For each workshop/small group session at the conference, have explicit norms that facilitators and attendees follow. Small group sessions and workshops should be limited in size. Workshops and small group sessions are intended to target and facilitate even smaller and more intense group discussions that typically involve a presenter interacting with just a handful of participants. The opportunity to interact with workshop speakers and presenters is an asset of face-to-face conventional conferences that should be facilitated through virtual means. Small group sessions and workshops should be limited in size to allow interaction with the key presenter, dynamic group conversation, social interaction and networking. Roles in small groups sessions should be clearly defined; a host, a moderator and attendees are all involved.

2.5.4 Poster and Demo Sessions

Poster and demo sessions offer the conference organizers both challenges and freedom for creativity. Unlike physical conferences, where poster and demo sessions are synchronous, a virtual conference allows the possibility for asynchronous poster sessions; asynchronous poster chats can be accompanied by authors actually presenting their poster, as well as discussion about their topic. Conversely, organizers can offer poster presenters synchronous, small group presentation time slots where they can interact with conference participants through screen sharing, virtual white boards or chat functions. Technological advances also offer organizers the potential to simulate a physical poster environment in the virtual projection of the conference; where attendees can roam posters and virtually 'jump' into live, ongoing poster presentations.

2.5.5 Social events

Allocate time and resources for both random and intended virtual social networking events throughout the conference to maintain participant satisfaction. Program for dedicated mentorship sessions.

Social events are arguably the most integral parts of providing a high-fidelity virtual conference that comes close to rivaling the in-person type. Participants value social networks developed from conferences in the academic and medical fields. (19) The importance of providing and fostering social networking in the literature cannot be understated. There are almost infinite number of ways to incorporate and supervise social events in a virtual conference setting. Through registration data, research and practice interests can be utilized to facilitate social interactions between conference participants with shared values. Conversely, random social interaction can be facilitated between participants. While not evidence-based, there is discussion in the lay-literature about the disinhibition that is brought on by the virtual setting; the connections and social networks that are possible through virtual conferencing are potentially greater and different than those that would be brought about by a face-to-face conference.

Like social events, mentorship relationships are a valued outcome of live conferences. Conference organizers can work with tech partners to develop means of matching student/apprentice conference goers with like-minded senior association members to facilitate networking of mentorship relationships.

2.6 Technological

2.6.1 Type of technology

Synchronous video conferencing is most effective if augmented by other forms of virtual collaboration, such as data and document sharing or real-time chat functions.

As previously mentioned, software is becoming increasingly powerful and user-friendly. It is outside of the scope of this guideline document to focus on any software in particular, however there is a summary document in Appendix 5. Furthermore, the ACM reference document has been actively compiling a formal list that is crowd sourced linked [here](#).⁽³⁾

2.6.2 Testing technology and connectivity

Test technology and connectivity of speakers, moderators and facilitators multiple times in advance

One of the most frequent themes that arose from our review was the emphasis on all forms of technology (hardware, software and connectivity) being tested early and often. Organizers of virtual conferences must ensure that the technology and connectivity is up to standards, with the highest possible video and audio qualities, so that there is a level of quality of product delivered to participants.

2.6.3 Technological Support

Technological support programme must be robust and scaled based on number of participants

Planning a robust technological customer support program in advance of the conference will pay dividends in quality of content and quality of attendee experience. This technological support service should be developed for both attendees and speakers/moderators of the conference.

2.6.4 AV production

Production budgeting should be spent first on events with the highest participant visibility.

Audio visual production of virtual conferences, especially of the high visibility plenary sessions, can be quite burdensome. It can consist of starting and stopping the live sessions, making sure the right speakers are in the right virtual spaces before their sessions, testing their microphones and presentations before going live, switching speakers during the sessions and further. High levels of AV production will increase the cost of the conference but will provide quality and longevity of content produced with recordings, if the sessions are recorded and posted for asynchronous viewing.

2.7 Monetization

Monetization of a virtual meeting should be a deliberate and methodical process by meeting organizers informed by previous experience with target audience.

Virtual meetings offer many of the same opportunities to earn revenue as conventional ones – attendance fees, sponsorships, and so on. When it comes to a virtual meeting, organizers may choose to charge people to access the synchronous and asynchronous meeting media. This payment model likely ensures that the relevant people show up and actually participate, as they have attached a monetary value to their virtual experience. Alternatively, organizers can choose to make admission free to potentially draw a bigger crowd for in-event upselling, pay-per-view strategies and information generation. The monetization structure of the conference can have drastic effects on volume, quality and accessibility of participation, thus this process should be deliberate and methodical by conference organizers.

2.7.1 Industry Support

Industry sponsorship and participation should fall in line with pre-set organizational guidelines, and follow precedent when applicable.

Conference organizers, when planning their budget, must consider the possibility and role of industrial sponsorship. Like in many physical meetings, industry participation can off-load budgetary constraints to third party groups in the realm of virtual conferences. Fortunately, many of the motivations and benefits of sponsorship from industry carry over well to the virtual setting—with the added benefit of accurate quantification of the number and types of impressions made throughout the conference. In the setting of academic and medical conferences, it is important to consider conflict of interest and industry declarations from the outset of the conference organization.

2.8 Marketing

Frequent marketing, through multiple avenues, targeted at the previously defined audience is imperative.

Make it accessible and easy for speaker and participants to ‘market’ their participation in the meeting.

Marketing is an important aspect of any conference, whether virtual or conventional. Utilizing as many member association email directories as possible, as well as industry contacts to market the conference to the target audience will stand to increase participation. Various incentivized pricing schemes for early registration and so forth can be utilized as well. It is equally important to harness social media (the 21st century’s word-of-mouth) to allow a multiplicative effect of speakers and participants marketing their own participation in the conference. Social media integration is imperative at every stage of the conference; allowing marketing of participation in the lead-up, the meeting itself, and the implementation of the learnt content after the fact. Small lead-up, or teaser events, can be marketed and executed to create further ‘buzz’ about the true conference.

3.0 Accomplish Meeting Goals

Accomplishing meeting goals through execution and delivery of the virtual meeting is the stage of the meeting cycle where the planning comes to fruition. The planning stage will lay the groundwork for the execution, but there are a great number of considerations about how the sessions should be executed, and these are covered in this section of the best practice document.

3.1 Session Roles

Designate a host and moderator for every session planned to provide consistency and timing for meeting sessions.

There are many different types of conference sessions that can be offered virtually (some of them outlined above), and each will have their own considerations and necessities for proper execution, in terms of human and technological capital.

3.1.1 Hosting Sessions

Organizers of the conference are generally responsible for ‘hosting’ the plenary and large group sessions. Hosting, in this context, means initiating and then managing the live, synchronous sessions. The organizers are officially the ‘owners’ or ‘broadcasters’ of the sessions, however it is not necessary for them to be in the same physical location as those leading the live sessions for the participants, and it is not necessary for the participants to know they are there. Hosts are responsible for maintaining the timing and troubleshooting during live sessions. As well, in larger sessions, hosts are responsible for muting and unmuting participants for questions and comments. Lastly, should there be audio or video disruptions happen during the live session, the host can mute or disengage the camera of the disruptive participant.

3.1.2 Moderation

Unlike hosts, moderators do not have technological responsibilities during the session. These participants of the live sessions, like in live conferences, are responsible for driving the live session along a planned theme and discussion. Moderators should generally be briefed and understand how hosts can involve audience members should they choose to do so in the course of their moderated session. A sample moderator preparation document is provided in Appendix 6.

3.2 Fostering Engagement

Generating and maintaining engagement at any type of conference can be a challenge, but the virtual world offers conference organizers a new set of challenges. There is a great deal of lay literature written about engagement of business employees in virtual meetings that has been published since the COVID-19 crisis. Much of this content is in the context of business or organizational meetings and makes recommendations for keeping meetings under approximately 30 people in size to maintain maximal engagement. We cannot make recommendations about how each conference, or session within said conference, should drive engagement in small group events, however a list of techniques is below.

- In small group sessions, encourage video by attendees to increase interactions
- Allow for introductions and small talk at the beginning of the session

- Set agenda and display an agenda
- Set time limits on small group sessions
- For each room/event have explicit expectations of facilitators and attendees
- Utilize technology to build in polls, surveys and trivia showing results in real time
- Encourage utilization of interactive technologies such as virtual whiteboards
- Work humour into the content of the session
- When in hybrid meetings, assign a moderator to ensure bridge between multiple virtual groups
- Live feedback discussion at the conclusion of small groups

3.3 Disruption Preparedness

3.3.1 Technological Disruptions

Pre-recorded substitution sessions should be scheduled for each large group event as a backup.

There are any number of different technological disruptions that can occur during virtual conferences. While an in-depth tech discussion is outside of the scope of this guidelines document, it is wise for conference organizers to schedule pre-recorded contingency events of presentations should there be disruptions.

3.3.2 Other Disruptions

Moderators and hosts must have clear guidelines on how to deal with in event disruptions and which technology features to employ.

To limit disruption and hacking of small group events green rooms, random access codes, and administrator monitoring of attendees can be used.

When organizing and executing both virtual and face-to-face conferences, there is the risk of any number of disruptions. In the virtual setting, some of these deliberate disruptions can be handled effectively. Zero tolerance should be had for deliberate attempts at disruption, trolling and other attacks. Conference organizers should arm hosts and moderators with the means to judiciously utilize platform features such as “Mute all”, or the ability to block a participant.

3.4 Post-event Deliverables

Speakers and content creators at the meeting should be given the option to provide conference-goers with take away materials.

Obtain consent from content creators prior to recording and making those recordings available after the meeting.

A deliberate predetermined strategy should be used to guide access to post-conference materials.

At the end of a conference, papers and videos may be archived and made available on a suitable technological platform. Organizers must make the deliberate decision what content they make public given that all of the content in a virtual conference can be recorded and

archived. Further, organizers should be deliberate in how they choose who gets access to the content and through what means.

4.0 Response and Engagement

The response and engagement phase of the conference cycle is important in ensuring the continued growth, development and continuous improvement of the virtual conference for the next cycle.

4.1 Response

Consent from participants and explicit signals should be provided when data is being gathered.

*Data gathering during the meeting should be as broad and thorough as possible
Post-session and post-meeting evaluations by all participants should be concise and not over-burdensome.*

One of the upsides of a virtual format is the robust data that can be gathered automatically through the platforms used. Data can be gathered from the registration process and from the marketing process with utilization of the number of social media platforms. The actual participation statistics in the execution of the conference can be gathered; the turnout, unique visits, and engagement can all be reported. Furthermore, the uptake, satisfaction and knowledge translation post-conference can be gathered through contacting and surveying the attendees. Organizers should however be aware of the concept of ‘evaluation burn-out’. Too many evaluations during and after the conference can fatigue attendees and devalue the results of the evaluations, as less time and effort are taken to provide valuable responses.

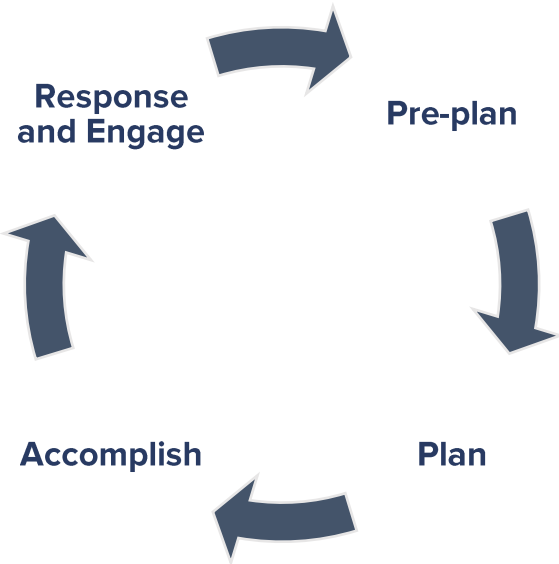
4.2 Engagement (implementation) strategies

Data gathering, reporting, analysis and implementation should all be transparent to all stakeholders

Consent for data gathering, and possible utilization in research, should be obtained from the outset with ethics approval if necessary

Engagement of the conference goer, and implementation of changes to the conference structure or function to address identified areas of improvement from the data gathering through the conference cycling will be tailored to the specific set of circumstances of the conference at hand. It is recommended that the entire process of data acquisition to implementation be transparent to all stakeholders in the conference, including attendees. Not only is the transparency of electronic data acquisition ethical, it may be a legal issue in some settings and thus legal consultation may be beneficial.

Figures
Figure 1



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APPENDIX 1



Given the recent systematic review on the topic by Spilker *et al.* from the education realm of peer-reviewed research, we heavily utilized the referenced documents in therein.(4) The systematic review did not review MEDLINE or Embase databases therefore these two databases were scoped for relevant, non-duplicate articles. Additional articles reviewed are referenced here.(9,10,19–23,11–18)

For lay articles, Google was searched on April 11, 2020. Boolean operators were used, and three separate searches were carried out which are listed below. Results were reviewed for the first 5 pages of each search strategy, with search settings displaying 10 results per page with location set as Canada. Advertisements and reviews of conferencing technologies were excluded from the results of the search. No click throughs were undertaken, thus only the first web page encountered was indexed. Articles were indexed for themes that contributed to the development and verbalisation of the recommendations herein. References of the articles were sought and indexed when possible.

1. (Virtual OR Online) AND (conference)
2. (Virtual OR Online) AND (meeting)
3. (Virtual OR Online) AND (conferencing)

APPENDIX 2

PrePARE Virtual Meetings Best Practice Checklist



Pre-Planning

<input type="checkbox"/> Define the organizing committee ■ <input type="checkbox"/> Multiple stakeholder groups represented. <input type="checkbox"/> Assign a committee member as an Accessibility Chair <input type="checkbox"/> Define target audience ◆	<input type="checkbox"/> Define the type of meeting ◆ <input type="checkbox"/> Conventional meeting <input type="checkbox"/> Full virtual meeting <input type="checkbox"/> Hybrid meeting <input type="checkbox"/> Asynchronous meeting
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Planning

<i>Registration recommendations</i> <input type="checkbox"/> Individualized robust registration processes for each participant ■ <input type="checkbox"/> Participant hardware registration ◆	<i>Scheduling recommendations</i> <input type="checkbox"/> Define duration of meeting ◆ <input type="checkbox"/> Define density of meeting ◆ <input type="checkbox"/> Define time zone of meeting ■ <input type="checkbox"/> Web-based, modifiable and frequently updated meeting schedule ■
<i>Speaker recommendations</i> <input type="checkbox"/> Attract best speakers with financial capital ◆ <input type="checkbox"/> Speaker support/instruction document ■ <input type="checkbox"/> Speaker hardware, software, connectivity support ■	<i>Attendee recommendations</i> <input type="checkbox"/> Attendee support/instruction document ■ <input type="checkbox"/> Explicit hardware, software and connectivity recommendations ◆
<i>Event type recommendations</i> <input type="checkbox"/> Allocate time and resources for virtual social networking ◆ <input type="checkbox"/> Program for dedicated mentorship sessions. ◆ <input type="checkbox"/> Bias towards small group sessions of no more than 30 people ◆	<i>Technology recommendations</i> <input type="checkbox"/> Augment video meeting with other forms of virtual collaboration ◆ <input type="checkbox"/> Test technology and connectivity of speakers, moderators and facilitators multiple times in advance ■ <input type="checkbox"/> Technological support programme in place ■
<i>Monetization recommendations</i> <input type="checkbox"/> Monetization process in place ◆ <input type="checkbox"/> Industry sponsorship and participation follows organizational precedent ◆	<i>Marketing recommendations</i> <input type="checkbox"/> Frequent/recurring marketing plan in place ◆ <input type="checkbox"/> Using social media <input type="checkbox"/> Accessible for speaker and participants to 'market' their participation in the meeting ◆

Accomplish

<p><i>Event recommendations</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Designate a host and moderator for every session ■ <input type="checkbox"/> Foster engagement in small group sessions ◆ 	<p><i>Disruption Preparedness recommendations</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Pre-recorded substitution sessions scheduled for each large group ■ <input type="checkbox"/> Moderators and hosts have clear disruption management guidelines ◆ <input type="checkbox"/> Strategies employed to minimize disruption and hacking of small group sessions ◆
<p><i>Post-event Deliverables</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Option given to speakers and content creators to provide take away materials ◆ <input type="checkbox"/> Obtain consent from content creators prior to recording and making those recordings available ■ 	

Response and Engage

<p><i>Response Recommendations</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Consent process in place for participants when participation data is being gathered ■ <input type="checkbox"/> Broad data gathering procedure in place ◆ <input type="checkbox"/> Post-meeting evaluations prepared and concise ◆ 	<p><i>Engage Recommendations</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Transparent implementation of data and evaluations of participant ■
---	---

Legend: ■ = Peer review and lay literature recommendation
 ◆ = lay literature recommendation
 ■◆ = Strong recommendation,
 ■◆ = weak recommendation

APPENDIX 3

Top Tips - Virtual Speaker Guide



1. Technology Check

- Trial your presentation in advance to avoid technical difficulties. Some programs require you to grant access before screen sharing, or audiovisual access
- Consider a professional microphone or headset to improve audio quality and reduce background noise. Headphones with a built-in microphone can be a low-cost option
- Ensure sound internet connection

2. Lights, camera, action

- The appropriate lighting is important. Dimly lit rooms can be dull and unprofessional looking. Too much sunlight can cast shadows.
- Ensure camera is at eye level to prevent awkward positioning

3. Professional Background and Set Up

- Neutral colours and avoid clutter to keep the focus on you
- Many platforms allow for artificial green screens to hide your background
- Ensure device is set up on a flat surface to avoid camera movement while recording

4. Technical Startup

- Open up the session 5 minutes early, allowing people to work out technical difficulties
- Promotes and replicates the normal pre-meeting chatter

5. Utilize the chat function to share information

- Can be used as a discussion platform
- Post appendix documents - articles or documents you refer to can be shared here

6. Use the camera

- Look into the camera and not the screen
- Allows for “eye contact” with viewers, making a stronger connection and simulates in person interaction
- Ensure your head and the top of your shoulders dominate the screen

7. Increase engagement through interaction

- Interactive polls or quizzes
 - The best way to increase engagement and retention of the information being presented
 - A benefit of virtual meetings or presentations is that names are readily available
- “5-minute rule” - Never go longer than 5 minutes in a presentation without engaging the audience

8. Stand up

- If possible, standing at eye level with your computer helps to provide energy
- If you have sit, avoid slouching as it sends a signal that you are disconnected

9. Cameras on

- Having all meeting participants turn their cameras on increases engagement, allowing for a deeper connection and increased engagement

10. Avoid a messy desktop

- If sharing a desktop, ensure that all confidential/personal information is closed
- Close other programs and create a clean desktop background

APPENDIX 4

Top Tips - Virtual Attendee Guide



- 1. Arrive Early**
 - Allow time to iron out any technical difficulties that may arise
 - Provides an opportunity to network with other participants
- 2. Be an active participant**
 - Take opportunities to pose or answer questions and participate in the chat function when appropriate
- 3. Act like you are really there**
 - Dress professionally
 - Be aware of your surroundings; prevent clutter or distractions (ie kids, pets)
- 4. Keep your video on**
 - Increases engagement and accountability
- 5. Reduce your audio footprint**
 - Utilize an external microphone or headphones with a microphone to reduce echo and external noise
 - Mute audio when not speaking to reduce background noise
- 6. Remove Distractions**
 - Mute notifications from emails, texts, and social media

APPENDIX 5



Pertinent summary of tables from open sourced *Tools for virtual conferences* online document prepared for the ACM Presidential Task Force on What Conferences Can Do to Replace Face to Face Meetings, “Virtual Conferences, A Guide to Best Practices.” There are three main attributes of interest of a technology for conference organizers to consider: low cost (\$), participant engagement techniques (☺), conference size and logistics (👤). These attributes are summarized in the left hand column of the table.

Video Conferencing Services

Name	Max users	Cost ¹	Media support	Recording and archiving	Pros	Cons
Zoom Meeting \$, 👤	100, 300, or, 500 viewers for the three 'tiers'	Free Paid version scalable (\$20/\$27/month/host)	Screen sharing Whiteboards Multiple participants can share their screens simultaneously and co-annotate	Free - No Premium - Yes Autogenerated searchable transcripts	Fully featured and reliable. Free version supports HD voice and video Up to 50 'breakout rooms' where subsets of participants can meet, useful for parallel sessions. Support for roles. Personal rooms, polling. Phone dial-in supported.	No support for anonymous participation. Free version is time limited to 40 minutes. Has crypto issues Be wary of unwanted intrusion i.e. “Zoombombing”
Webex ☺	100	Free Paid version (\$17.95/\$23.95/\$35.95/month/host)	Interactive whiteboards, message threads, can share web-based multimedia content	In paid version	Free version supports HD voice and video Active speaker view, Support for breakout rooms, 'personal room' that has its own ID Polling and Q&A possible Support for roles. Phone dial-in supported.	No support for anonymous participation.
GoToMeeting ☺	150	\$16.25/\$21.67/month	Screen sharing with drawing tools	Yes Supports audio transcripts	No codes or pins; Integrated with Google calendar, Slack, Siri, Office 365, Support for roles Phone dial-in supported	
Uberconference	50 free	Free	Screen sharing	Yes	Browser based. Support for anonymous participation.	Single conference room, No chat function

\$	100 for paid	Paid version (\$15/month)		Complete searchable transcripts can be autogenerated	Support for roles Phone dial-in support	Time limited to 5 hours.
Blujeans Meetings \$	50 viewers	\$9.99/\$13.99/host/month	Spreadsheets, videos, presentations	5 hours/ meeting Autogenerated transcripts	Crowd-sourced commentary on transcripts Support for action items Support for roles Phone dial-in supported	No support for anonymous participation.
GlobalMeet \$	125 viewers	Free Paid version (\$16/\$32/user/month)	Screen sharing	Yes	Integrated into Office365 Phone dial-in supported	No chat function Not clear if there is support for anonymous participation Not clear if there is support for roles
Google meet 🔒	Free: <100 Paid: < 100,000 viewers	Free Paid version is in G Suite (\$7.80/\$15.60/\$34/user/month)	Presentations	Yes (if paid)	Integrated with Google Calendar Phone dial-in supported	Not available standalone Not clear if there is support for anonymous participation Not clear if there is support for roles
Jitsi Meet \$, 🔒	Unlimited viewers	Free	Screen sharing, text chat, streaming to YouTube Live, Shared text document, play YouTube video	Yes	Has high video and audio quality. Support for anonymous participation. Support for roles. Phone dial-in supported	In the default configuration, video is not mixed; instead every participant gets all the audio and video streams (i.e. not scalable)
Skype \$	50	Free	Can upload arbitrary files	Yes	Screen sharing with HD quality Smart messaging. Phone dial-in supported	Participants need Skype ID (no support for anonymous participation) No support for roles.
Microsoft Teams 🔒, 😊	Unlimited viewers	Free/ Paid version for institutions (\$5/user/month)	Spreadsheets, videos, presentations, shared whiteboard	Not in free version	Free; Unlimited chat, 2 GB file storage per person Real-time collaboration for Office365 apps. Support for roles. Phone dial-in supported.	Complex. Mainly supports calls with others in the same organization (guests need to be explicitly given permission to join, and there are limits on the number of guests allowed per user). No support for anonymous participation.

¹Costs expressed in USD

Livestreaming and webinar services

Name	Max users	Cost ¹	Media support	Recording and archiving	Pros	Cons
Twitch \$, ☺	Unlimited viewers	Free Prime for \$7.99/month	Whiteboard	14 days Supports YouTube exports	Free Support for roles Supports shared whiteboard	All anonymous Cannot control who attends (i.e. the audience) Chat requires moderation if used
Adobe Connect Webinar 🔒, ☺	100, 500, or, 1000 for the three 'tiers'	\$130, \$470, \$580 per month subscription for the three tiers'	Screen sharing, whiteboards. Smart Q&A, multiple poll types, quick status options, ice breakers, timers, registration management templates	Yes	Persistent rooms can be setup days or weeks ahead and re-use content from previous sessions (useful to repeat a session). Engagement dashboard for insight into participation and level of interest. Powerful host controls. Up to 20 'breakout rooms' where subsets of participants can meet. Phone dial-in supported 'Presenter Only Area' and 'Prepare Mode' that enable presenters to chat.	No free version User interface is somewhat complex No support for anonymous participation
Zoom Webinar 🔒, ☺	Up to 100 live panelists, up to 10,000 viewers	\$20/month per host plus \$53 annually for 1 host per 100 participants/\$186 per 500/\$452 per 1000/\$1317 per 3000/\$3312 per 5000/\$8632 per 10000	Mute/unmute panelists, and promote attendee to panelist Facebook, PayPal and YouTube integrations, polling, reporting, analytics	Recording and auto-generated transcripts.	Support for registrations Phone dial-in supported Roles supported Multiple third-party integrations	Not free
Crowdcast 🔒, ☺	30,000 viewers	Monthly or annual Scaled based on number of participants and duration (\$20/mo for 5 host with 50+ attendees, \$34/mo for 10 host with 100+ attendees, \$62/mo for 20 host with 250+ attendees, \$139/mo for 40 host with 1000+ attendees)	Screen sharing, Q&A, polls, chat built in; can invite participants to join livecast; HD quality; screen sharing; can integrate with payment systems, and with registrations	Yes	Large number of viewers High adaptability with integrated technologies	Not free. 6 hour time limit for business membership
Intrado 🔒, ☺	200,000+ viewers concurrently	Quote based pricing	Documents, spreadsheets, presentations, applications can be shared Tailorable technological integrations	Yes	A high-end corporate event solution with possibility of tailored technology integration	High cost
YouTube Live \$	Unlimited viewers	Free	None	Yes	Free	Advertisements Only available to users who have more than 1,000 subscribers (followers) Single direction communication Lacks integration
Vimeo live events \$	Unlimited viewers	\$55/\$95month	Q&A, graphics, and polling capabilities	Yes	Unlimited streaming to vimeo player on all platforms. Streaming to all social media platforms. Tools to manage stream content. Password protect stream.	Single direction communication

¹Costs expressed in USD

Technology Infographic



Video Conferencing Services

Name
Zoom Meeting \$, 🗂
Webex 😊
GoToMeeting 😊
Uberconference \$
Blubeans Meetings \$
GlobalMeet \$
Google meet 🗂
Jitsi Meet \$, 🗂
Skype \$
Microsoft Teams 🗂, 😊

Livecasting and webinar services

Name
Twitch \$, 😊
Adobe Connect Webinar 🗂, 😊
Zoom Webinar 🗂, 😊
Crowdcast 🗂, 😊
Intrado 🗂, 😊
YouTube Live \$
Vimeo live events \$

Legend

low cost (\$)

participant engagement techniques (😊)

conference size and logistics (🗂)

APPENDIX 6

Top Tips - Moderator Guide



1. Prepare thoroughly

- Engage the speaker(s) well in advance, and regularly leading up to the meeting
- Offer opportunities for them to do partial or full practice runs of their presentation
 - i. If full practice runs performed, ask for permission to record this for use in case of a technical failure on the day of the event
- Try to gain a basic understanding of the topic and the audience expected (number, demographics, etc.)

2. Establish routes of communication clearly

- Be explicit but flexible about how you will communicate with the speaker(s) and the audience
- Some speaker(s) will prefer to field all questions themselves, while others may prefer to have them triaged by the moderator first

3. Stay on track

- Ensure the speaker(s) and the audience understand how long each session is expected to take, and whether this includes built-in time for discussions/questions or if that time will be added on
- Develop a “warning” system to allow you to alert the speaker(s) if the presentation starts to run too long - ideally this should be done throughout the session rather than just near the end
 - i. It may be useful to set flexible targets - e.g. aim to have completed 20 slides after 30 minutes

4. Manage dysfunctional behaviour

- Identify dysfunctional behaviour (disrespectful, unengaged, distracting, etc.)
- Approach the individual(s) privately, respectfully, and empathetically
- Try to understand if there is anything you can do to help improve their experience
- Attempt to reach agreement on the problem
 - i. Do NOT tolerate overtly offensive (i.e. sexist, racist, etc.) behaviour

5. Promote discussion

- Try to come up with your own questions (preferably ahead of time) to ask if audience engagement is slow to start
 - i. If unfamiliar with the subject matter, ask the speaker(s) or a colleague of theirs for help with these questions
- Try to avoid participants dominating the conversation - this can be achieved by directly calling on others to answer questions or for their input
- If incorporating a panel discussion into the presentation it is best to ask direct questions to each panelist individually rather than asking a question to the group- this will avoid panelists talking over one another.

6. Evaluate and improve

- Collect evaluations from both the audience and the speaker(s)
- Keep these brief but direct - collect only information that will help you understand how things went and how to improve