

Online Presentation Workflow



Resources for the Media Arts Community

[Version française](#)

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Introduction

Digital platforms have created new opportunities for media arts presenters to share works with audiences and support artists. This said, organizing online screenings, exhibitions, or events comes with unique technology challenges and requires lots of planning. In some cases, the process may be straightforward. But when many layers of technology are involved, online presentation can become quite the logistical challenge!

The Independent Media Arts Alliance (IMAA) has developed this resource to support media arts presenters across all stages of the online presentation process. We recognize that media arts organizations have different levels of financial, operational capacity and technical knowledge. Likewise, the range of online presentation initiatives involves multiple possible technology solutions, from ready-to-use platforms to custom-built websites and digital tools. With this in mind, this resource is not intended as a ready-made guide for online presentation. Rather, it serves as a map to help media arts presenters navigate the online presentation process.

This resource was developed by researcher Mariane Bourcheix-Laporte in collaboration with James King and a working group of 9 media artists and cultural workers. The working group met several times in the Spring and Summer of 2021 as part of IMAA's **Online Presentation Standards Project**.

This guide should be used with the **IMAA Fee Schedule** and these publications:

- **Intellectual Property and Online Presentation: Guidelines and Resources for the Media Arts Community**
- **Towards Accessible Online Presentation Models: Introduction and Resources for the Media Arts Community**
- **Glossary of Terms: Online Media Arts Presentation Standards**
- **External Resources: Online Media Arts Presentation Standards**

How to use this resource

The **Online Presentation Workflow chart** illustrates the different steps involved in presenting media arts online. Each step includes a list of prompts that outline questions and action items for media arts presenters to consider. These are general guidelines that should be adapted to the needs and realities of each organization and project.

1. WHAT TO CONSIDER THROUGHOUT THE PROCESS?

1.1. What are my organization's resources and priorities?

1.1.1. What are my organization's mandate, values, and commitments?

In making sure that projects align with the organization's mandate, values, and commitments, presenters make decisions that will impact how online projects are presented, including which platforms and formats are used. It's important to consider these questions throughout the process because they influence how resources are allocated. In some cases, projects may need to be scaled down or reconfigured to meet the organization's priorities. Key aspects to consider include:

1.1.1.1. What is our artistic vision and curatorial approach?

Establishing the artistic priorities of a project can help make practical choices and establish back-end technological needs.

Consider the following items:

- **Which presentation mode** is best aligned with our approach? (e.g., synchronous, asynchronous, hybrid)
- **What types of works/events** are we presenting? Are there specific tech requirements (e.g., resolution, interactivity, restricted/unrestricted access)?
- What are our **web navigation and user interface** needs (e.g., curatorial links, text integration, interface customizability)?

1.1.1.2. How will artists be paid?

The [IMAA Fee Schedule](#) establishes minimum fees that media arts presenters should pay artists when presenting their work. Online presentation fees vary depending on the presentation mode (synchronous or asynchronous) and other factors.

Consider the **artists' fees** associated with different presentation choices and ensure that you can meet minimum fee standards.

1.1.1.3. What commitments have we made to increase accessibility?

Aiming towards greater accessibility is an iterative process that should be considered from the beginning and throughout a project's development. Ideally, organizations should engage questions related to accessibility in collaboration with the D/deaf and disability community. Please consult [Towards Accessible Online Presentation Models: Introduction and Resources for the Media Arts Community](#) for more information.

Consider these aspects:

- **Costs** (e.g., accessibility services, D/deaf and disability consultants' services, added features on presentation platform, etc.)

- **Staff time and involvement** (e.g., relationship building with D/deaf and disability community, management of accessibility services, tech support needs)
- **Presentation mode and platform requirements**

Please note that D/deaf and disability communities are not monolithic. The concepts presented in this document are in evolution and may not be used by some individuals or groups. We encourage consultation with the people concerned to validate how they identify and the terms they prefer using. *If you have any questions, would like to make a comment, or have a conversation about this document, please contact us at info@imaa.ca.*

1.1.1.4. Who is our audience? What are its needs?

Defining your audience, its needs, and its level of digital literacy may have an impact on your choice of presentation mode and platform.

- If you anticipate that your audience may be **unfamiliar** with the chosen presentation mode or platform, consider producing “how-to” guides or videos and having a dedicated support person or phone line.
- If your audience is in **rural or remote regions**, they may not have access to high-speed Internet or may have Internet access through cellular data. Consider providing low-resolution versions of works on low bandwidth platforms (e.g., Facebook Live vs. Zoom).

1.1.2. What is my organization’s capacity?

It’s important to assess your organization’s capacity to undertake an online presentation project at the beginning, and to reassess it along the way. If your organization is new to online presentation (or to a specific type of online presentation), making realistic assessments and planning for troubleshooting at different stages will prevent many headaches!

1.1.2.1. What's our budget?

Depending on projects, online presentation can be expensive, especially if initial equipment investments, “pro” subscriptions to cloud services, or custom digital solutions are required. Costs associated with accessibility services, tech support, and artists’ fees are also important to consider and may influence the scope of a project.

Establish priority areas in your budget based on your organization’s mandate, values, commitments, and technical needs. Re-evaluate these priorities throughout the process.

1.1.2.2. Who will work on this project? How much time do they have?

Staff time is a precious resource that is easy to underestimate.

At the start of a project, create a “**time budget**” with the number of hours staff will dedicate to the project. Do regular check-ins and readjust the time budget as needed. Depending on your organization’s level of experience with online presentation and the tech-related tasks involved, you may want to overestimate the time needed to complete certain tasks ... chances are this buffer time will come in handy!

1.1.2.3. What technical capacity do we have? What are we missing? What do we need?

Does your organization have access to a resource person(s) that can provide technical support at different stages of the project? Are you properly equipped for the type of programming you want to deliver? Do you have a backup plan in place in case of tech failure?

Do regular **tech audits** to ensure that you have the resources you need and are able to anticipate the resources you may need down the line.

1.2. How transparent is our relationship with artists and distributors?

1.2.1. How will we ensure transparent communication?

1.2.1.1. What information have we communicated to the artists or distributors?

Presenters should not make decisions about how works will be presented without consulting the artists and/or distributors. This is particularly important when making changes to the presentation mode, e.g., from in-person to online or from livestreamed to on-demand. Please consult [Intellectual Property and Online Presentation: Guidelines and Resources for the Media Arts Community](#) for more information.

Include information about **how a work will be presented** in the contractual agreement and discuss all presentation aspects with artists and distributors. Get permission from the artist or distributor before making changes and amend the contract as needed. Please consult [Intellectual Property and Online Presentation: Guidelines and Resources for the Media Arts Community](#) and [Contracts Checklist between media arts presenters and artists or copyright holders for](#) more information.

1.2.1.2. Have we acknowledged the level of risk involved and communicated it?

Online presentation, especially livestreamed events, involves a higher level of risk than in-person presentation. Technical failure can happen at both transmission and receiving ends and the speed and reliability of Internet connections (both the presenter's and the audience's) will impact the quality.

No matter how much planning and testing goes into online presentation, it's important for presenters to acknowledge that there are elements they can't control.

- **Assess the level of risk** and put in place a contingency plan. For example, instead of being livestreamed in high definition, a film could be screened in standard definition if the presenter's Internet speed fails the day of the event. If a glitch happens partway through the screening, a second screening could be organized.
- **Communicate the risks** with the **artists and distributors** and inform them of the contingency plans in place. This information should be included in the signed contractual agreements. Please consult [Contracts Checklist between media arts presenters and artists or copyright holders](#) for more information.
- **Communicate the risk with audience** members in promotional materials. Include information about the contingency plan and/or reimbursement options if applicable.

1.2.1.3. Have we informed artists or distributors about how we will use their files?

It's important for presenters to be transparent about how they will use and transcode the files provided by artists or distributors. Copyright regulation allows presenters to make temporary copies of works for presentation purposes, but other uses may be restricted or may require the copyright holder's consent.

- Discuss **all uses of the work** with the artist/distributor and include this information in the contractual agreement. For more information see [Intellectual Property and Online Presentation](#) and [Contracts Checklist between media arts presenters and artists or copyright holders](#).

1.2.2. What are the artists' and distributors' needs?

1.2.2.1. Are we able to support artists' and distributors' requests?

Artists and distributors may request that the works be presented in certain formats or at a certain resolution. They may also request that access parameters be put in place, such as geoblocking, digital rights management measures (DRMs), audience caps, registration and other audience screening measures, etc.

- Include requests about presentation and access parameters in **initial conversations** with artists or distributors and include all agreed-upon parameters in contractual agreements.
- Make sure that your organization has the **technical and financial capacity** to follow through on these agreements. Accounting for, or anticipating these needs is important when selecting digital platforms and presentation tools.

1.2.2.2. What data will we provide artists and distributors after the event?

Artists and distributors may want data about how the audience engaged with their work (e.g., number of views, the length of views, the geolocation of viewers, etc.).

- **Negotiate the data** that will be shared with artists and distributors early in the process. This information can also be included in contractual agreements.
- Make sure that your organization has the **capacity to follow through** on these agreements. Accounting for or anticipating these needs is important when selecting digital platforms and presentation tools.

1.3. What's our back-end management plan?

1.3.1. Do we have a data and file management plan in place? Is it up to date?

Online presentation involves transferring, storing, and sharing sensitive data and important files, from audience contacts to exclusive audio-visual content. Presenters should take steps to safeguard data and integrate data management protocols into their operations.

- **Establish a clear protocol** for dealing with data and files, from the moment they are received by the organization to the post-event archival or deletion stage.
- **Minimize copies** and keep track of duplicate files and data sets. Don't forget to delete these copies when they are no longer needed.
- **Consider the security and censorship features** of the different cloud and file transfer services you use. Using third-party services with servers located in Canada might be a good option depending on your mandate and the type of work you plan on showing.
- **Do a cybersecurity audit** of your organization and implement best practices. For more information, see [Cyber safe and sound](#).

1.3.2. How will we be tracking our audience engagement data?

Clicks and views are the digital equivalent of “bums in seats.” It’s important to think about tracking audience engagement data for use in grant reporting and organizational planning.

- Make tracking audience data **part of somebody’s tasks** to ensure that this information is systematically compiled, maintained, and analyzed.
- When selecting digital platforms and presentation tools, consider their **built-in data tracking** and reporting features.
- **Analyze** the data and learn from it! In your next events, you can account for your audience’s preferences and habits.

2. WHAT TO CONSIDER IN THE PLANNING PHASE?

2.1. What type of event and what type of work are you presenting?

2.1.1. Limitations and risks of presentation types

The presentation of an event can be either an on-demand system (like video-on-demand, VOD) or a “Live” presentation. Consideration, in this case, is to weigh the value of a communal viewing or listening experience (i.e., “Live”) vs. the event experienced at the leisure of the participant (on-demand). This is critical to consider from the beginning.

2.1.1.1. Livestream

The risk inherent to a live presentation is the possibility of technical failure at either transmission or reception. Such problems can include network bandwidth issues, equipment failure, remote presenter/participant connectivity issues, operator error, etc. A decision to go “live” carries the same concerns and risks as a live television broadcast. However, the excitement of an online, communal viewing or listening can make it a more engaging experience (more akin to an in-person event).

2.1.1.2. On-demand

An on-demand system dramatically increases both control and reliability. However, this comes at the cost of the communal viewing or listening experience. This is of particular concern if audience engagement is important to the screening experience, which is not possible in on-demand. While network stability is still a concern with this option, the risk is significantly reduced. This option trades the “as-it-happens” feeling of the event for a more reliable playback of the material being presented.

2.1.1.3. Presentation Value

Unfortunately, with online presentation, there is no quality control at the viewing or listening stage—i.e., the viewers’ home. With that in mind, an on-demand system does typically provide more options (higher resolution, additional audio streams, etc.) and requires less technical support than livestream presentation. As bandwidth, equipment, and software options become more powerful, this will be less of a concern. Quality is, of course, important for any event, although in a streaming environment, consistency is more important so that the viewers have an uninterrupted experience. It’s important to keep in mind that an on-demand system typically provides a more reliable option.

2.1.2. Choosing the right presentation tools and solutions

2.1.2.1. Features/degree of customizability

Depending on the platform used, the player and/or landing page could be customized. This should be considered when deciding the platform and what equipment or software is used to manage the livestream.

Here are a few points you may want to consider:

- How should your **audience engage** with the material?
- How should you frame the content of your presentation, **aesthetically**?

- With **pre-made film or performance content**, you will likely not want to include distracting graphics so your audience can engage directly with the work.
- However, with a **Q&A or other similar presentation**, you may want to include graphics or other such customization to better align it with your organization. This will have both hardware and/or software considerations.

2.1.2.2. Audience

Consider how your audience will access and engage with the event. Will your audience be passive or active?

If you require audience interaction, you may want to consider the following:

- **What type** of interaction do you need (e.g., a “chat” function, or polling)?
- **When** will you have these features active (or inactive) during the presentation?
- Who will **manage the audience engagement**? This is particularly important to consider when there are technical issues with the livestream or if there are inappropriate comments being made. You may want to set basic rules of engagement at the beginning of your presentation.
- How will the **comments from the audience** be relayed to the participants if needed?

2.1.2.3. Accessibility

We recommend that you consult the document [**Towards Accessible Online Presentation Models: Introduction and Resources for the Media Arts Community**](#) for more information about the subject.

Accessible options such as captions, described video, or ASL video feeds should be considered at the planning stage.

- **Captions** can be either overlaid (i.e., selectable, semitransparent overtop the main video) or “burned in.” While both options meet accessibility needs, a burned-in option can be done at the production/encoding level, reducing cost and technical setup needs.

- **Overlaid captions** can be available automatically with some platforms (e.g., YouTube); however, consideration should be made for the content of the event and whether an automated system or a human captioner should be required. For sensitive or complex topics (particularly with names or terms that are not common), an automated system could introduce unintended misunderstanding due to incorrect captioning.
- With a **human captioner**, consultation can be done in advance to ensure that some sensitive items are properly addressed and managed.
- While somewhat in its infancy, **multiple audio stream options** are becoming available in livestreaming environments which could provide descriptive audio options. As with a cinema presentation, for example, an audio stream for described video could be included as a selectable option for the viewers. Please note, however, that most platforms don't yet support this option, consider your needs carefully when deciding on a platform.

2.1.2.4. Registration and Payment Needs

Determine whether your online event requires an advance registration through a ticketing system (i.e., a “Paywall”) or other formats. Most “turn-key” online platforms do support some form of livestream or on-demand integration. In this case, the presentation would only be available through the ticketing system of your platform.

2.1.2.5. Geoblocking and DRM (Digital Rights Management)

Control measures such as geoblocking and Digital Rights Managements can be applied to both a live and on-demand environment; however, it is typically easier to use with on-demand.

Here are a few things to consider about DRM:

- DRM has **several versions** to determine how restrictive the anti-piracy measures are applied. This is somewhat determined by the devices that are viewing the stream (e.g., Apple uses a different DRM system than Android/Windows), as well as how invisible the system is when in use (e.g., visual vs. forensic watermarking).

- With DRM, consider your **potential audience** and what measures seem reasonable as the costs can increase dramatically to include some of the more restrictive measures. Most online platforms support some version of DRM and, in most cases, are sufficient.
- Consider that DRM is **never fail-proof**. When content is available online, there is always a way to circumvent it. DRM is a means to deter, rather than eliminate, piracy.

Here are a few things to consider about geoblocking:

- Geoblocking has become a popular option with **most online hosting platforms**, but is not necessarily available with the larger players such as YouTube, Facebook, etc.
- Determine **how precise** your geoblocking needs are as most restrict to countries, but some can go further (e.g., by provinces). However, the increased specificity can increase the cost.
- Consider that geoblocking **cannot always protect from a VPN** (Virtual Private Network), which would mask the users' IP address to appear as if they are viewing or listening from a different country or region.

2.2. Budget and timelines

It is critical to determine a workflow and a list of assigned responsibilities at this stage to see if it aligns with your staffing estimates.

2.2.1. List of prompts

When assembling a budget and timeline, consider the following:

- Do you require a **ticketing system** for the audience to access your content?
- Will you require any **live event integration**?
 - If so, **how exactly** would you like this to look like? (be specific)
 - Will you require **remote presenters**?

- How would you like the remote presenters to be **framed or visually** presented, i.e., do you want to avoid it looking like a typical “zoom” call?
- Do you require still images or clip playback?
- Do you require **geoblocking**? How precise?
- Do you require **DRM** or other such protective restrictions? How restrictive?
- Do you require **extensive archiving** of any presentations for later on-demand access?

When you have answered the above questions as best possible, then you can start getting into the details of how to budget for your online presentation!

2.2.2. Technical consultation in the planning stage

While online platforms can certainly provide technical support in how to best execute your event, you should understand that they have an interest in having you commit to their platform regardless of if it’s a best fit for you. You might want to investigate some options by yourself!

Before committing to a platform, make sure you understand your needs in advance. You can ask someone (or an organization with experience) to plot out workflows and timelines. Map out exactly what you would like the viewer to experience as a first step, this will help you figure out what elements are critical or essential (e.g., accessibility features, live integration).

2.2.2.1. Run-of-show

Create a run-of-show (ROS) at this planning stage, and plot out the visual and audio features you want at each step of the event (even if this isn’t precise at this stage).

- This will greatly help determine **how complex** the show could be before you seek technical consultation.

- This will also help determine what you can cut to offset **unnecessary costs**. Be as specific as you can—i.e., imagine what the viewer is experiencing at each part of the event and document it to create the ROS.

2.2.2.2. Audio-visual Providers

Audio-visual providers are organizations or individuals specializing in audio-visual services. If the budget allows, most audio-visual providers are supporting online event production. However, again, use the same caution with the platform in determining if you need their support vs. attempting this on your own. This may be the most reliable option, but also likely the most expensive.

2.3. Testing and troubleshooting

Critical to ensuring the success of an online event is replicating the exact conditions as best as possible in the testing phase.

2.3.1. Private streams

Most online platforms and streaming locations allow for a private or “unlisted” stream which should replicate the final setup.

- Ensure that you replicate the event needs based on the **ROS exactly** how it will be for the actual show.
- While certain remote presenters may not be available to test the platform ahead of time, having staff or colleagues as **stand-ins** will minimize unforeseen technical issues during the show.
- **Test run as many components of your programming as possible** to ensure you’re prepared to troubleshoot as many potential issues as possible.

2.3.2. Test audience

Setup a test audience of at least three people in different locations, this will help to ensure that, during testing, any potential issues are not a result of local network connectivity issues.

- Ensure your test audience uses any, and all, accessibility, chat, and other **audience engagement options** at this stage. Never assume an element will “just work.”
- For on-demand options, seek out **colleagues that are unfamiliar with the platform**, provide access, and get feedback on how easy it was to access and/or use. The more people who can “beta test” the system the better. Providing access to those who are not technically inclined will also flag potential issues with accessing the platform.

3. WHAT TO CONSIDER IN THE PRESENTATION PHASE?

3.1. What are our technical needs?

3.1.1. Technical Equipment

Livestreaming an event will inherently require reliance on software, hardware, or a combination of both to be managed.

3.1.1.1. Hardware

This is the most reliable option, but also the most expensive. A hardware solution for livestreaming an event will typically include multiple pieces of equipment, all with a “role” in the presentation (e.g., audio, video, etc.).

- Consider that this option often requires **technically skilled labour to operate**. It does increase the reliability of the presentation, but also increases the overall cost.
- **Equipment can be rented**, which may be an attractive option in the testing phase to see if it’s right for you.

3.1.1.2. Software

This option is the most flexible, from both a cost and initial user-skill perspective. Software solutions typically avoid the upfront cost of equipment, affording a lot of creative options to support most online presentations. The caveat, however, is that the more complicated and dynamic the show is, the more strain this will put on the system hosting the software (i.e., your computer).

- The hardware running the software would need to be **scaled in proportion to the needs** of the event—e.g.: a simple event of a zoom conversation with a graphic overlay would be easily supported by most modern laptops.
- However, a show that could comprise **multiple remote presenters**, clips, local camera inputs, etc. would require a powerful computer.

3.1.1.3. Combination

The most effective strategy is typically combining both software and hardware options. This solution usually allows for the most control and distributes the system load to reduce the risk of failure. Including multiple technical software and hardware elements may increase the complexity of the presentation (and need for a more skilled technician), but will afford greater flexibility for what you can do in your livestream.

3.1.2. Codec/Streaming Formats

The method of which your content is to be encoded for a broadcast will be dependent on what the player or hosting site supports. Most hardware and software streaming solutions support a variety of streaming codecs, but it is important to check what your platform supports before committing to a software or hardware option.

The current streaming video codecs are:

3.1.2.1. RTMP

The most widespread and oldest streaming codec option. Not originally designed for video broadcasts, but quickly adopted for as much. While this

option is the most widely supported, it is the most limited (in terms of options and latency) and is slowly being phased out.

3.1.2.2. HLS/DASH

This is a modern, adaptive streaming codec. This translates to a more efficient means of video transport, lower latency, and support for multiple audio tracks (e.g., alternate languages) and/or multiple captions. This is the direction of online video compression moving forward.

3.1.2.3. SRT

“Secure Reliable Transport” is more of a point-to-point streaming option used by broadcasters for bringing in remote participants or transmitting feeds to locations for rebroadcast. This transport method has very low latency, but this system can be a little more complex to set up and/or deploy.

3.1.3. Player/Streaming platform

Consider whether you require a “turn-key” platform for support with streaming, on-demand system, ticketing, etc. or whether a stand-alone embedded player would meet your needs.

A “player” is a landing point for your stream, which could then be integrated in a site by a web administrator. While there is a lot of customization afforded by this option (colours, graphics, hyperlinks, etc.), it does not offer all options a typical platform would provide. However, this could be more budget-friendly as there are some open-source options.

3.1.4. File Formats for On-Demand Content or Livestreaming

Compression is essential for the transportation of data online. As such, the file formats (codecs) used will be different than with an in-person screening environment.

3.1.4.1. H.264

The dominant video codec is H.264. This is the most efficient means of transporting quality video online.

- As the **video bit rate** (the rate at which data is transmitted) for online streams will likely fall within 4000–8000 kbps (for HD resolutions) the **compression rate** for the video file does not normally need to exceed this. For example, an Apple ProRes file with a data rate of 145 mbps (145,000 kbps) would be entirely unnecessary.
- It's important to be **transparent with artists** involved in livestreamed events about technical considerations and limitations. Presenters and artists should discuss how these elements will impact the rendering of works online. Files are streamed out at a fixed frame rate, which should be communicated to the artists involved.
- In a program with **multiple elements**, the stream integrity requires the use of a consistent video type. This means that files may need to be converted in advance. Presenters should discuss all file conversions with artists ahead of the screening.

3.1.5. Implementation of Accessibility/Geoblocking/Digital Rights Management (DRMs)

3.1.5.1. Integrated Platform Implementation

Some platforms have built-in accessibility, geoblocking and/or DRM functions. The user interface should allow you to customize, enable, and control these functionalities. However, make sure that the platform you choose allows you the options you need!

3.1.5.2. Third-Party Accessibility Implementation

This is typically deployed by redirecting the stream to a third-party server which would allow the embedding of live captions in real time. This system

allows for either automatic (e.g., Google’s deep learning) or human produced captions. Please [consult the caption section above for more information](#).

3.1.5.3. Third-Party Geoblocking

This is typically determined by the player or ultimate platform being used (the platform through which content will be shared with viewers). While there are hosting options that can operate in advance of the final landing location (e.g., Wowza streaming systems), this would typically be a feature of the platform being used. The service chosen will typically determine the specificity of the geographic restrictions that can be applied. You can refer to the [Geoblocking and Digital Rights Management section above](#) for more information.

3.1.5.4. Third-Party Digital Rights Management (DRM)

The method of DRM deployed is determined at the user end, either by the client type or device used to stream content. For example, if the stream is viewed on an Apple device, this is a different DRM type (typically) than on an Android device.

- **The deployment** of the DRM can be via a redirect of the stream as seen with captioning, or with a native integration of the DRM system with the platform or player being used.
- DRM typically requires a **ticketing system** of some kind to be deployed. This can be integrated with whatever access system is being used for your stream or event. “Free access” protective measures can be deployed (i.e., a free livestream with DRM active on the stream), but the system is a little more complicated to enact.
- While there are DRM options coming out that are more universal in supporting various devices, the deployment and integration can be **complex and/or expensive**.

3.1.6. Implementation of audience access measures (ticket, pass, registration, etc.)

Finally, you need to think about how you will manage and keep track of who is able to access the presentation. Many ready-to-use services are offered through a presentation platform or are available independently. Please also refer to point [2.1.2.2 Audience](#) to find relevant questions to guide you in this step. You can also keep in mind the following:

3.1.6.1. User experience

How easy is it to navigate your platform? Does your audience recognize the branding of your event? How many steps do they need to complete before accessing content? When they register, will viewers receive confirmation by email? If there are problems accessing the platform, what support structures are in place?

3.1.6.2. Data

Setting up an event is a good opportunity to get to know your audience better. You can directly ask questions in the registration form or use metadata to analyze your audience. However, keep in mind that you need to protect this personal data!

3.2. How can we reduce barriers to audience engagement and access?

Accessibility is a process that doesn't come with a checklist. We recommend that you consult the document [Towards Accessible Online Presentation Models:](#)

[Introduction and Resources for the Media Arts Community](#) for more information about the subject.

3.3. When problems arise

3.3.1. What technical support will be in place during the event?

3.3.1.1. Technical support for your audience

If someone has a problem, whom should they contact? This information needs to be clearly available. For a large event, multiple people should be assigned to the task of helping the audience.

3.3.1.2. Internal Communication System

Make sure you have a system to communicate efficiently with your team during the event. This could be as simple as having everyone's phone number easily accessible or setting up a parallel messaging platform to reach everyone at the same time. Some systems also allow you to have different streams for different needs.

3.3.1.3. External technical support

Ensure that the platform chosen has a technical support contact that operates during the hours of your event.

Also ensure that you have a contact at either your Internet Service Provider (ISP) or local network (or both) in case any issues arise.

3.3.2. Having a Plan B

With any live-broadcast, there should be a two-factor backup option:

- 1) **The livestream**, as it is presented (or as the viewer is experiencing it), should be recorded. This can be either through the platform (YouTube, Vimeo Live, etc. offer this) or through a local recorder option in the hardware or software managing the livestream.
- 2) If including **remote participants**, as is typically the case, this direct feed should be recorded as well (e.g., zoom conference call recording).

By ensuring a dual-redundant recording of the event, and the event's elements, the show can be recut and uploaded in the case of a failure. Make sure to inform all participants that this type of recording will take place. Ideally, this information should be included in contractual agreements.

It should be accepted that with any online presentation, there is inherent network volatility. Regardless, if going with an on-demand system or livestream option, there is a risk to the transmission. **As long as there is a recorded backup, you do have the option to re-upload the event afterwards.**

While certain remote presenters may not be available, adding staff or colleagues as a **replacement** will minimize the potential for surprises during the show.

4. WHAT TO CONSIDER AFTER THE PRESENTATION?

4.1. Archive and documentation

4.1.1. Archiving

The recording of the show can be archived as part of the platform's or players' native system. However, it is important to consider there is at least a 2-1 archiving approach—i.e., one copy backed up online (the “cloud”) and one locally, offline on a computer (preferably a RAID system with redundancy).

4.1.1.1. Determining the Duration of the Preservation

Consider the duration of the archive and the long-term intentions. Be transparent (either within your own organization or with the participants) on how long the content can be reasonably expected to be archived by the organization. If long-term preservation is critical, then it may be prudent to consider a managed, long-term archive solution through a third-party.

4.1.1.2. Archiving Captions

Platform—or player—dependent, the captions for an event can be archived as a simple text file. However, this depends on the platform used, as many automated systems (e.g., YouTube) do not necessarily offer this service.

- **Third-party caption** providers will typically bundle this as part of the overall service.
- If the content will be made available for viewing or listening after the event, consider a system that does archive captions in case any **edits or adjustments** need to be made.

4.1.1.3. Simulation of experience for interactive works

Some interactive works do not easily lend themselves to preservation. You may record someone navigating through an interactive work to record what the experience looked like. In this case, explore every facet of the work and document it to provide a clear understanding of the work.

4.2. Scheduled back-end management of files

4.2.1. Respecting the terms of your contracts

The contracts you sign with artists and presenters should specify how long works or recordings will stay up online, either as publicly accessible files, as content hidden in the back-end of a platform, or as archived material on the cloud. It is the presenter's responsibility to delete files stored online according to the terms of the contract. Failing to do so can be a form of copyright infringement.

- Keep track of **deletion deadlines** and integrate them into your team's overall workflow.
- Make sure that **all publicly accessible files** (including in social media posts) are deleted.
- **Clean-up the back-end** of the platforms, cloud servers, file transfer services, etc. used in the planning and presentation stages. Make sure that there are no unfiled copies of works.

4.2.2. Clean-up all your hard drives by deleting working copies of works and recordings

It's likely that your team made several copies of works and recordings in the planning and presentation stages. Ideally, these copies were discussed with the artists and presenters and mentioned in the signed contracts. After the event, check all devices that were used for the event and delete any copies that are not kept for archival purposes. Failing to do so can be a form of copyright infringement.

- Delete any leftover copies on all **computers used for the event**, including staff's personal computers if applicable.
- Delete any leftover copies on all **external hard drives**, thumb drives, and other digital storage devices used for the event.

4.3. Understanding data

4.3.1. Audience data and tracking

Some platforms manage real-time analytics better than others, and the data of how many viewers are watching (and when) should be considered when deciding on a platform.

Analytics from a livestreamed or on-demand online presentation can be critical to determining future budgets, planning other events, or applying for grants.

Ensure that the data provided covers the following:

- Number of **viewers**?
- **How long** (on average) did each viewer stay on?
- **How many** viewed the stream in its entirety?
- **Where**, geographically, were the viewers located?
- **When** did most viewers log off, if relevant?

4.3.2. Learning and self-reflection

4.3.2.1. Analyzing data

Upon completion of the event, it's important to take time to review any data you have acquired. Audience and collaborator surveys as well as staff input are helpful in forming an image of how successful the event was. It can be especially helpful to review this data against analytical data available via the platform (number of viewers, how long they stayed, etc.). You may want to modify your workflow, including budgeting and staff time, based on this data. Given how relatively new online event production is, the more data that is processed and documented, the easier it is to determine workflows for future events.

Here is a list of questions you could consider at this stage:

- Did you have **enough people** to manage the workflow?
- Were the **staff compensated** for their time or resources (e.g., Internet use)?
- What were your **objectives**, and did you achieve them?
- Did you utilize all the **hardware or software** resources as expected?
- If any **geoblocking or DRM** resources were deployed, were they effective?
- Based on viewing analytics, did your **audience** watch the entire stream? Did you get the number of viewers you expected?

4.3.2.2. Sharing Information

Sharing this information with the arts community will inevitably help everyone not only develop but refine their workflows so they can build reasonable budgets and expectations. With more and more platforms becoming available, having a thorough understanding of what you need to present your work online is all the more important.