Live Streaming for Churches

(By Jacob Borrett, Christ St. Paul's, Yonges Island)

In the event that you or your church needs to produce a livestream, the number one thing to consider is, what are you trying to accomplish. Are you attempting to reproduce an entire service with liturgy, readings, and live music? Or are you simply hosting a live sermon? Once you have decided what parts of the service you're going to attempt to provide, you can begin to look for the appropriate tools that will work.

Options

1. If you've decided to simply share a live version of your message, this can be done quite easily. All you'll need to proceed, is a laptop, and a camera. You can use either the camera built in on your laptop, or even your iPhone or Android device. For audio, you again can either use the microphone in the computer that is built in, or the built-in camera on your smartphone of choice. ***This option is the most budget friendly but requires you to have a plan for what part of the service you're attempting to provide live.***

2. If you are attempting to recreate portions of, or even the entire service, you will need
   a. Computer
   b. Camera
   c. Video Capture Device - for bringing the image from your camera into the software necessary to stream.
   d. Software - Unfortunately, live streaming multiple items (videos, camera inputs, audio, images, slides, etc) requires 3rd party software to manage.

1. **Computer**
   a. **Laptop**
      i. Advantages
         1. ***Portable*** - very easy to move and set up where you want to be. This can be ideal for Option #1 because most people looking to pull this off already have one.
         2. ***"All in One"*** - audio and video in one place.
         3. ***"Simplicity"*** - You simply open up Facebook, press a button, and stream.
      ii. Disadvantages
         1. ***Proximity*** - Because you have to be close to your laptop to use the built-in camera, as well as close to the microphone to get good audio, you can't leave it on a table and point it at your pulpit 10 feet away.

    2. ***Camera Quality -*** Generally the camera quality in laptops is subpar. That might not matter for what you're trying to accomplish, but it's worth noting.

    3. ***Power -*** Laptops are generally not as powerful as Desktops, and don't have dedicated devices for powering external cameras as efficiently as desktops.

   iii. ***Summary -*** A laptop is a great option for putting something together on the fly.

  b. Desktop

   i. Advantages

    1. ***Power -*** Desktops are generally the most powerful option, and with the right tools, you can produce just about anything.

    2. ***Flexibility -*** Desktops allow for a wide variety of pieces of equipment that will fit varying budgets.

   ii. Disadvantages

    1. ***Fixed Position -*** Desktop has to remain in its place, so setup is key.

    2. ***Cost -*** Generally Desktops designed with the right parts are more expensive than "an old laptop" you already have.

    3. ***Learning Curve -*** If you're going to use a desktop, then you will invariably need to learn how to use the software that comes with pulling video feeds and streaming them live. ***NOTE - You can use a desktop and a webcam in the same way you can use a laptop - but it doesn't make much sense unless you're broadcasting from an office, and have no plans on being in the church.***

  c. **Smartphone** - very similar to Laptops overall

   i. Advantages

    1. ***Portable*** - very easy to move and set up where you want to be. This can be ideal for Option #1 because most people looking to pull this off already have one.

    2. ***"All in One" -*** audio and video in one place.

    3. ***"Simplicity" -*** You simply open up Facebook, press a button, and stream.

   ii. Disadvantages

    1. ***Proximity -*** Because you have to be close to your phone to use the built in camera, as well as close to the microphone to get good audio, you can't leave it on a table and point it at your pulpit 10 feet away.

    2. ***Camera Quality -*** Smartphone camera quality varies greatly by smartphone.

    3. ***Power -*** Smartphone power varies greatly by smartphone, however in 2020, 99% of them should be more than capable of livestreaming.

2. *Camera*

  a. DSLR

   i. Advantages

    1. ***Quality -*** DSLR's provide the best camera quality you will be able to find.

   ii. Disadvantages

1. **Cost -** DSLR's are the more expensive option.
2. **Learning Curve -** DSLR's can be quite difficult to learn
   b. **Smartphone**
      i. Advantages
         1. **Portable -** They can be used anywhere.
         2. **Quality -** While smartphone devices can vary, many smartphones in 2020 have phenomenal camera quality.
      ii. Disadvantages
         1. **Price -** Smartphones can also be an expensive option.
   c. **Camcorder**
      i. Advantages
         1. **Price -** Camcorders typically sell for less than DSLR's or higher end smartphones.
         2. **Zoom -** Camcorders typically have built in digital zoom, so you can place one further away from your subject and still get good quality video.
      ii. **Disadvantages**
         1. **Varying Models -** There are a number of options in the camcorder market, and it can be stressful to find the right one.
         2. **Quality -** Camera quality isn't always guaranteed.

3. *Other Tools*
   a. Video Capture Devices -
      i. A video capture device is required to bring in a camera feed, route it into your computer, and out through any production software you may be using.
   b. Software
      i. Production software is required for live streaming of anything outside of using just your computer or smartphone to run the whole thing

What Christ St. Paul's, Yonges Island Uses

1. Desktop Computer
   a. [ASUS CM1745](#)
      i. This computer is a few years old - but still manages to get the job done, but barely. ***EDIT: This computer is old enough that it probably isn't sold anymore. It is more than likely on Ebay or Amazon. Newer models will be better at performance than this one anyway.***
2. Camera
   a. [Canon Vixia HF R21](#)
      i. An old camcorder, has zoom capabilities, but not fully up to date HD quality. ***EDIT: This camera is old enough that it probably isn't sold anymore. It is more than likely on Ebay or Amazon.***
3. Video Capture Device
   a. [Elgato Camlink 4K](#)

          i.   The camera is plugged into this device, which is then plugged into the computer, and routed to software.

4. Software
   a. [Vmix HD](#).
      i. Vmix is a robust production suite allowing for multiple cameras, videos, slides and more. Vmix also allows for streaming to multiple services including Facebook, YouTube, Vimeo, and many more.