The Role and Potential of Live Streaming in Marketing for Small and Medium-sized Enterprises

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Live streaming is a form of video delivery increasing in prevalence in the consumer and commercial sectors. Its use in commercial applications has been limited to primarily large enterprises. This thesis concerns the practical application of live streaming and its role and potential for small and medium-sized enterprises.

The thesis discusses three major aspects of live streaming: the theoretical ramifications, the practical requirements, and the implementation in SMEs.

On a theoretical level, the different aspects of streaming fit the paradigms of content marketing due to its format, as well as influencer marketing & personal branding due to the significance that the presenter plays.

Practical requirements found for live streaming were relatively low, with only a computer or a smart device required along with an internet connection to start streaming on the low end, with production being able to be scaled up to scale similar to professional television productions. However, the content was found to have a larger role on viewership than production qualities.

Live streaming was found to be an effective method of video content delivery as well as a communication channel to replace video-on-demand content due to its lower cost per piece of content, as well as being more effective delivering the message to the viewer.

**Keywords**
Live Streaming, Content Marketing, Personal Branding, Influencer Marketing, Online Community, SME
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1 Introduction

With the increased access to the internet and increasing popularity of social media and content platforms, marketing has shifted to platforms where the content can be either searched or pushed to the viewer. With large content platforms, such as YouTube and Facebook, commonly being used by companies, a form of video or audio content creation has been left untapped by marketers outside certain fields or large companies: live streaming. This thesis considers the practical aspects of live streaming, and what is its role in contemporary marketing, and what is its potential for small and medium-sized enterprises.

The available academic literature directly relating to live streaming at the time of writing is very limited. Due to this, some of the points made rely on commercial sources instead of academic ones. As live streaming is often counted into the spectrum of social media, available social media research into topic relevant to live streaming was used as context.

As stated, this thesis considers the use of live streaming as a form of marketing for small and medium-sized enterprises. Due to the subjectivity of both marketing and live streaming, the topics discussed here are boiled down to parts that can each be discussed as objectively as possible. In terms of marketing, the topics discussed are content marketing, influencer marketing, and personal branding; marketing theorems that prominent due to the format of live streams. In terms of live streaming, the practical elements of organizing and operating a live stream are presented, as to create a framework. This framework can then be used as a base on how to organize a live stream.

With social media playing an increasing role in marketing (Chaffey 2018), being distinct and attractive to potential clients while trying to reach them via channels where one’s competitors often are present as well is crucial. This is especially true for small and medium-sized businesses, whose marketing budgets are more limited compared to large companies; each cent has to count towards reaching existing and prospect customers. Video has proven to be an effective method of content marketing (Bowman 2017), increasing the efficacy of other content tied to it. However, the drawback of video content that it often is quite expensive to produce when compared to, for example, written content. Video content takes longer to produce than other pieces of content in all phases, and the equipment necessary to produce quality content costs more. To counteract this, live streaming serves an alternative.
In live streaming, as the name suggests, the content is created live, frontloading the effort necessary to produce each piece of content, but drastically cutting the time necessary for post-production. Live streaming also grants benefits not present in regular video content, primarily in the form of the live chat, a text based communication platform tied to the live stream, allowing viewers to discuss with each other and with the content creator as the content is being created, leading to an interactive experience.

![Number of Employees](image)

Figure 1. Companies using live streaming by number of employees in North America (Brandlive 2016)

As Figure 1 shows, the adoption of live streaming is relatively limited. This can be due to live streaming being a new phenomenon, with the first live streaming service, Livestream, founded in 2007. Other factors leading to the low adoption rate would be being uninformed of live streaming and its processes, and a perception of being unable to produce and present interesting content.

The thesis presents the material by first going through the theoretical aspects through which the rest of the material is then framed. Then the practical aspects of live streaming are discussed and presented as to inform how the process of live streaming is conducted, what it entails, and how one would go about live streaming, with some practical suggestions on implementation. Then the role of live streaming is contemporary marketing is discussed. Then the potential of live streaming in marketing is presented based on findings from conducted study, framing it for small and medium-sized enterprises. Lastly, the overall implications are discussed.
2 Live Streaming in Marketing

Despite a large amount of research being dedicated to social media in marketing, available academic research into one of its subsections, live streaming, at the time of writing is very limited. Due to it being part of social media sphere, it shares characteristics with its theorems. Theories used here are content marketing, influencer marketing, and personal branding; as they pertain closely to the characteristics of live streaming.

2.1 Live Streaming

Oxford English Dictionary defines live streaming as transmission of live video and/or audio coverage of an event over the internet. It is very similar to a live broadcast done on television or radio, save for the fact that you do not have to pay to book time on a broadcast channel’s airtime to make said broadcast.

Live streaming is used to create content, that the viewer or listener (henceforth viewer) then consumes almost as fast as the content is created. This is opposed to Video-on-Demand (VOD) and podcasts, where the content is stored for the viewer to consume on their own chosen time. This simultaneous creation and consumption can, however, impose challenges to the content creator, as when mistakes happen, it has already been broadcast with little to no ways to fix potential damages (Gomez 2016). However, it can also create a positive impact, as it shows that there is an authentic human element on the side of content creation, instead of a perceived cold and calculating marketing machine (Brandlive 2016).

![Figure 2. The general process of live streaming](image)

As shown in Figure 2, the general process of live streaming starts by capturing footage and audio as a part of the production. These media streams are then fed to a computer or a dedicated device, called an encoder. The encoder then processes the raw media into a cohesive product and sends it to the assigned platform, a web service that hosts the live stream. The platform then processes the streamed content and, depending on the service, starts playing it after 2-15 seconds. This content is then delivered via the platform for the viewership to consume.
Live streaming can be used to transmit a variety of content. Common content types include simulcasting, simultaneously transmitting, in-person events and CEO town halls (Brandlive 2016). However, due to the versatility offered, the content need not be large scale events, as smaller bursts of content, for example, situation updates and new VOD content launches can also be done via live stream.

One of the largest perks offered by live streaming is the potential for viewer interaction. Unlike with VODs and static content, which the viewer needs to either find or stumble upon, live streaming offers a “real time” chat alongside the content delivery, allowing the content creator to interact with viewers who are in the chat. The chat can also accommodate the viewership acting with each other, creating a small temporary community for the duration of the stream. When live streaming, the content should be accounted for, as not all content can accommodate viewer interaction. Additionally, the chat can still be a vector for legitimate conversation during the stream, even if the content does not accommodate, as well as harassment. For such situations, a person or a group of people called “moderators” should be appointed to manage the chat, so that it can be a forum of dialogue instead of a place of harassment (Twitch.tv 2018).

The platform can often offer other services alongside hosting the content, such as allowing logged in viewers to follow or subscribe, opting in for the platform to send a notification when the content creator starts a live streaming again. Some platforms also offer options for the viewer to donate money to the content creator directly or semi-directly.

2.2 Content Marketing

Content marketing is a paradigm of marketing, where instead of pushing the marketing to the customer directly, the customer instead is pulled in through content that entices them (Liu, Huang 2015). By creating content tied to the brand and the product, the content creator forms a community around the brand in the place of a clientele that engages with the brand rarely outside of the purchasing context (Baltes 2015).

Outside the type of content being produced, a large part is the channel being used (du Plessis 2017). The choice of channel(s) afford different options to provide the content to the customer, and for said customer to interact with the content creator/provider. The three methods discussed by du Plessis are Content Communities, Platform Specific Content, and Understanding Channels. Content communities, as the name implies, are communities built around the content. This community is then not just a place for the brand to post their content into, when well curated, it also is a place for clients, advocates, and influencers to post their content about the brand. This then serves as a framework for
socialization not just among customers, but as well as a communication channel between the brand and the clientele.

Platform-specific content posits that all content should be tailored to the platform it appears on and have a specific goal. The main purpose of platform-specific content is to differentiate the marketing content to play to the strengths of its given platform and medium to differentiate it from the rest. The goal is to engage the customer to interact with the brand. This can be done by varying the types of content from promotional to non-promotional.

Understanding channels pertain to utilizing different channels to maximize reach and then guide the viewers to the main content channel. This is done by making content that is more long-lasting and up-to-date and unifying the content in the different channels stylistically and ideologically. This is done to guide the ideas toward a certain core brand message and idea, and through that generate (electronic) word of mouth (eWOM) in the customers.

The content provided should also be relevant and understandable by the clientele viewing said content. When the languages entice the viewer, it can lead to higher user engagement (Noguti 2015). Using enticing and inclusive (us, we, our) language, the user engagement, and retention rate is likely higher, due to heightened feeling of being part of the community, rather than using generic and exclusive (I, me, mine) language, where the content creator and audience are clearly separated entities.

2.3 Influencer Marketing

Tying into content marketing, influencer marketing is types of marketing, where customers, who already are already familiar with the brand and product, advocate for the brand and product inside their own networks. These advocates, henceforth called influencers, then act as part of the sales force and persuade other prospective customers (Brown, Hayes 2008). When discussing influencer marketing strategies, every single person is not automatically considered to be an influencer, though even a single person’s advocacy can bring in more customers. Influencers are usually people who already have a large amount of following in their networks. Single people can still act as influencers in smaller communities, though their overall impact often less measurable.

In influencer marketing, when actively going for influencers, the brand needs to consider factors like reach, brand compatibility, personality, and creative freedom (Woods 2016). When deciding on influencer to pursue, most reach usually means higher cost. Usually,
when an influencer has reached a wide audience, they tend to have a higher amount of influence on the said audience.

Brand compatibility pertains to the influencer's personal brands and the company's brands compatibility with each other. If these brands are in conflict, the image of the company's brand is more likely to become damaged (Brown, Hayes 2008). Additionally, brand compatibility extends to the fact that influencers represent a reach to individuals, not categories of individuals. Thus, the identifying and segmenting influencers is usually of greater importance than segmenting their audience.

Influencer marketing campaigns usually should not be tied to a single influencer as its cornerstone, but a portfolio of influencers should be used. This can be done by internal research into potential influencers, or via an influencer marketing agency. Through this research, personalities that fit the brand should be chosen. Personality, while part of personal branding as well, also ties to audience retention. If the item being marketed by the influencer is not the main topic of the post, their ability to retain the audience until the item is mentioned, and how the item is mentioned is crucial.

Creative freedom is an important matter to grant to the influencer. Though stopping an influencer to post you have sponsored or provided material for is a given right, forcing the influencer to conform wholly to the brands marketing methodology and style can make the resulting content seem forced, giving the image of the influencer "selling out," reducing the post's and the influencer's future credibility.

### 2.4 Personal Branding

Personal branding is the planned process of creating a brand for an individual through self-marketing (Kurchaska 2017). Personal branding, much like product and company branding, is the management of the image perceived by others.

A personal brand is grown from a great number of factors, some even not directly tied to marketing. Factors such as personal hygiene, wardrobe, the tone of voice, mannerisms, and confidence all are a part of growing one's personal brand (Graham 2012). Actions usually do play a significant part as well, as what one writes, says, and does often affects the client’s image of the person in question. When in public, be it on location or on the internet, one should keep presenting the brand that they want to convey or be neutral. Going against the brand you want to establish can be detrimental, as you never know who’s watching.
Personal branding, however, greatly differs on the medium it is conducted on. According to Kurchaska, while factors such as identity, distinctiveness, utility, and interaction affect the building of personal branding in the physical world, on virtual mediums self-expression is the key factor, while other factors do not have a significant statistical weight.

Personal branding additionally requires self-reflection (Wee, Brooks 2010), as knowing yourself usually helps one manage themselves to convey the wanted perception. “People form opinions of you the moment they meet you (Graham 2012).” First impressions matter, so managing a personal brand that conveys the image you want to have the customer feel is important.

A corporate brand can have multiple personal brands housed beneath it, but these personal brands should have partially the same characteristics, as to not change the clients experience drastically from one representative to the next. These characteristics could be factors like value orientation, competitiveness, or level of seriousness. These tying characteristics should be subtle and few, as too many and strong characteristics in different people can invoke the image of a “corporate drone.”

Confidence usually plays a major part in how a person is seen. Not everyone has an inherent level of confidence or can feign it. Building up confidence takes time and effort. One also should be knowledgeable on the factors that can take away confidence, and try to work through them. Being conscious of oneself also allows them to focus on others, if they do not go to the point of being self-conscious.

Somewhat less discussed part of personal branding is the ability to recover from failure. As part of being human is to make mistakes, one should also be handle situations where the mistake is about to happen or has happened, and how to get back “on message.” Working through the situation with humor, admitting fault, forgiving, or distracting gracefully from the situation are all legitimate tactics to defuse an embarrassing situation.

3 Live Streaming in Practice

Live streaming entails the use of multiple pieces of equipment, software, and assets to function to its fullest extent. Presented here are the basics of what one needs to operate a live stream, and how one would improve each part moving forward.
3.1 Platform

As with any type of content, the choice of distribution platform matters. There is a plethora of platforms out on the internet, presented here are 8 with different use cases, audiences, and pros & cons. Unless otherwise specified, the platform discussed is free.

Common features shared by all the platforms is a live chat, that allows the viewers to interact with each other and with the streamer, be it a one-person show, or a production team running the stream.

3.1.1 Mainstream: YouTube Live, Twitch.TV, & Mixer

Google’s video platform, YouTube, has also expanded into live content via YouTube Live (YTL). Using YTL can be the most cost-effective method of entering into live content production, as the YouTube’s subscription system also carries over to the live streams. Your existing subscribers get notified of your live content, and new viewers can subsequently subscribe for your VOD content.

The largest perk of using YTL is the ability to use the familiar tools to manage the channel. Starting a live stream is not too different from posting a new video. Additionally, the stream can also be posted after the fact as a VOD for the people who were not present to view, adding to the content strategy. The familiar analytics tools also apply to YTL streams.

At the time of writing, if you want to monetize your streams, YTL does not have that great of a toolkit, and the users are somewhat wary of them. Most of the monetization comes via Google AdSense, and now recently an option of viewers directly sponsor the channel.

Twitch.tv is one of the largest live streaming platforms, with the content focusing primarily on live streamed content. Though the focus of the site was on gaming content for a long time, it has recently shifted to allow content such as talk shows, creative, and in-real-life content.

Twitch’ tools are quite simple to use, though has fewer options for tagging and descriptions. As a major perk is that the viewers can directly support the stream in multiple ways. For the viewer to get updates on the channel, they follow it, functioning similarly to YouTube’s subscriptions. Then there are Twitch’ subscriptions, allowing the user to pay $4.99, $9.99, or $24.99 to gain certain perks, such as the ability to use custom emotes in
the chat. Part of this money is then transferred over to the channel, in the case of the lowest tier subscription, the amount is around $2.50. Subscriptions then run monthly or until the user cancels them. Another support option via Twitch is called Bits. A user pays Twitch to buy Bits, which they then can give to the channel, each Bit being worth $0.01 to the channel.

As always when starting on a new platform, the big hurdle is developing the audience. Twitch has some tools that automatically promotes the stream, but primarily the promotion must be done outside the platform. Twitch channels have multiple tiers, starting from a regular user to affiliate to partner, each tier unlocking more option to the channel, like having more past streams as VODs. Generally, the VODs are only viewable for a limited time instead of indefinitely, like on YouTube.

Mixer is sort of a “new kid on the block.” Though very similar to Twitch, it offers more interaction options. It has integrated options for viewers to affect the happenings on stream, as well as an integrated tool to allow multiple streams to be viewed in one go. Though similarly games focused as Twitch, they also allow creative content on the platform. VODs also are retained for a limited period depending on the account status.

All of the three mainstream platforms mentioned focus on the demographic of gamers when it comes to its categorization of content. Each categorize content primarily on the video game being played. Twitch and Mixer additionally have additional categories outside of gaming, such as Creative, In Real Life (IRL), Music, and Talk Shows, while YTL offers the same categorization options as it does with videos, though lacks the browsing per category option of Twitch and Mixer.

3.1.2 SOME Integrated: Facebook Live & Periscope

Just like with YTL, Facebook Live (FBL) can leverage your existing follower base. You have all the tools available for posting videos on Facebook available for you for live streams as well, and this can also drive traffic to your Facebook page.

The largest perk of using FBL is the surrounding social media tools, that you can use to notify your audience about upcoming streams and post related content. The tools to directly monetize are still quite limited.

The biggest con of FBL is that the chat is not as interactive as with other platforms.
Periscope is as personal streaming platform owned by Twitter. It is a very simple application, though it does have some caveats.

The major selling point of Periscope is being personal. It is operated solely from a mobile device, with no option to stream video from a computer. The integration with Twitter also allows an easy way to notify your audience about a stream and discuss it afterward. If one wants to put effort into the visuals of the stream, Periscope is limited in personalization and management. The personal aspect, however, can be a point that draws viewers in. Unlike most platforms, the VOD of the stream is only available for a very limited time, 24 hours from the end of the stream.

Due to being tied to their respective platforms, they are more personal, offering very limited browsing options. Thus, the audience has to be contacted by the streamer prior to starting a stream, and organic acquisition of audience through browsing is very limited.

3.1.3 Professional: Ustream, Livestream, & DaCast

Ustream is a paid streaming platform. Though viewing of content is free, broadcasting starts from $99 per month at the time of writing. It has been created with professionals in mind, so it has tools to manage larger networks and offers additional features, such as video sharing for work teams.

Due to its low consumer usability, the platform itself will not draw the attention of consumers, granting very low organic traction. However, for a company regularly live streaming and with an existing audience via other social media may find the platform’s tools very valuable.

One of the most widely known and used live streaming platforms, Livestream is heavily favored by corporate, government, and academic clients. They are a paid service, starting from $75 a month at the time of writing. Unlike other platforms, Livestream has focused its business on creating an all-encompassing ecosystem for live streaming. In addition to being a platform, they also create hardware, such as network cameras, encoders, and video switchers, to software tools to stream from any computer or mobile device. Livestream has more traction due to its prevalence in North America and age. Although, as with previously mentioned Ustream, it has a low number of consumer users, so organic traction is lower than on free platforms.

DaCast offers a platform for live streaming and VOD with a Software as a Service model. They offer on-platform video hosting and streaming, as well as integrating their video
player into existing websites. Their pricing starts from $19 per month at the time of writing. They have extensive monetization options allowing for easy transfer from one service to another.

Their service requires the streamer to link the specific stream every time, as the site itself does not have an option to browse ongoing streams, leading to no organic viewership through the service itself.

The three platforms presented here require an established audience to ensure success due to their nature, thus they are often not viable for individuals and companies just starting streaming.

3.1.4 Platform Summary

As the platforms can differ from each other in many extents, going to the platform that you are already using partially, or going to the platform some of your viewers are already on would often be the easiest solution. Trying out on free platforms prior to moving to paid ones can be used to gauge the efficacy and motivation to produce live content before investing money on the platform.

3.2 Hardware

Depending on the extent of the production, live streaming can require only a small amount to extensive amounts of specialized hardware. The hardware categories discussed herein short are capture, encoding, and production.

3.2.1 Capture

When capture devices are discussed, what primarily are meant are cameras and audio equipment. For simple productions, a good quality webcam is enough. If the video feed is clear and of decently high resolution, it will fulfill basic needs of live streaming.

For larger productions, multiple cameras, be it webcams or proper video cameras, are preferred to give higher production qualities, such as different camera angles. Depending on the production, this may require additional hardware and software.

A general note on production is that viewers prefer higher quality audio over higher video fidelity. As audio is half of the equation of streamed content and the primary delivery method of language, higher audio fidelity can increase viewer retention.
A basic hardware setup is a USB webcam capable of High Definition video recording (1280x720 resolution or higher) and a good quality microphone. Both are relatively inexpensive and provide a basis to start building a streams production off from. At the time of writing, a high definition webcam and a quality USB microphone can be purchased for roughly 150€ (Finnish price level.)

Once a methodology and willingness to go on with streaming, higher-end equipment can be purchased and used to increase the stream quality. Dedicated audio setups with audio mixers and multiple mics, be it wired or wireless can be utilized to increase the audio quality in a more controlled way than with a USB or similar microphone. This also enables having multiple people on the stream without compromising the audio quality, and even have multiple people in different locations in the same recording premises, enabled by multiple cameras.

Dedicated video cameras often have a signal output, often in the form of an HDMI or SDI port, that enables the user to transfer what the camera sees to a different location. A camera with a clean output (the output signal does not contain the preview data used to operate the camera) and a specialized device called a capture card can then be used to transfer the video signal from the camera to the computer running the stream broadcasting software, and thus have a video camera quality video available to be used for the stream.
Capture cards can, however, be used to input any compatible video output of the capture card’s corresponding input type, like video output from computers and video games consoles, allowing, for example, a presenter to move through a presentation on their own without the need of an assistant to move the slides on the broadcasting computer.

### 3.2.2 Encoding

As mentioned previously, a large part of streaming is a broadcasting computer. This broadcasting computer handles encoding, transforming a raw feed of signals, such as multiple video & audio streams, visual assets, and other production additions into a single feed, that is then continuously uploaded to the streamer’s platform of choice.

Broadcasting computer, however, does not necessarily refer to a personal computer, as different platforms either set limitations on what kind of broadcasting computers can send the encoded feed, or they have multiple options to send said feed. For example, Periscope, as mentioned in “Platforms,” requires the user to send their feed via a mobile device. This limits the options of additional capture devices but also equalizes the production qualities of the streams present on the platform. On the other end, Livestream offers a variety of hardware encoders, that can be used as standalone encoders to broadcast the feed without the need for additional computer hardware. These often have a variety of input options, but can be limited in expandability by their standard build.
For most streamers, a standard PC, be it Windows, MacOS, or Linux based, is the choice of encoding hardware to go with. For basic streaming, almost any modern computer purchased since 2015 is capable of streaming content without major problems. For larger streaming setups, however, the requirements for the computer may vary greatly, and thus require specific consultation.

### 3.2.3 Production

When it comes to basic streams, very little hardware on the production side should be put emphasis on, as investing early into production equipment usually eats the budget from equipment that is more crucial for the stream itself.

As a camera is a device that collects light, good lighting is a part of the stream’s aesthetics. A well-lit room is a good basis to start from, though in larger productions dedicated lights, such as spotlights, softboxes, and floodlights can be used to tune the look of the video and ensure clean video signal, without the grain and noise incurred by low light levels.

![A basic lit studio used for product demonstrations (Image by Epiphan Studio)](image)

Depending on the look you are striving for on your stream, a chroma key backdrop, be it a colored panel or a painted wall, can be a worthy investment. A chroma key color is usually a fluorescent green or a deep blue color used to separate the subject from the background as to use a computer to replace the background with a video or image of something else. A common use case for this is news weathercast, where the weather map is
placed there after the fact or in live broadcast using a green or blue screen behind the presenter.

If the broadcast uses multiple cameras, a switcher can be used for the easy connection of multiple cameras to the broadcast computer and then switching between them without a break in the video feed. When handling a small number of cameras, most streaming software can handle switching between them without problems if set up correctly, though when a production spans over four cameras, a switcher is a preferred solution. They, however, require a specialized set up to operate, so should be used when a broadcast has a dedicated production team.

3.3 Software

As with hardware, there are a plethora of software one can use to broadcast. Other content creation software can be used to supplement the actual broadcasting software, such as using Adobe Photoshop for creating graphical elements, though here only actual broadcasting software are mentioned. Three software suites are mentioned in different price points: free, paid enthusiast grade, and paid professional grade.

3.3.1 Open Broadcaster Software

Figure 6 The OBS interface (Image by Gadget Carpet)
Open Broadcaster Software, henceforth OBS, is a free and widely used encoding software. It is operated as an open source project and thus is constantly getting improved by not just the primary developers, but also the community around the software. It is compatible with most pieces of production and capture hardware, and as a primary advantage over other encoding software is a wide range of plugins, that the user can install into the software, enabling additional features, such as timers, automatic effects, transitions, counters, and many more.

The flexibility and tools present in OBS allow for a production to grow into the full capabilities of the software suite and expand said capabilities as necessary, given that suitable plugins are available.

OBS also supports a wide range of platforms, being capable of streaming to all previously mentioned platforms.

3.3.2 XSplit

![XSplit interface](Image by Syber Gaming)

XSplit is a paid encoding software very similar in capabilities to OBS. It has a slightly higher level of customization right from the start and similarly offers plugins to expand capabilities. Unlike OBS and many other encoding software, it offers integrated stream notifications without the use of third-party applications, leading to a single user experience.
managing all aspects of the stream rather than multiple different experiences using different software to suit different aspects of the stream.

In comparison with OBS, XSplit additionally includes an integrated rudimentary video editor. This allows for the purchase of single piece of software instead of having to invest in a separate video editing suite to prepare stream recordings for posting.

3.3.3 Wirecast

Wirecast is a paid encoding software designed for professional productions. As such, it has fewer features that can be added as plugins but also has a lot more features included as to fulfill the needs of a professional grade broadcast. It can simultaneously upload to multiple platforms, take in multiple sources of comments and messages, has an unlimited number of input sources, and can even be managed remotely, so a large production can be split into managing different aspects of the stream without the need of specialists crowding a single computer managing the stream.

Telestream also offers a large selection of supplemental software and hardware that can be used in conjunction with Wirecast. In large scale productions, unifying the tools used can reduce some of the failure potential caused by a mixed equipment set.
3.3.4 Software Summary

All the software mentioned are nearly the same on a general level. They have different limits of capability, with most common limits circumventable with a workaround without the need of for professional grade software, especially if the rest of the production is not ready for the extra, often untapped, capabilities of high-end software. However, most software providers also offer a trial product, so when a production reaches the point where the current program’s limits and/or workarounds come too cumbersome, a higher end solution can be tested and to see a fit. This list of software is not definitive, and thus there can be software solutions that suit the streamers use cases better than the ones mentioned.

3.4 Assets

In media production, asset does not always mean goods or capital that is used to create value or is able to be invested into new goods to create value. In content creation and media production, asset is often used to refer to material that appears in the final product, such as sound, graphical elements, and on-screen talent.

Integral to any presentation, the on-screen talent, most often the streamer or a presenter, is what draws the viewer in before they make contact with the content. Though the viewership is a social network in and of itself, and an initial round of marketing of the stream must be done prior said viewership establishes itself, the on-screen persona is what retains the viewers. If the viewership deems the presenter endearing and/or interesting, they organically will often draw new viewers in as well.

Graphical elements and sounds can be used to polish the visual and auditory experience of the stream. Graphics, such as an overlay, add polish to the visual appearance of the stream, and depending on the type of content your stream is used for, it can also improve the user experience by increasing readability and discoverability of the visual content. It can be used to keep the video interesting, as well as inform the viewer about what is happening on screen, for example, a name bar stating a guest’s name, or what is upcoming later in the stream. Graphical effects can also be used as a part of viewer interaction, for example, displaying new follows, donations, or other special interactions you have set up with the aid of automated script accounts, often referred to as bots.

Tied to the aforementioned effects, a sound can also be used to notify the presenter on the type of notification the effect is communicating. Sound does not only refer to sound effects as a part of a notification, but also the soundtrack, the background music of the
stream if such music is being used to add to the content. As with anything using copyrighted works, one should ask for the permission of the artist beforehand to ensure that their content is not being used against their wishes. Although, streaming platforms do not generally moderate music that is being played on stream unless it goes against their terms of services, though when the stream is turned into a video-on-demand, unlicensed copyrighted audio will be muted, alongside any other audio present on the track. Thus, it is prudent to use either royalty-free music or music you have purchased a license for prior to streaming.

4 Role of Live Streaming in Marketing

On a surface level, live streaming occupies the same sector of marketing as video content marketing. Though both are used to deliver video content to the viewer and share somewhat similar production cycle, the perception of the viewer for these two types of delivery methods are quite different.

Video, in general, is a strong method of delivering marketing content, a significant factor in delivering the message via video is viewer retention. VOD content viewer retention is relatively low, as roughly 20% stops viewing within the first 10 seconds, and 44% will have left at the minute mark (Cutler 2010). These Viewership losses are presented in Figure 9. Each lost viewer then only gets partial or none of the core messages of the video, leading to low to no organic distribution of the video, or in the worst scenario, the spread of false information.

![Average Viewer Abandonment Rate by Viewing Time](source: Visible Measures (www.visiblemeasures.com))

Figure 9 Viewership abandonment rate (Graph by AdAge)
Live streamed content opposingly has a much higher viewer retention, leading to watching times of over 20 minutes in a single viewing session (Brandlive 2016). This can be attributed to a variety of factors, most of which are attributed to the viewer's perception of the nature of streaming. One of the surface level perceptions is that, even when one posts VODs of the stream after the fact, one stream is a fleeting moment in time, only present in then and there. This then creates a view of scarcity, leading to higher demand for the content, even if no actual scarcity exists. One other great factor is the text chat alongside the stream, especially if the presenter interacts with it, as it creates a feeling of belonging in the community then and there around the stream, and of interaction, feeling that they contribute to the overall experience of the stream. This interaction with the viewership may also be a usable channel for processing feedback, as you can clarify and answer points in nigh real-time.

The aforementioned interactivity is the key selling point of live streaming over VOD (Brandlive 2016). Due to the content being sent out live, it sends out a perception of authenticity, as any action, be it for the positive or negative, is seen by the viewers, not edited out after the fact. This makes the content presentation seem more human, potentially building rapport between the presenter and the viewers.

Live streaming can also be used to supplement video content creation. Scripted video content takes longer to produce, though also generally has higher production qualities. Live streamed content can be produced much faster and likewise has lower production quality afforded by its format. Thus, live streamed content can be used to fill space between larger scripted pieces of content, thus delivering content more consistently.

5 Potential of Live Streaming in Marketing for SMEs

As eWOM’s emphasis grows as customers become more and more connected, online videos’ value in marketing is becoming more apparent. The content of these videos also has a large effect on retaining viewers and the viewers then disseminating the video (Hsieh, Hsieh & Tang 2012). But with small entrepreneurship, having an internal production team or outsourcing the video production is a human resource or financial unfeasibility. However, with thorough planning and reasonable effort, live streaming can be used a substitute and a point of differentiation from competitors.

As live streaming’s qualities and platform afford lower production qualities than scripted content, upfront equipment is not as large of a financial burden. If the company deems live
streaming to be an effective marketing channel for them, they can then incrementally invest in improving the production quality instead of having to replace equipment in bulk when the base standard of high production increases every 5 or so years.

The presenter is at the forefront of any product of media, so the being a presenter in a live stream often poses scenarios that can be used for better or for worse, depending on the person. In a live stream presented by a company, the presenter is not just representing the company, but also themselves. Though the company brand is important to present clearly, and humorous content helps viewers dissemination (Hsieh, Hsieh & Tang 2012), the success of consumer streams presents a case for the presenter’s brand holding higher emphasis in the mind of the viewer. This often will cause the presenter to become the “face” of the company in cases where the presenter creates interest in the viewers.

As a stream forms into a dialogue, especially if the live chat is integrated as part of the content being produced, the content emphasis should be put into relevant topics that also interests the presenter. If the content is just masked sales pitching, the viewer might feel that they are being used, causing them to leave and even spread eWOM that will counter the stream’s marketing efforts (Hsieh, Hsieh & Tang 2012). Counter to that, content about relevant topics that are interesting to the presenter can cause the viewers to also become interested via emphatic relation. This can also be a point of rapport building, as it humanizes the presenter and the topics discussed, as something separate from the corporate entity behind the stream.

If the presenter’s personal brand is compatible and/or aligning with the company’s brand, the rapport between the presenter and the viewers can be created, leading to situations usually present only in consumer media. With the rapport built between the presenter and the audience created, the presenter themselves can become an influencer. As long as the influencing is done subtly and non-obviously in accordance with the public corporate agenda, the presenter can guide the viewers to the company’s and its partners’ products. As live streaming can be started with fewer resources than edited video content, as long as the production qualities are appropriately high, a company of almost any size can start streaming to the public, be it prospect or existing clients. As only 4% of companies with less than 50 personnel have streaming in their media mix (Brandlive 2016), it can serve as a key point of differentiation from competitors.

As having an informed clientele is important to companies who want to create trust between themselves and their clientele, the content plays a major part in both rapport build-
ing and communicating information. There are various ways to convey what one’s company does in the form of video, and it depends greatly on the general modus operandi how it can be presented in the most appealing way. Questions and answers, town hall, and panel discussions are a relatively low effort way to convey both the message one would want to convey as well as answering to the concerns of clients directly. However, some have found success in so called work streams, where the presenter discusses a piece of work they have in front of them, explaining the though process and the work that goes to it as they continue to work on it. Though artists and musicians are the primary group to do this sort of content, there are examples of other workers doing successful content in this manner.

Figure 10 Video content cost estimates

Figure 10 presents an estimate on the costs of video and streaming content production. These estimates were based on estimate quotes by WebpageFX and the current prices of equipment and software. The in-house initial costs don’t take into account employee salaries and the price of computers. For SMEs with limited resources, live streaming can prove to be and indispensable way to enter video content creation.

In summary, after finding a format that suits the company & the presenter, as well as gathering and organizing a functional community around the content, live streaming can be a mode of delivering content effectively and efficiently. And this content can be a perpetual effort, with the format shifting along with the community and the company.

6 Discussion

The goal of this thesis was to evaluate the practicality of live streaming in contemporary marketing in small and medium-sized enterprises, as the perception was that only large companies, organizations, and events are live streamed.
After researching the application of live streaming in marketing, it seems to be a cost-effective way communication method for small and medium-sized enterprises and not just large enterprises. However, due to the precedent set by the large enterprises’ streams and historical perspectives on large companies being the only ones to afford live broadcasting, the perceived entry barrier to live streaming for SMEs seems higher than it in actuality is. Although higher production values sometimes can increase viewer retention and turnover rates, the low number of required equipment allows almost any company to try streaming without investment.

Live streaming first and foremost is a communication method, which allows your current and potential customers to peer into the company, humanizing it. Consistently posted and consistent quality content that arouses interest in the viewer and demonstrates the presenter’s expertise plays a key role in building the audience around the stream, and this around the company and/or product the presenter is representing. The content presented also should be openly available. If there is some barrier for watching the stream, even if it is minor, such as signing up beforehand, the viewership number is bound to be smaller than it otherwise would be.

Not all companies are compatible with implementing live streaming into their marketing mix as is. As content is the major player, forming the content from the company’s operation can prove challenges of differing levels depending on the type of operations. For example, an accounting office deals with sensitive information and deals in business often deemed unpleasant by the public, but for viewers interested in improving their personal accounts or start an entrepreneurship, watching someone who works in accounting presenting the process can prove useful. Another example would be a manufacturing company. Though the manufacturing process itself might be formed of many industrial secrets, just running through general details of the manufacturing and potentially having the customers participate via live chat in the research and development process can prove to be an image booster for companies often seen as faceless from the public perspective.

This research concludes that live streaming is a valid option for small and medium-sized enterprises to try and potentially implement into their marketing mix. However, through planning, a trial period of decent length, and marketing of the stream itself will be needed to receive decent returns for the initial time and potential equipment investment. With the high quality of consumer grade equipment, starting to live stream is available for anyone with a decent computer or smart device and an internet connection.
The points presented in this research were primarily based on results of studies from the commercial sector and observation of commercial live streaming efforts. Practical testing on practical methodology and notes from successful (over 500 followers) consumer streamers were informally collected to form a realistic and comprehensive framework for the practical implementation of live streaming for different levels of investment. All information obtained from streamers was added with their consent, and none of the matters discussed with them have been explicitly disclosed. All opinions presented were compared to available sources. All practical testing conducted was done by the author.

This research has been a superficial look into the application of live streaming in marketing, and how it fits in contemporary marketing paradigm. The chosen theorems have proven during the process of the research to be very appropriate to describe live streams marketing value on a general level. Additional research deeper into the implications of the opportunities live streaming poses, such as the value of the live chat and the practical return on investment, should be conducted. Additionally, research into the current implementation of live streaming should be conducted, as currently a very limited amount of academic research is available, with most research coming from the commercial sector.

The thesis was an interesting experience, as parts of it have been an exercise in controlled chaos. As academic and commercial material on live streaming is very limited or not available at the time of writing, finding primary data to use proved difficult. However, due to the prevalence of social media research, a large amount of tangential relevant research was available to be used as the basis of this thesis. Also, having done corporate marketing and streaming prior to starting this thesis, and having a network of streamers on hand to gather thoughts, opinion, and experiences from, made writing the parts where no literature existed slightly easier.

The most major part of learning from this thesis has been the academic contextualization of live streaming. There existed a precedent in the utilizing live streaming in marketing, as especially companies in the video games and technology industries having been at the forefront of using live streaming as a part of their marketing mix, though almost all companies using live streaming were categorized as large companies. This aroused interest in why small and medium-sized enterprises were not using live streaming. Through looking into the different aspects of live streaming, it became apparent that it was a perception problem stemming from the time of TV broadcasts being affordable only for large companies. Thus, this thesis became a way to present contextualize live streaming to a level of a SME, and to present the basics to start implementing live streaming and a baseline for growth.
For future research putting more time and effort into planning and executing practical testing could prove to improve results. The practical testing done for this thesis was somewhat limited in scope due to a large variety of technical problems stemming from using a mobile broadband connection as the link to the internet, as cable internet was not available in the residence used. Additionally, the theorems used in this thesis were based on an estimated relevance due to the format of live streaming, proving effective to suit the purposes of this thesis. However, other marketing theorems might still prove suitable to describing the phenomenon and effects present in live streaming, though they were not considered in depth due to the scope of the thesis.
7 Bibliography


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Appendix

Appendix 1: Live Streaming Plan Template

The following is an example of how one would plan live streaming and operations surrounding it. It covers the core considerations, though each point can be supplemented based on the needs of the planner. The questions presented are there to serve as a starting point.

Identity: What is the image you want to show your audience? What activities does your company do? Which of those activities would you be willing to show your audience?

Platform: What is your core audience? What kind of audiences are you trying to reach? What platforms are available to you? Which of those distribute content similar to what you would produce? Which platform is your audience present in? How would that platform integrate with your existing content marketing strategy and social media?

Assets: What equipment do you have available? What equipment of what you don’t have is necessary for the content you will produce? Do you have employees familiar with the activities you are going to present and capable of presenting?

Community: Do you have employees available to handle chat moderation? Or is the presenter able to do it themselves? Is there a communication channel for the audience outside of the stream? If not, can it be established? Can the presenters be present in it?

Consistency: Is a consistent schedule feasible for the type of content you are creating? Can the types of content vary depending on the position in the schedule? How often it is feasible to stream per week? Per month? Is there a format to tie the different types of content together?

Development: What can you do to test and improve the content? What sort of content would you be willing to try out? What sort of assets would improve the quality of production? Would a dedicated presenter aid in creating a consistent stream and quality of content. Would partnering with already established content creators aid in your position or the position of your own product?
Appendix 2: Example Plan of Live Streaming: Case Wooden Cauldron

Wooden Cauldron is an independent publisher and designer of tabletop games. The company itself has 2 employees, and it is operated part-time. Currently the company is making a roleplaying game, a type of tabletop game where the players engage in cooperative storytelling.

The type of viewers Wooden Cauldron is trying to reach is people interested in games, more specifically roleplaying games. And as the two employees are operating the company part-time, and operating with low funds, the choice of platform was limited to ones where broadcasting is free. Thus, Twitch.TV was chosen as the platform to reach as many people in the target audience as possible with limited marketing efforts.

As both employees had existing Twitch.tv accounts, an existing account was converted to serve the purpose of the company, though plans for making an account tied to the company specifically is in the plans for the future.

Existing graphical material was used to create a unified look for the stream, as to not differentiate drastically from other visual content created.

The company's regular value creation activity are divided into development, production, and publishing. As publishing relates to business statistics, legal factors, and other financial operations, it is not considered to be suitable as shareable material for the time being. Development relates to the crafting of different aspects of games and testing these aspects in practice. Production relates to writing, visual design, experience crafting of the final product. All of these activities were thought suitable for streaming, as live comments in the case of some activities were deemed to be useful feedback for the improvement of the final product.

As the two employees were specialized in different fields of the aforementioned activities, one specializing in game design and writing, while other focused on visual content creation, each employee would present a stream pertaining to their skills. This is to keep the content as well informed as possible. Additionally, this allows the other to be in the chat while the other is presenting, and thus moderate the chat.

To keep the content production consistent and the viewership engaged, a schedule and a community forum were established. The schedule was created so that the viewers, even ones that would organically find the stream, could consistently come and watch the
stream at pre-established times. A community forum was established using a service called Discord. This community forum was created for the viewership to engage with each other and with the presenters outside of the streaming times, and thus organically increase engagement.

From this initial setup, future development of the stream would be done by trying parts of new formats and types of content, and through gauging the viewer reaction, improve the overall production.