

argiva

# Starting your VOD service



## Foreword

This document is aimed at anyone who wishes to launch a service offering Video-On-Demand (VOD) content for consumers, either independently or through an end platform (such as Sky, YouTube or Amazon). Given the global nature of the TV market, and the increasing reach of VOD services, this document is relevant for many territories, not just the UK.

The primary goal of this document is to provide enough knowledge for a content owner, content distributor, or broadcaster to:

- Understand the wider VOD market and the trends within it
- Understand why they are launching a VOD service
- Evaluate the goals and objectives for the service
- Investigate the various business models and monetisation options available
- Identify the most efficient and effective solution to reach their target audience
- Ask the right questions of a technology provider and understand the answers or solution proposed

The aim of this document is not to describe how to technically build a VOD service, but rather help the reader ask the right questions of a technology partner.

The market, as well as the technology that supports it, is changing faster than ever and so working with a technology partner that can support an evolving business model is key.



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# 1. Introduction to VOD services



## 1.1 How do we define 'VOD'?

Video-On-Demand (VOD) is sometimes confused with other terms such as streaming and Over-The-Top (OTT). For clarity, here are some simple definitions which will be adhered to within this paper.

### VOD

VOD, at the highest level, is video requested and viewed on demand. However, there are some nuances to this.

VOD is a video asset (along with its associated audio and metadata), delivered to a consumer for viewing at their convenience. Although almost all VOD is delivered to a consumer upon their direct request and over the internet, some technologies push VOD content to consumers under the expectation they will wish to view it - normally to set-top boxes (STB) - over either the internet or another distribution medium.

VOD is not device-dependent, meaning it can be offered across devices such as smartphones, tablets and laptops, as well as STBs and smart TVs. And, due to its individual, two-way nature, the internet has become the primary delivery mechanism for VOD services.

Additionally, VOD can be streamed or delivered as a file for viewing from the consumer's local device. Streamed VOD is fairly simple; in the vast majority of cases, the VOD file is delivered in chunked segments to the consumer as they view the content and is 'buffered' ahead of their viewing. These segments are only stored temporarily by the consumer's device and are removed once viewing has ended. There are exceptions to this where some STB providers use progressive download technology to support this functionality, but the concept remains the same.

If a file is delivered to the consumer, it means (in most cases) that the consumer is then able to save this file and view offline.

Content management and access rights can still be applied to this content, but it becomes more complex to manage.

### Streaming

The term 'streaming' is used to describe the delivery of VOD content upon request and delivery during the viewing session, almost always over the internet. It is also used to describe the delivery of a 'live stream', however. A live stream may be truly live, such as a sports event, or could be like a traditional broadcast channel, just delivered over the internet. Confusion is sometimes caused here as a technical solution designed to meet one of these needs is unlikely to also meet the other.

This document only relates to VOD content and services, and therefore wherever the term 'streaming' is used, it is only intended to mean the streaming of VOD content, not the delivery of linear and/or live content.

### OTT

Over-The-Top (OTT) is a term used to describe the delivery of content over the internet. It is a catch all phrase that covers many services, but is rooted in the delivery of content via the internet.

### D2C

Direct-To-Consumer (D2C) describes a service where a broadcaster or content owner makes their content available directly to the consumer rather than via a platform (such as Sky or Freeview in the UK). This is not limited to VOD as many D2C services also include linear content. However, in this document, when D2C services are referenced, only VOD D2C services are discussed.

## 1.2 Why do you want to launch a VOD service?

There are a vast number of VOD services available online today, with myriad reasons to exist. Many are purely commercial enterprises, while others focus on learning and development, or on delivering religious, social or political messages. And then under each of these there are sub-reasons. For example, some commercial services focus on content as the value driver (Netflix, ITV Hub and Now TV), while others focus on using video content to drive sales of goods (such as QVC's website).

Launching a VOD service needn't be complicated, but it does require a solid understanding of why, what and how. Below are some questions you need to answer when considering launching a VOD service:

- What content do I have?
- How can I exploit this content through VOD?
- What return on investment do I need from this service?  
And over what timeframe?
  - » And how will I measure this if it is not purely financial?
- Who is my target audience?
- What is the best way to reach my target audience?
- What is the best technology solution to launch my service?
- What are the regulatory requirements I must adhere to?

The VOD market is highly fragmented, with many options available to consumers. But there is real opportunity for services with a clear differentiator.



## 1.3 An introduction to possible business models

As you would expect from internet-based services, the number of business model options is huge. However, there are a few typical models used:

- “Free-To-Air” (meaning that the content is free to view)
  - » Typically supported by advertising (AVOD), but not always
- Subscriptions (SVOD)
- Transactional/pay-per-view (TVOD)
- Supporting another business aim (normally alongside one of the above)
- Social media
- Sale to a third-party platform

### TVOD

Transactional VOD (TVOD) is where a payment is made for a specific purchase of one item of content, or a bundle of content.

TVOD services (such as iTunes or Sky Store) have been around for some years now but have been eclipsed by SVOD services such as Netflix, and free (normally ad-supported) services. This isn't to say they haven't been successful, however. The likes of Netflix have exposed the customer appetite for low-cost, all-you-can-eat services. The challenge has been one of value perception; consumers do not feel that a film is worth £10-£15, or that a TV series is worth north of £35. This perception is likely driven by the low rates of all-you-can-eat SVOD services; TVOD can work well in some instances - new movie releases being a prime example.

TVOD is likely to work for rights holders/broadcasters that have highly desirable content that committed viewers are willing to pay a premium for, but where you are only expecting a couple of purchases per year for each consumer. Alternatively, a micro-payment model may work, whereby you charge the consumer a very low sum (e.g. sub

£1 depending on target audience) per item, leading to less 'sticker shock' for the consumer.

### SVOD and AVOD

Subscription VOD (SVOD) services allow subscribers to access content for (normally) a monthly or annual payment. Advertising VOD (AVOD) services monetise their content through advertising interspersed within, or played before, the content. The two are not mutually exclusive, so it is possible to monetise through both options; however, many subscription VOD services (such as Netflix) do not include advertising and so the user experience of SVOD and AVOD in one service may not be what consumers expect.

SVOD and AVOD services have proved themselves to be by far the most popular with consumers. Famously, Netflix and Amazon Video offer great content coupled with low monthly subscription costs; while YouTube and ITV Hub rely mainly on advertising to support their business models. Both SVOD and AVOD make it easy for the consumer; with either low payments (£3-£10) or no payments, the consumer feels like they are getting a good deal. However, to make SVOD or AVOD work, scale is needed (in all but a few edge cases). The challenge for a new entrant is working out how to subsidise the growth needed for SVOD or AVOD services. Netflix has been able to raise capital from the investment market, whilst Amazon has its giant e-commerce business from which to pull investment.

For any broadcaster or rights holder that has either a large or loyal following, both SVOD and AVOD services are viable options. They allow you to keep the highest level of control over your content while receiving on-going revenues.

### Supporting other business aims

Video is now a key component of many businesses' operations, from training and direct sales right through to

marketing. Therefore, revenue generation may not be required directly from the asset itself, but rather from something it drives.

For example, shopping channels have been on TV for many years and have been hugely successful, but with consumers spending more money online, ecommerce has become key to these companies' continued success. Using their video content, these companies can improve their online experience for consumers, driving increased sales. In this case, it may be through their own website, but could quite as easily be through a social media platform.

VOD has become an integral part of how consumers interact with brands and companies, so it can play a key part in meeting a variety of business aims.

### **Social media**

The use of video content on social media has exploded in the last few years. In a recent study<sup>1</sup> it was shown that Facebook pages with more videos attract more followers. With social media becoming such a key part of how companies interact with their customers, the ability to build a large following is crucial.

However, there are two distinct uses of social media platforms. Firstly, to

drive consumers to a website, service or product; and secondly, to directly monetise content. The traditional use of social media platforms for companies has been to engage with customers, with the goal of marketing a brand and/or product(s). For this aim, video is proving to be highly effective.

Social media giants like Facebook and Twitter have also been working to attract more high-quality video content onto their platforms. They have done this in two ways: firstly, they have both been bidding for sports rights, but secondly, they have been developing ways for broadcasters and rights holders to monetise their content through their platforms. This has taken the form (in most cases) of dynamic and targeted advertising within videos.

### **Sales to a third-party platform**

For large-scale multinational broadcasters, platforms like Sky seek to tie VOD rights into affiliate deals, meaning the broadcaster can secure guaranteed revenues for their content, but must then provide VOD content in the specifications required by the platform. However, with the growth of services such as Netflix and Amazon Video, the opportunities for rights holders to sell directly to a third-party platform have increased markedly.

<sup>1</sup><http://advanced-television.com/2017/11/01/social-media-study-more-video-attracts-more-followers/>

## 1.4 Partners to help you launch and operate your service

You are likely to need more than one partner to help you launch and operate your VOD service. The questions you will need to ask yourself first are:

- Am I launching my own D2C service, or am I working with a consumer-facing platform of some kind?
  - » Who is the best technical partner to get my content where it needs to be?
- What content do I have?
- Do I need to source content for my service?
  - » Who do I need to work with to ensure I have the right content?
- What help will I need to meet the regulatory requirements?
- Will I be taking payments from consumers?

- » Do I need a partner to support the payments and customer management?
- » Do I need a solution in place for consumer support?

Finding the right content and technology partners is going to be most important; and they may also be able to provide advice on the best partners in other sectors.

Due to the fragmented but growing online VOD market, the number of suppliers in all spaces can be daunting. Additionally, ensuring they can deliver on their promises can be difficult. However, this gives you the opportunity to find partners that meet your unique needs, at a price point that suits your business model.

## 1.5 An introduction to regulation in the UK

*This section only relates to regulation within the UK; be aware that regulation for VOD services will vary depending on the country where content is stored, received and consumed.*

Since the beginning of 2016, Ofcom took full control of VOD regulation in the UK, absorbing the responsibilities and authority of Authority for Television on Demand (ATVOD). This means that ATVOD no longer exists, although the Advertising

Standards Authority (ASA) continues to act as the regulator for advertising content within VOD services<sup>2</sup>.

Later in this document we will review regulation in more depth. It is crucial, however, that you take the time to fully understand the requirements Ofcom have for on-demand programme service (ODPS) providers before you launch your own service. Full details can be found on Ofcom's website<sup>3</sup>.

<sup>2</sup><https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2015/1520333>

<sup>3</sup><https://www.ofcom.org.uk/tv-radio-and-on-demand/information-for-industry/on-demand>

## 2. The VOD landscape



## 2.1 The current landscape

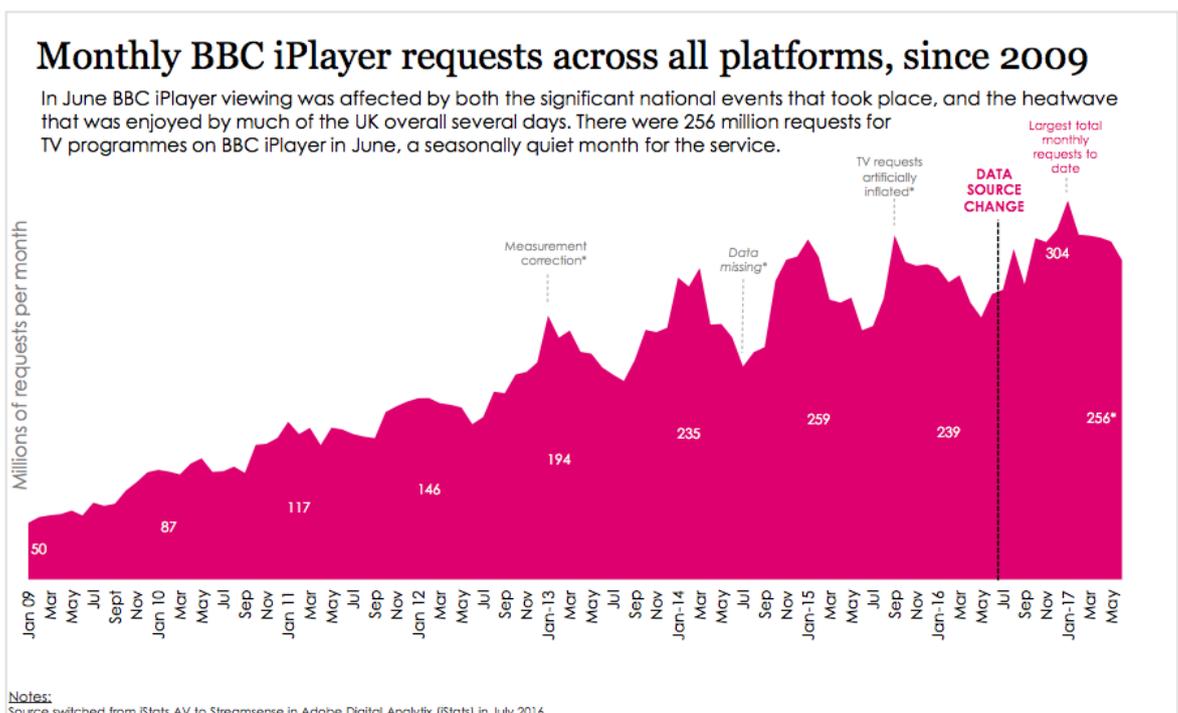
It could be argued that VHS and DVD were types of VOD service, with the likes of LoveFilm and Blockbuster allowing consumers to watch content for a rental fee or monthly payment. However, VOD as we know it now is really a child of the internet or ‘connected’ age we live in, as content is instantly available in a way it was not before.

The development of new technologies has allowed consumers more choice; from where they view the content and what device they use through to when they watch. This trend of increased choice can be seen in other areas but it is particularly stark in the broadcast industry.

### The current VOD landscape in a single word?

#### GROWTH

In almost all areas of VOD we see fast and consistent growth. An example of this is shown in the graph below, which details the growth of BBC’s iPlayer since 2009. With the number of requests doubling over the last five years, and demand continuing to rise, the BBC’s iPlayer is a great example of changing consumer behaviour.



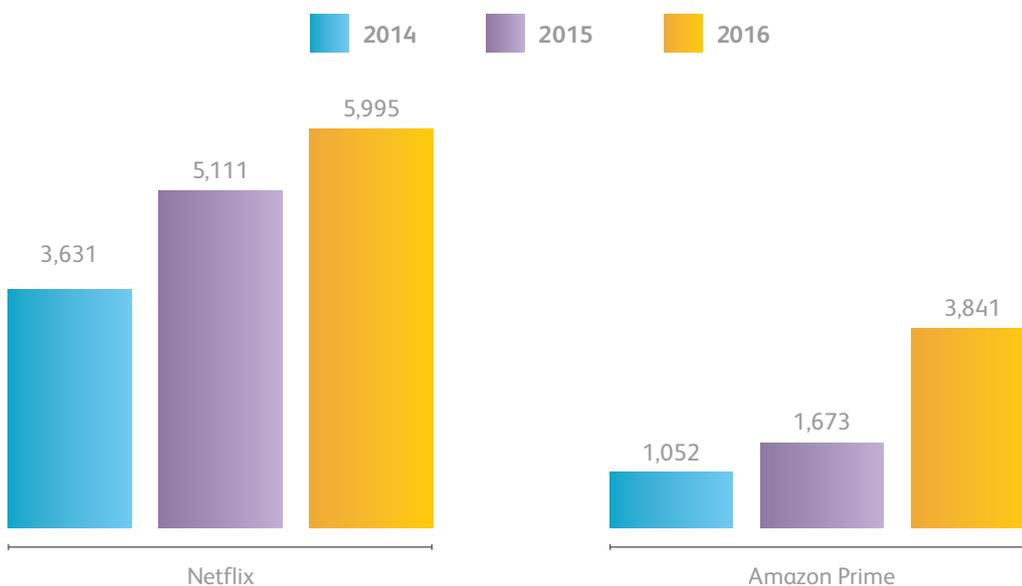
<https://downloads.bbc.co.uk/mediacentre/iplayer-performance-jun17.pdf>

The rise of services such as iPlayer, Channel 4's 'All4' and UKTV's 'UKTV Play' shows how consumer habits are changing. Broadcasters who still heavily support traditional broadcast services are seeing a significant portion of viewing taking place OTT (both linear and VOD) and are focusing money and effort on continuing to attract their target audience to their content.

However, the Silicon Valley 'disruptors' have been making their mark over recent years. YouTube has been around for a while and has built a huge user base that values content variation – a mix of short and longer-form content, for example. It has also been one of the pioneers of mobile viewing.

On the other hand, disruptors such as Netflix and Amazon have come in with an external headwind. Both have been able to sink billions of dollars into technology, advertising and original content, but have not had to make this back (in the short term). Netflix has been able to convince the markets that the value in growing a global user-base through low-cost subscriptions and high-value content will lead to future returns. While on the other hand, Amazon has a colossal e-commerce business to help fund its Amazon Video service (through Amazon Prime). This works as Amazon Prime subscribers spend 4.6<sup>4</sup> times more on shopping through Amazon.

Figure 2.3: On demand/streaming service subscription numbers: 2014-2016 (000s)



Source: Ampere Analysis Note: Data points are from Q4 each year

The growth in these new services (as shown in the diagram above<sup>5</sup>) is significant, with an approximate 3.5x increase in subscribers in just two years for Amazon.

<sup>4</sup> <http://uk.businessinsider.com/amazon-gives-clue-number-of-prime-users-2017-2>

<sup>5</sup> [https://www.ofcom.org.uk/\\_\\_data/assets/pdf\\_file/0017/105074/cmr-2017-uk.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0017/105074/cmr-2017-uk.pdf)

### But what does this mean for the wider video content market?

It means that consumers have a great and growing ability to choose when, how and what to watch; and they are using it. The disruptors have ensured their services are universally available on as many devices and platforms as possible, and have focused on both high content quality and a great user experience.

For other players in this market it means that:

- Consumers expect a great experience within your service
- Consumers can find great content through myriad sources (and have shown willingness to pay for this), so will find it easy to move elsewhere
- Consumers value great content
- Consumers will find you if they are engaged with your content
- Your USP will need to help you stand out in a crowded market

Compared to the rest of the broadcasting and content distribution market, mass market VOD services are relatively new, and this means they are still undergoing huge change. At the time of writing, Disney has only recently released its plans to remove its content from Netflix and launch its own D2C offering. And at the same time, we have Netflix further increasing its spend on original content, promising subscriber growth, but profitability far down the line.

For any broadcaster or content owner looking to launch a VOD service, the market is open. Most content is still viewed via linear broadcast, and the big players in the VOD space are playing a very long-term game. If new entrants take advantage of ongoing shifts in the market through the utilisation of the various dynamic services on offer, and experiment with different models to meet the desires of their consumers, there are great opportunities for them to grow their businesses.

## 2.2 Trends and future predictions

It's impossible to tell exactly what will happen next in VOD, but we can make some educated guesses from what we are seeing.

### 2.2.1 Consolidation

Firstly, we are seeing consolidation in traditional linear broadcast services. Large multi-channel, multi-national broadcasters are reducing the number of linear services they offer whilst buying up smaller broadcasters that either give them access to a complementary consumer base, or a consumer base with which they

do not currently have a relationship. With these consolidations, and the resulting scale of the larger players, we expect that consumers will be able to get a better service from a core number of providers, but will still look to smaller providers for content when offering something different (i.e. niche or targeted content).

### 2.2.2 Regionalisation

Broadcasters large and small, as well as solely OTT service providers, are increasingly focused on offering regional services. For some this may just mean ad replacement in different territories, but for others it could mean variations in the content scheduled/made available between territories, or ensuring subtitles are available in local languages (no matter the content audio language).

The expectation is that this focus will only increase as we see the consolidation

trend continue and more operations become centralised.

This is, and will continue to be, driven by two factors. The first is the increased engagement from consumers in content more relevant to their region, whilst the second is improved advertising revenues. We expect the trend to continue as a result, meaning any pan-regional/global players must ensure they can provide this to be able to compete in a crowded market.

### 2.2.3 Personalisation and targeting

‘Personalisation’, ‘recommendations’, ‘individual experience’ and ‘targeted’ are all buzzwords that reverberate around industry conference halls and get dropped into press statements made by big corporations, but what is the trend likely to be as this market evolves?

The simple answer is that, for all the hype, there are two gems of true value here; consumer retention and targeted advertising.

Netflix has been one of the providers at the forefront of recommendations systems; both in how to expose this to users, but also in the back-end systems powering the decision-making. Netflix has used extended content metadata as well as constant user testing, most of which the consumer is unaware of (such as thumbnail testing<sup>6</sup>). This data gets constantly fed back into the company’s recommendations engines, allowing for an ever more personalised experience for the viewer.

However, a system like this has two problems; the first is a lack of serendipity, and the second is its requirement for huge datasets. A lack of serendipity means that consumers can begin to feel that they are stuck in a recommendations bubble - that they are only ever shown content of one type (genre, style, etc.), and that they are never given something they didn’t know about to ‘discover’. The requirement for large datasets is less of a problem for Netflix (as it is able to collect these), but for smaller broadcasters with either a smaller following or a smaller content library, it can be challenging to define the benefits of such a large recommendations system.

Where does personalisation work, and how will it impact new service? The answer is everywhere, but in different ways. Consumers are coming to expect an ever more personalised experience, but how a VOD service achieves this can vary wildly. For example, large-scale broadcasters/

rights holders that have a long tail of content would benefit hugely by implementing a large-scale recommendations system similar to Netflix’s. However, mid-sized or smaller services would be much better served by focusing on some of the personalisation basics such as:

- Auto-playing the next episode in a series
- Alerting users to a new series of content being released if they have already watched the first series
- Listing content episodes or series not yet complete (but started) by a user
- Providing editorially-based recommendations on a per-programme, series or genre basis
- Offering a ‘picklist’ that allows users to save content to watch later

Now that consumers have a taste of a personalised service, they will only demand more over time. For anyone looking to launch a VOD service, this is an easy win and one that can reap huge benefits as it will both engage the audience and drive them to watch more content. This in turn enables greater advertising revenues, longer subscriptions and more content purchases.

To achieve the personalisation discussed, you’ll need a deep understanding of your consumers, built from captured and analysed data. But there is another use for this data: targeting advertising. Anecdotally, it is understood that targeted advertising can produce 4-12x the CPM (the price paid for each 1,000 adverts viewed) than a non-targeted advert. This can be incredibly valuable for VOD services and is also mutually beneficial as the consumer receives a service more relevant and valuable to them.

Targeted advertising is used by many of the biggest VOD services, including YouTube and All4, and can be crucial to the success of new services.

## 2.2.4 Search and discovery

The ability to search and discover content aligns very closely with the previous comments relating to recommendations and personalisation; these are all focused on ensuring a consumer can find what they want to watch so they remain within the service offered.

The TV guide (electronic programme guide, or EPG) has been immensely powerful in helping consumers find content to watch and leads to a 'lean-back' experience. The lean-back experience will be discussed in more depth under the innovation section, but the question here is how can search and discovery systems help solve the same problem for consumers?

A large proportion of content that consumers watch is not recommended to them by automated systems, but rather by word of mouth, social media or advertising. So, assuming the consumer knows what they want to watch, how can they find it? The first challenge is finding out which platform the content available on; this is where content aggregation platforms can help broadcasters and rights holders get ahead.

However, search systems that pull data from various platforms (such as search on Roku devices), are a straightforward way of exposing content from within a third-party service through an aggregator, whilst keeping the control that a D2C service offers.

Once search is in place, it's a case of determining how

to make the interface accessible for the user - enabling voice search for TV platforms or predictive text on smaller devices are good examples here. Alongside this, the ability to expose accurate content to users is key, and that will rely on improved metadata.

As with a personalised service, the market has already started down this path (and for search is relatively mature) which means it is imperative for any new service to incorporate searching functionality, as well as other technologies to support discovery.

Looking further down the road, we expect that innovations will be made in user interfaces to make it easier for consumers to find content, whilst the prevalence of cross-service search will increase. This will be driven by three factors:

- Device, environment and platform providers will want to keep users engaged
- Service providers will want to expose their content and products
- Consumers will use it
  - » We have seen the rise of solutions that make life easier for consumers and save them time (VOD being one itself). Therefore, a solution that achieves these, and helps broadcasters/rights holders draw in consumers, is more likely to succeed if implemented well



## 2.2.5 Innovation

The VOD market has been driven by innovation; it has been core to the service offerings, the consumer interest and even the content produced.

We firmly believe this trend will continue, and that it will help set apart the services that succeed from those that don't. This is not to say that all services should provide the same innovations, nor always follow a successful innovation elsewhere; but they must innovate in ways that improve the experience for their target audiences.

This section will explore some innovations that may or may not be successful, but is intended to give a flavour of the ideas currently being discussed within the industry.

### A lean-back experience

The great advantage of VOD - vast choice - has also caused one of its greatest challenges: being able to give a lean-back experience to consumers. The EPG and linear channels have achieved this lean-back experience, and one of the aims of recommendations is to support a similar experience. However, scrolling through a Netflix or YouTube-style carousel still requires the user to make a conscious choice about what they wish to watch. For many this can lead to indecision, excessive amounts of time scrolling, and eventually looking somewhere else.

So how does the EPG and its linear channels solve this issue? It could be argued that less choice makes it easier for consumers to settle on watching something, partly because consumers visit the same couple of channels each time they are looking for content out of habit, but mainly because it is just 'on'. The consumer doesn't really feel like they've made a big choice, they've just stopped at a channel that was already there.

The innovation in this space alone can be staggering: different recommendations displays, auto-playing the next episode, auto-playing assets if the consumer stops for too long on the description page, through to personally curated 'channels'. The last of these points deserves some interest.

What if we could create a linear channel per person, or a few per family? We could offer content we know they might like, including content they may not have tried before.

This would effectively follow the idea of Apple Music's or Spotify's 'radio channels', which create bespoke playlists per user based on either a song or their preferences. This hybrid between linear and VOD would be complex to get right, and runs the risk of being a

gimmick that has immense potential but fails at implementation. However, if done correctly it could revolutionise the experience on offer through VOD services by giving choice when desired, but also providing simplicity to the consumer.

### Interfaces and Interaction

The greatest revolution to the TV interface since its creation is arguably the remote control. Without this, the EPG would never have come about, nor the complex user interfaces we have today, or even the proliferation of so many channels - could you imagine 'tuning' manually to each one through a knob or button on the TV itself?

So, what comes next?

If you look at the devices on offer that focus on VOD (Apple TV, Roku, Amazon Fire, etc.) we see the widespread emergence of voice control. And with the launch (and relative success to date) of smart devices like those within Amazon's Echo range, we see intelligent voice-activated support becoming increasingly accepted and used. There is great beauty to voice-activated controls; they allow for complex messages to be quickly relayed and are incredibly natural (once you get used to speaking to an inanimate object) – much better than keyboard entry using left, right, up and down keys.

The advances made in artificial intelligence (AI) and machine learning (ML), as well as cloud services, have enabled voice technologies to become more accurate and, therefore, more useful. However, there remains a question of where to pull data from. If a consumer is searching for the latest 'Game of Thrones' episode within the Amazon Fire interface, they don't want to perform one search in each app until they find where the content is available. So, this leads us to believe that the prevalence of cross-service search will increase greatly in years to come. For broadcasters and content owners, the fear is a loss of control of the interface to their consent, but the risk is not being found by consumers when they search for content.



## 3. The technology building blocks



## 3.1 Overview

In this technologically-rich industry, it should come as no surprise that for each problem you need to solve, there are at least a couple of solutions to consider. However, knowing what problems need solving, and then how to go about solving them, can be challenging.

This section aims to give an overview of the main technology blocks that are required

for a VOD service and what they achieve. In the majority of cases the most cost-efficient and straightforward solution will be to partner with a few supporting providers. In many cases, you will find that if you have a technology provider helping you with some of the core functionality, they will be partnered with or can recommend providers for the other elements.

## 3.2 Content management

Content management will mean many things to many people, but here we will be focusing on content management prior to processing or delivery.

Once content is created (captured and edited), it is likely to be passed between a number of parties that may make small alterations, but once it's with you, it must be stored and available for use. You may also need to schedule, augment, alter, check and prepare your content before it is ready to be sent onwards.

This is a key part of how you retain control of your content and ensure that everything is prepared and ready for onward use. There are many technology partners in this space,

each either filling a specific niche (e.g. content scheduling) or providing a processing or delivery solution. Before making a decision, you will need to understand:

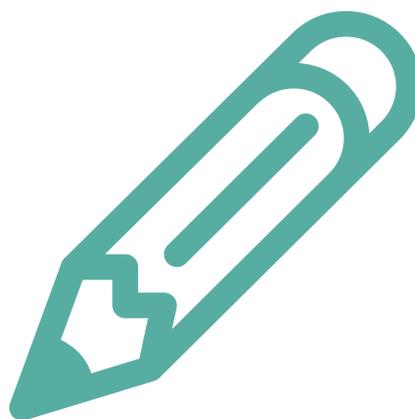
- The state in which your content will be when you receive it from the creator
- What is needed by the end platform (either a third party or your own platform)
- What compliance checks you need to perform
- In what ways you need to augment your content - for example:
  - » Subtitles
  - » Metadata augmentation
  - » Clipping or the addition of bumpers

### 3.3 Content processing

Content processing is one of the most pivotal technology blocks, and your provider in this space is likely to be one of your most important. Although it is possible that this could be done in-house, the technical complexity is likely to mean that it will be far more cost-efficient and reliable to partner with a service provider.

If you are solely running a D2C service, your content processing partner will be able to ensure that all your content, as well as its associated auxiliary items (subtitles files through to metadata) is transcoded, processed and packaged ready for the delivery system you will be using.

However, in most cases, even if you are running a D2C service, you will have requirements to send your content to a number of end platforms. This could be to the likes of the Sky platform in the UK in the event that you have an agreement in place, but could equally be a subset of your content being sent to Facebook or YouTube to help drive consumers to your platform, or to take advantage of their advertising products. These end platforms have highly stringent technical specifications for delivery of content and ensuring that content is processed in line with these specifications will be the job of your service provider.



## 3.4 Content delivery and syndication

Depending on the service you are offering to consumers, the complexity of this part will vary. If you are offering service solely through third-party platforms, those platforms are likely to take on the complexity of delivering the content to the consumer. However, if you opt for a D2C service, you will need a technology provider to support you here.

Third-party platforms will have a defined specification for content delivery and the likelihood is that your content processing partner will deliver your content to these platforms as part of the service that they offer you.

If you are operating a D2C service, content delivery and syndication will require a number of technologies, and possibly a number of partners.

To manage where content needs to be routed and who can access it, you will need a partner that can take the place of an Online Video Platform (OVP). They are likely to support you in your back-office systems as well, as discussed later, but will primarily ensure that your content is available when

required, and available only to those with the rights to view it. They will do this in partnership with your content processing partner, as encryption and digital rights management (DRM) systems will need to be enabled by both parties.

Additionally, you will need to work closely with one or more content delivery networks (CDN) as they will be the ones that carry your content as close to the consumer as possible, and will ensure every consumer gets the content they request as fast as possible in a cost-effective manner. A CDN is very efficient at taking an asset once, caching it and making it available as needed, all at a huge scale (a process only managed in-house by a very select few, including Netflix).

Choosing a partner for content delivery and syndication is complex, but if you have made a decision on your content processing partner, they will be able to support you in this as they will come to the table with experience of working with these companies for other services. And, as noted earlier, they may be able to meet some of these requirements as part of their service.

## 3.5 User interface

This section will briefly review the user interface (UI) requirements you will have if you are launching a D2C service. If you are pursuing a solely platform-based approach, this section will not relate to you.

Your UI is likely to be one of the most exciting parts of launching your service, and should be a key area of focus.

The interface you provide for consumers is critical to the success of your service. Netflix has stated that after 90 seconds<sup>7</sup>, users are likely to leave a platform and go find content elsewhere. Given that the route to content is via the interface, a good experience is about so much more than just pleasing aesthetics.

Your interface must take a huge number of factors into account, a select few of which are listed below:

- Aesthetics, simplicity and consistency of the design itself
- Brand recognition
- The device through which this interface will be seen
  - » Web browser
  - » Mobile
  - » Tablet
  - » TV
- User inputs
  - » TV remote
  - » Touch

- » Mouse or keyboard
- » Voice
- Navigation throughout the experience
- Dynamic scaling of the interface
- Bandwidth constraints impacting load time
- Backwards-compatibility (or lack thereof) for older devices
- Playback technology

The list above is only a subset of the total number of factors impacting your design, even before we begin to build the interface itself. A team of UI and user experience (UX) designers will be key to ensuring that a design can be put together that meets all of these needs. To then take this and deploy a functional interface that can be populated by your content will require an extensive team of engineers, product owners, business analysts and developers.

Depending on your exact position, you may wish to bring this process in-house. Doing so would allow you to continue developing your service after launch in an iterative fashion. For the majority, this is prohibitively expensive, but there are a large number of third parties that can support the design and development of interfaces.

Once again, choosing a UI partner can be challenging if your background is not in this space, but your other partners should be able to advise and support you with this.

<sup>7</sup> <http://variety.com/2016/digital/news/netflix-ab-tests-image-optimization-trick-1201674325/>

## 3.6 Back-office systems

Although unlikely to be the most exciting area of focus, these systems are critical to the success of your service, and therefore should not be neglected. Depending on your exact service, your back-office system requirements will vary significantly, but in this section we will review some of the main and most commonly required systems.

### 3.6.1 Subscriber/customer management system (SMS/CMS)

A system that can manage a database of your customers' details, billing information, subscription information and analytics results will be pivotal to running a D2C service. If you are running a fully ad funded service you may not think this is critical, but to be able to power targeted advertising and personalisation systems, these types of system will be required.

When defining this system, you will need to ask yourself questions like:

- For each of the functions within my service, what information do I need from my customers?
- What regulatory requirements will be put on me regarding the collection, processing, storage and deletion of this data?
- How will I manage billing?
- How will I manage support issues (either billing-related or service-related)?
  - » Do you need to develop a system that has an interface for support staff?

- How will customers be able to manage the information I have stored?
- What analytical data do I want to capture from my users to power other systems or business decision-making?

Depending on your requirements, it is possible to build these services from the ground up, enabling the greatest level of control and bespoke features. However, this can quickly become costly due to regulatory requirements and the number of external systems you will need to integrate with. Additionally, systems that allow you to bill customers directly are incredibly costly to develop, so integrating with a third party to support this element will likely be required, no matter which route you take.

The partner supporting you in distribution and syndication is likely to be able to handle some of this subscriber management, which may help ensure a streamlined system that can be quickly deployed at a reasonable cost.

## 3.6.2 Rights management

Very tightly linked to both your content management as well as both processing and distribution is the rights management of your content. The two angles to this are that you need to ensure you comply with the rights you have bought from the content creator (unless you have full rights over the content), and then you must ensure that only those allowed to access the content can access it.

There are tools - or you can develop tools - to support you in managing the rights you have over your content. This includes determining the regions in which content can be shown, and how long rights in each area last.

Depending on the size and complexity of your content library, there are some heavyweight tools and providers in the market that can aid in automation and integrate directly with your technology and service providers further along your content's journey. There are also some low-tech options that would work well for new entrants with relatively straightforward rights and content structures.

The partner you choose for processing or management will be able to advise you on what type of system you may require here, and what the most cost-effective solution will be.

Once the back-end systems know when and where your content is available, the focus should shift to ensuring that you can enforce this. If you are running a free service (either ad-funded or funded through another revenue stream), you will want to ensure your content is available to your consumers, but you may have regional rights restrictions, and may also want to ensure your content can't be pirated. For pay or restricted-access services you will need to be able to ensure that only users with the rights to access your content can indeed access it. To support this, you may employ a number of technologies, including:

### Encryption

- In most cases (excluding a few specific industry sectors), the encryption of content should be used to ensure it cannot be pirated once made available publicly
- Encryption can be added even to freely available content and is a more straightforward solution than a full DRM system; however, for high-value content, DRM should be investigated

### Digital rights management (DRM)

- DRM technologies are used extensively to protect content and ensure that only those with the rights to access the content can do so
- All DRM systems use encryption to protect the content itself and then have additional sophisticated protection around the 'key management' of the decryption keys required to access the content
- There are a number of DRM systems to choose from, but your delivery platform or device will restrict this and you may have to use more than one if you operate an extensive service
- If you are working with a platform partner, they may operate this, but your content processing partner may have to integrate with them in some way

### Geo-blocking

- Geo-blocking stops people outside of a specific region from accessing content, although it can regularly be bypassed through the use of virtual private networks (VPN)
- This is advised on all D2C services (platforms will operate this themselves), and is normally handled well by your CDN

### 3.6.3 Metadata management

Metadata (data about data – commonly content in this sector) will be key to driving a number of systems, such as recommendations, but also in enabling a rich UI. Keeping control and managing this metadata can get complex no matter whether you are working with end platforms or running your own D2C service.

It is convention for your content and metadata to travel together between your

various partners and suppliers to avoid orphaned information. It is likely that one or more of your providers will augment and alter your metadata as part of their service to you. In some cases, this will be to meet the need of an end platform, but you may also want some bespoke data for your D2C service added, or even tracking information. It is important that in-depth discussions with your partners and suppliers relating to this are not neglected.

### 3.6.4 Recommendations and personalisation

Recommendations and personalisation systems are discussed in the previous section, but integrating a technology block that is able to pull data from a number of your other systems (meaning deep integration with each of them) should be kept in mind while choosing partners

and defining your system requirements. Although there are many providers in this space, it is important to be able to articulate your aims of implementing such systems so you can pick the right provider, but also to ensure they implement their system in the most optimal way for you.

### 3.6.5 Analytics

Understanding your audience, how they use your service and the experience they get at a granular level is one of the greatest advantages of internet-provided services. It will allow you to continually develop, improve and monitor your service, as well as make informed business decisions.

However, the generation of data without actionable outcomes should be avoided. To ensure your investment in analytics provides you with a real return you must ensure you closely partner with an analytics provider that can understand your business and your purpose. This will allow them to tailor their analysis to you and then work closely to improve this over time.

Some of the things you should be thinking about are:

- How do I define a good service?
  - » No buffering during playback
  - » Press play to first frame time
  - » How long it takes a user to decide on a piece of content
- Before people leave my service, what have they been doing?
  - » Have they just had a poor video playback experience?
  - » Have they been unable to find content?
- What content is watched most?
  - » Is this because it gets exposed to customers more often?
  - » Is there an external factor affecting this?
- How do people find content in within my service?
- What is the impact of any change that I make?

### 3.6.6 Customer support

This section is aimed at those of you looking to launch a D2C service as, if you are making your content available through an end platform, they will handle this for you.

With any D2C service, some level of customer support will be required. This may be as simple as an office-hours email address to a full call centre team, available 24/7. This will be partly determined by the scale of your service, but also the type of service offered. For example, if you operate

a paid-for service, it is a requirement of most (if not all) payment providers to ensure consumers have a way of getting in contact for support in the event of failure. Additionally, poor service in this space can have a hugely detrimental effect on your churn rate as well as the reviews you are given by your customers. A bad PR event can be caused by poor customer service, which can impact your business significantly, especially if you are a new entrant.

### 3.6.7 Service-specific

It is not possible to write an exhaustive list of other technology blocks that you may want to integrate into your service, and over time this list would just grow. However, as an example, if you look to make your service searchable by third parties, you will need a system that exposes this. You may choose to make this public so that anyone can access it, or you could give access to a limited number of systems (e.g. Roku and

Apple TV). This would help consumers find your content and service, but would require an additional technology block.

When beginning down this path, it is not imperative to be able to scope all of these in detail, but it is important to understand that additional blocks may be needed and who can help you in defining these.



## 4. Steps to set up your service

Throughout this document, we've provided plenty of information on VOD, while discussing the process of launching your own service. In this section, we'll review the high-level steps that you should take when thinking about launching a VOD service.

## 4.1 Purpose

As with any endeavour, the first and most important question is 'why'?

What is driving you to launch your VOD service? Answering this question will help you to clearly articulate your vision to the people you'll need alongside you to support its launch and success.

As discussed earlier, there are a number of reasons you could have for launching a VOD service: to support an e-commerce platform, to promote a political or religious message, or to entertain or inform an audience through video content. Everything you do, and the decisions you make through the next few questions will all pivot back to this.

A clear and well-formulated purpose is what will enable you to review the various business models and monetisation options (which will be detailed shortly).



## 4.2 Target audience

The question of who your target audience is will likely have been answered in part during the formulation of your purpose; however, it is still imperative that your primary target audience is clearly identified.

Once identified, your target audience will inform every decision you make going forward; but for this to be effective, time must first be spent on understanding your audience's needs, desires, interests and habits.

Let us take for example a new SVOD service with a target audience of children from the age of 4 to 15. Some of the questions that should be asked are:

- What will differentiate us from the likes of BBC iPlayer, Netflix and NowTV Kids?
- How do my target audience access content today?
  - » Devices they use
  - » How they navigate the user interface
    - \* For a kids' market, a heavily graphical interface is likely to work better
    - \* Using images of their favourite characters is likely to make it easier for them to navigate
  - » Would speech recognition work for slightly older portion of this audience?
- Given the range of ages, should the service be split into two or three sub-sets within the interface?
- What types of content are popular with my target audience?
  - » Different types of content for the 2-3 distinct age groups within this spread
  - » Is there content that would be attractive to the parents who are paying for the service (such as educational or nature-based content)?
- How do I promote my service to my audience?
  - » Social media? But focus on the 12+ age group for this
  - » Advertising on other children's channels
  - » Advertising to the parents
- Do they download content to take with them, or watch only while on WiFi/cellular?
- What level of parental control is required?
  - » Limiting the usage time per day?
  - » Blocks on changing the subscription settings?
  - » Blocks on content with violence or pushing teenage subjects?

This list is by no means exhaustive, but shows how the target audience heavily influences the questions that need to be asked. The answers to these questions allow you to make the correct decisions for your business in the next few steps.

### 4.3 Monetisation and platform choice (the business model)

There's an ever-growing list of business models to consider when it comes to monetisation of content (or anything else for that matter) on the internet. However, there are a few tried-and-tested models, as discussed earlier in this document. Some of the general benefits and challenges to each are noted in the table overleaf, but this will vary depending on your exact business, customer, market and competition.



Monetisation Model	Benefits	Drawbacks
Direct-To-Consumer (D2C)	<ul style="list-style-type: none"> <li>• Full control of your content and distribution</li> <li>• Direct link between your brand and your content</li> <li>• Commercial benefits are kept within your business</li> <li>• Easier to signpost for loyal customers</li> <li>• Supports non-content based business models (i.e. could support e-commerce)</li> <li>• Some ‘white-label’ options are coming to market to support quicker launch times</li> </ul>	<ul style="list-style-type: none"> <li>• All costs are borne by your business</li> <li>• Driving customers to your service will require heavy advertising, whilst signposting outside of your service is complex and/or expensive</li> <li>• A regular renewal of content will be required to keep customers returning</li> <li>• This is the most technically and regulatorily complex option</li> <li>• The analytical data you can get access to can be incredibly powerful for decision-making</li> </ul>
Platforms* (e.g. Sky or Netflix)	<ul style="list-style-type: none"> <li>• Likely to be part of a wider carriage deal that can provide steady, reliable revenues</li> <li>• The platform may be willing to support advertising and other associated activities</li> <li>• Costs such as UI design and content distribution are handled by the platform</li> <li>• The platform may manage customer subscriptions, support and associated activities (dependent on agreement)</li> <li>• A successful platform will help expand your reach</li> </ul>	<ul style="list-style-type: none"> <li>• Some (or even most) of the control over your content is handed over to the platform</li> <li>• Growth is likely tied to the overall success of the platform (which you may not have much control over)</li> <li>• Your brand is likely to be ‘watered down’ within the platform</li> </ul>
Other platform approaches** (e.g. Amazon Video)	<ul style="list-style-type: none"> <li>• New and innovative models can help engage customers and hit market segments not yet tapped</li> <li>• These platforms will likely cover the UI and distribution fees</li> <li>• Depending on the platform in question, revenue share models may be available to reduce risk</li> <li>• These platforms are seeing huge growth in customers</li> <li>• Billing and customer support is likely to be included</li> </ul>	<ul style="list-style-type: none"> <li>• The audience is likely to be of a set demographic so may not work for all business models</li> <li>• You are no longer in full control of your brand</li> <li>• Growth is likely tied to the overall success of the platform (which you may not have much control over)</li> </ul>
Social media (e.g. Facebook or YouTube)	<ul style="list-style-type: none"> <li>• The social media giants are currently courting the content industry as they see this as a route to continued growth</li> <li>• The addressable audience is one of the largest in the world</li> <li>• They are trying new monetisation models and are willing to experiment</li> <li>• This can be used as an incredibly powerful signpost to another service (e.g. your D2C service)</li> <li>• You can drive free advertising and promotion of your content through your loyal customers</li> </ul>	<ul style="list-style-type: none"> <li>• Revenues from their advertising models can be unpredictable</li> <li>• Analytics to define what works and what doesn’t can be hard to come by</li> <li>• You can easily be lost in the noise of social media if you do not have a clear strategy and a loyal following</li> </ul>

\* ‘Platforms’ in this context should be taken to mean the likes of Sky or Netflix who buy content either for use under your brand (such as a carriage deal), or under their own for distribution through their platform

\*\* ‘Other platforms’ in this context should be taken to mean new business models whereby content is made available to a consumer through a platform, but new commercial models around either the carriage or consumer access (e.g. subscriptions) is innovative in some way

## 4.4 Content

The phrase ‘content is king’ never seems to lose its potency. We have seen the rise of huge businesses such as Netflix and Amazon in a very short period of time; however, their focus always returns to ensuring they have the best content. Without this, no VOD service can succeed and prosper.

As with deciding on your business model, the key to obtaining or commissioning the best content is to deeply understand your customer base; viewers’ needs, desires and interests. Additionally, the continued review - using analytical data - of the content on offer to your customers and their usage patterns will allow you to make ever better buying decisions.

Depending on the service you operate, the amount of content you need in a back archive, or to be released each day/week/month/year will vary. For example, a D2C SVOD service targeting the 24-30 age group may require a strong back archive to support binge watching, whilst also requiring a range of new content on a weekly/monthly basis to allow for new discoveries and to keep avid viewers entertained. Whereas children’s services will require daily content to retain their attention, but also some classics available for repetitive re-watching.

Hopefully not surprisingly, content is going to be critical to the success of your service. However, it is so dependent on the type of service you wish to offer to your customers that the right answer will be different for every business.

## 4.5 Regulation

Regulation within the UK is defined by Ofcom, which has taken over the management of this from ATVOD. The full details of your regulatory requirements are on Ofcom’s website<sup>8</sup> along with supporting documentation and examples. The regulation in other countries and jurisdictions will vary and will be published by the government or related department.

There can never be adequate substitution for good and open legal advice, and so it is always advisable to retain the advice of a legal professional with experience in this industry. In addition, the VOD market is still in its infancy in many ways, and therefore the regulation of it is likely to change and evolve over time, so it is imperative that you review the laws and regulations of the countries and territories within which you operate on a regular basis.

<sup>8</sup> <https://www.ofcom.org.uk/tv-radio-and-on-demand/information-for-industry/on-demand>

## 4.6 Technology providers

Your technology providers are going to be the cogs within your machine. They will ensure your service launches in the way you require, and that it operates in the best possible manner.

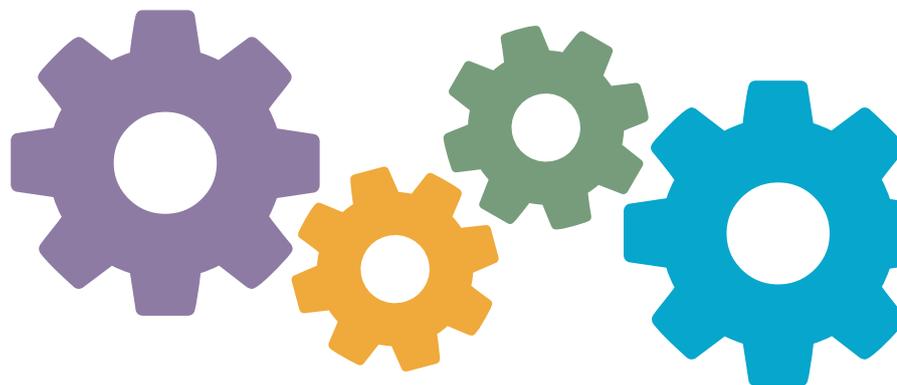
Earlier in this document we went into some detail regarding the variety of technology providers you may need depending on the service you wish to operate. When beginning your search, it is helpful to have a clear purpose and goal in mind, but also to remain open to the varying approaches and innovations of each provider. You will find that most (if not all) of the technology providers you meet will bridge two or more of the technology blocks we discussed earlier, and each will have their own key strengths.

It's likely that the core functions of content storage, processing and delivery/syndication can be handled by one or two providers. It is advantageous to spend time early in your process working with, and learning the values of, these providers as they will be crucial to your success. If you can move

from a provider to partner relationship with these companies, they will be able to support you in the process of bringing in other providers.

To help you decide on your technology providers, below are a few key questions to answer:

- Are they interested in a partnership, and not just in being a supplier?
- Can they buy into your vision and purpose?
- Do they have a good track record of delivering for others?
- Are they able to support the level of service you require?
- Do they have the right people, and do they invest in their people?
- Are they going to keep your content safe and secure?
- Are they willing to support you in reviewing your other partners objectively?
- Will they support you in supporting your customers?



## 4.7 Marketing

One of the biggest challenges when launching a new service of any kind is marketing to consumers: ensuring they know where you are and what you are offering. Getting this right is going to be one of the most challenging parts of launching a service as it is what will drive consumers to it.

For the majority of broadcasters or rights holders (i.e. those without very strong

brands or direct customer contact details), it would be beneficial to bring in an external marketing team that specialises in either your target audience or this market. This document does not go into depth on marketing as this will be highly specific based on your target audience, as well as the service you are looking to launch. However, you can find out more about D2C marketing [here](#).



## 5. Summary

The VOD market is growing fast. Now is a great opportunity to launch a service and ride the wave of consumers moving to new providers that offer them flexibility and great content.

## 5.0 Summary

Launching any new business venture is a challenge, and the process can be daunting. However, this document has given you a head start in understanding the steps to take, and the building blocks you need. Below are some key themes to take away with you:

1. Start with your purpose – your vision for your service
2. Understand the market you are operating in, and where others have succeeded
3. Ensure you understand your target audience
4. Understand your route to monetisation
5. Align your content with your target audience, but also with the environment it will be in when viewed (e.g. short-form content is viewed far more on social media)
6. Partner with key technology providers as they can support your service technically, as well as supporting you in your decision-making



For more information, or to discuss the opportunities the VOD market holds for you, contact Arqiva at [sales@arqiva.com](mailto:sales@arqiva.com) or call +44 (0)1962 823 434.