



Digital Transformation in the German Sports Broadcasting Industry

A QUALITATIVE STUDY ON THE IMPACT
OF THE DISRUPTOR “OTT”

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Abstract

Title: Digital Transformation in the German Sports Broadcasting Industry - a qualitative study on the Impact of the Disruptor “OTT”

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The study investigates the impact of the OTT (over-the-top) technology for the German sports broadcasting industry. For this purpose of the study, OTT is defined as streaming technology that bypasses traditional distribution and offers content directly over the Internet anywhere at any time. All potential OTT initiatives from different stakeholders that impact the industry are examined.

The incumbent technology, traditional TV, is challenged by innovative business models that provide sports content over-the-top via the Internet. Pure OTT channels such as DAZN and digital giants such as Amazon entered the sports rights market forcing old leaders to rethink their business model and to adapt to the new technology.

Besides of changing consumer requirements, different market dynamics such as the digitization of sports rights, the trend towards D2C (direct-to-consumer), niche targeting and features around digital fan experiences push OTT in becoming the leading sports consumption technology.

The fast-paced and vibrant market movements in the sports media industry make estimations difficult. The findings from qualitative and quantitative findings identified the consolidation of the market to a concentrated number of content aggregators operating in the premium sports right segment as most the likely scenario for the industry in 5-10 years. This trend goes along with a starting content endgame initiated by top rightsholders who implement D2C business models for secondary markets. The major change in the market will be the end of market fragmentation to a more consolidated sports rights market led by major D2C and OTT platforms.

Keywords: *Sports broadcasting, sports media, sports rightsholders, OTT, streaming platforms, content aggregation, direct-to-consumer platforms, long-tail platforms*

Sumário

Título - Digital Transformation in the German Sports Broadcasting Industry - um estudo qualitativo sobre o impacto do disruptor “OTT”

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O estudo investiga o impacto da tecnologia OTT (over-the-top) para a indústria alemã de transmissão desportiva. Para este efeito do estudo, a OTT é definida como uma tecnologia de streaming que ultrapassa a distribuição tradicional e oferece conteúdos diretamente através da Internet, em qualquer lugar e a qualquer momento.

A tecnologia já existente de televisão tradicional é desafiada por modelos de negócio inovadores que fornecem conteúdos desportivos através da Internet. Os canais OTT puros como o DAZN e gigantes digitais como a Amazon entraram no mercado dos direitos desportivos, obrigando os antigos líderes a repensar o seu modelo de negócio.

Além da modificação das exigências dos consumidores, diferentes dinâmicas de mercado, como a digitalização dos direitos desportivos, a tendência para D2C (direct-to-consumer), a segmentação de nichos de mercado e as características em torno das experiências digitais dos adeptos, impulsionam a OTT a tornar-se a tecnologia de consumo desportivo líder.

No entanto, as conclusões dos resultados qualitativos e quantitativos identificaram a consolidação do mercado para um número concentrado de agregadores de conteúdos que operam no segmento dos direitos desportivos premium como o cenário mais provável para a indústria dentro de 5-10 anos. Esta tendência vai de par com um jogo final de conteúdos iniciado pelos titulares de direitos de topo que implementam modelos de negócio D2C para os mercados secundários. A grande mudança no mercado será o fim da fragmentação do mercado para um mercado de direitos desportivos mais consolidado, liderado pelas principais plataformas D2C e OTT.

Palavras Chave: *Sports broadcasting, mídia esportiva, detentores de direitos esportivos, OTT, plataformas de streaming, agregação de conteúdo, plataformas diretas ao consumidor, plataformas de cauda longa*

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1. Introduction

The sports broadcasting industry has undergone different readjustments revolutionizing the way, how content is distributed. This includes the shift from black-white broadcasting to color, the transition from analogue distribution, to cable and finally to satellite, which allowed the live-broadcasting of sporting events. Digital broadcasting and IPTV was offered before the market coverage was extended from free-to-air offerings to subscription-based pay-tv channels (Chalaby, 2016). Today, the domination of traditional TV has ended “meaning that the structural integrity of national televisual systems has been eroded” (Hutchins, Li and Rowe, 2019).

With the emerge of the OTT (over-the-top) technology, sports fans are now able to follow sports through the internet live or on-demand (Hutchins, Li, & Rowe, 2019). Both, pure OTT channels and traditional broadcasters, who go digital, have adapted their services.

An OTT platform provides a product or service over the Internet and bypasses traditional distribution. The content is not distributed through a multiple-service operator (“MSO”) but rather “on top of” the current setup (Gimpel, 2015). Users log in to the website and directly consume the content, which is supplied by the platform itself. Internet-based platforms enable fans to follow sports content not only live but also on-demand from different devices such as tablets, phones or laptops simultaneously for a fixed fee.

Big sporting events such as the Olympics or the FIFA Worldcup are not anymore in the leading hand of traditional TV channels. The latest example represents the media right allocation of the Olympics in Germany. For decades, the public TV channels ARD and ZDF acquired the rights to broadcast the Olympics. For the last Olympics in Pyeongchang, public channels started to offer online live streaming channels to extend the flexible broadcasting options for their viewer base. However, for the 2020 Olympics, the biggest OTT sports streaming platform worldwide, DAZN, will be broadcasting the Olympics for the first time in 2020 after acquiring the rights from the global TV giant Discovery.

Currently, OTT accounts for \$25 billion in yearly global revenues that are mainly generated by a small number of American big players such as Netflix or Amazon with the tendency to grow substantially. The growth rate amounts to more that 20% per year (BCG, 2016).

1.1 Problem Statement

Today's consumers are developing an increasing lifestyle towards “anywhere, anytime, any device (AWATAD)” and therefore request to consume content on-demand, which challenges service providers to offer continuous and flexible access from different devices (Gimpel, 2015). Moreover, the demand after high-quality and options for personalized, uniquely tailored content is increasing (PWC, 2019a). Therefore, sports associations need to progress to satisfy the changing needs of sports fans “to compete against new forms of entertainment and any other form of leisure” (PWC, 2019c).

OTT with its streaming and mobile video is an opportunity to satisfy the changing consumer needs. From a business perspective, OTT is also a technology that saves media costs and enables players to scale up their reach and viewership by taking advantage of direct content distribution via OTT.

OTT has an exceptional growth potential due to an increasing demand after bundled video streaming services (PWC, 2019a). Global OTT revenues of US\$38.2 billion in 2018 and the forecast of doubling by 2023 (PWC, 2019b) underline the growth projections. As the OTT market is increasing, traditional broadcasters are challenged and aim at sustaining their leading position in the broadcasting landscape (Deloitte, 2018a).

The spread of OTT in other industries such as the Music industry with Spotify or the Movie industry with Netflix shows that OTT has the power to reshape an overall industry and is expected to become the dominant source of consumption (Matrix, 2014; Marshall, 2015). Due to the market changes, digital media platforms are considered “as the major disruptors in the future TV and video market” (Deloitte, 2018b).

OTT is also a disruptor for the sports broadcasting industry as it challenges traditional broadcasters to rethink their current strategy to remain competitive and profitable. However, the technology has been commercially underwhelming to date (PWC, 2019c).

The potentials of OTT also lead to a rethinking of sports rightsholders in regards to their strategy on how to distribute their media rights and a potential application of OTT (PWC, 2019c). This raises important questions for sports rights owners on how they approach their own digital media distribution strategy and the possible use of OTT platforms.

Pure OTT channels such as DAZN are expanding globally, invest heavily in the acquisition of media rights and are continuously increasing their revenues (Hutchins, Li and Rowe, 2019).

Different stakeholders such as Pay-TV channels and telecommunication companies also started to invest into OTT and entered the market with different business and subscription models. Traditional channels reacted with corresponding online services and started to offer live sports

content via the internet. Their strategy secured their position as favored sports channel of Germans (PWC, 2018).

The overall question is to which degree OTT will transform the sports broadcasting industry in Germany as the technology is still in its early stages? Is the technology going to reshape the overall sports media environment in the long-term? To which degree are traditional sports media players adapting and how will rightsholders distribute content to their viewers in the future?

1.3 Purpose and Research Questions

The fast-paced and vibrant market movements in the media industry make estimations difficult (Deloitte, 2018b). Although there are some future projections how OTT will further evolve in the future, limited information is available for the sports broadcasting sector specifically. Moreover, “there has been little study of the impact of OTT and the changing TV landscape on the various domestic production ecosystems” (BCG, 2016). Therefore, the following thesis analyses the effect of the spread of OTT platforms in the sports broadcasting industry in Germany. The following research questions will be analyzed:

RQ1: Will the OTT industry disrupt the German sports broadcasting industry?

RQ2: How will the sports broadcasting industry look like in the future once the disruptor has taken full effect?

1.4 Academic and Managerial Relevance

The following master thesis has the goal to validate the impact that OTT will have on the industry as the future of the business model OTT is uncertain (Hutchins, Li and Rowe, 2019). The thesis aims at reducing the uncertainty and will offer an industry outlook of the technology in Germany. Analyzing the past behavior, level of innovativeness of the major stakeholders and current industry trends in the German sports broadcasting industry, will lead to estimations about the future development of the market players in regards to the disruptor OTT.

The goal is to equip existing and traditional marketers with strategic recommendations on how to deal with the OTT technology and how to invest in the technology in the future. The results will also offer existing OTT platforms and rightsholders the opportunity to analyze their current business model critically and question their market offerings.

1.5 Scope of Analysis

The thesis analyses the strategic disruption of OTT within the sports broadcasting industry without focusing on the marketing and consumer perspective. OTT will be defined as technology enabling the direct distribution of content via the Internet while all stakeholders influenced by this technology will be considered. The research and industry analysis will focus

on Germany as a geographic area. Progressive adopters of the OTT technology such as the United States or United Kingdom will serve as an orientation to explain some developments. The thesis will be targeting all types of sports broadcasting media across all devices to analyse the overall effect of OTT technology for the sports broadcasting industry. The analysis will focus on the spread of OTT among premium sports rights as they have the strongest impact on the economic development. All streaming trends around e-sports will be excluded.

1.6 Thesis Structure

This thesis is divided into four separate chapters. The next chapters will provide a literature review on previous studies about the development of the German broadcasting market and the influences of OTT. The second chapter covers the methodological approach of this thesis.

Afterwards, the gathered data will be analyzed. The first research question will be answered based on the outcomes of the primary and secondary analysis. The second research question will provide a scenario analysis regarding the future spread of OTT in the German sports broadcasting industry.

The discussion, conclusion and limitations of this study will be presented in the last chapter.

2. Literature Review

The literature review will cover the current state of knowledge about the German sports broadcasting industry and the disruptor OTT. As the chosen topic bears innovative and disruptive aspects, the literature will offer an overview of the disruptor for the overall broadcasting industry, which will then be applied to sports broadcasting specifically. The stakeholders and main players in the German sports broadcasting market are presented concerning their current trends and past strategies before giving an overview of OTT as a technology and content aggregation format.

2.1 The Sports Media Landscape

The sports broadcasting industry has undergone many technology-driven developments and changing patterns of its viewers. Traditional and commercial broadcasters shaped the commercial sports consumption for decades and were considered as viewers' primary (Hutchins, Li and Rowe, 2019). Today, there is a tendency towards the Internet substituting TV as a medium to consume live sports.

The TV content global value chain framework (GVC) of Chalaby (2016) will be applied to the German sports broadcasting industry to present the major stakeholders in the market with the corresponding value creation process. The framework divides the media value chain into three sections, which are (1) Production, (2) Distribution and (3) Aggregation with its individual stakeholders in each step. Those three phases have to be passed before the sports event will be finally available for the viewer.

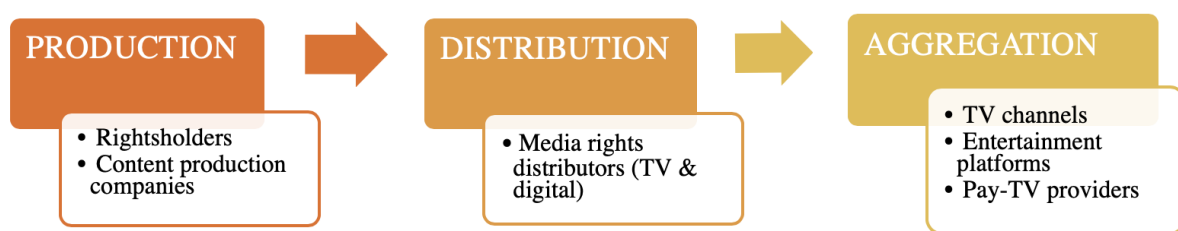


Figure 1. TV content global value chain and main stakeholders (own representation)

Traditionally, rightsholders and production companies as traditional professional content creators are responsible for the audio and visual content creation (BCG, 2016). They generate expensive, high-quality productions that are licensed later on to the aggregators (Chalaby, 2016). In the sports media environment, the main sports associations sell their broadcasting rights to the production companies who managed the needed arrangements for the broadcasting and content production (Chalaby, 2016). The ultimate goal is to produce content that generates

enjoyment around the sporting event for a specific audience. The content distribution infrastructure ensures the acquisition and delivery of the content to the sports fans leading to the desired media coverage.

Media rights distributors coordinate between content production and aggregation (Chalaby, 2016) and are responsible for delivering the rights to broadcast sports to different media operators. This independent allocation part in the media value chain was developed with the emergence of traditional broadcasters who needed content for their channel but were not able to produce everything on their own. By acquiring broadcasting rights, distributors face commercial risk. (Chalaby, 2016). The level of attractiveness to acquire broadcasting rights for sports events depends on the price and the consumer demand. The content delivery is provided by satellite operators who develop a user interface to make it available for the customer.

With the ultimate content aggregation phase, relevant content is bundled and offered to the viewers. National broadcasters were the first offering to consume commercial sports and considered as viewers' primary choice for decades (Hutchins, Li and Rowe, 2019). Broadcasters own the needed equipment and personnel at the event venue realizing the content delivery to the mass audience outside the venue. The technological developments caused different market structures for the production, distribution and aggregation landscape.

2.1.1 Content and Digital Rights on Rise

The content production sector is growing (Chalaby, 2016) as players notice the opportunities of digitalization. "The number of content creators, and the market value of content are all higher than ever before" resulting in a 'golden age' for the industry (BCG, 2016). This is mainly due to the rise of digital formats in media consumption (Deloitte, 2018a) and the extension of traditional, linear formats (Burroughs and Rugg, 2014). Different digital devices such as tablets, smartphones, and smart TVs are readapted to deliver sports content to the fans from anywhere at any time with high-speed internet (EY, 2013; Deloitte, 2018a). Therefore, rightsholders increasingly diversify the media rights that are available for conglomerates. Different formats are created for multiple channels with specific requirements "including television, interactive television, format (or remake), video-on-demand, or new media" (Chalaby, 2016).

Moreover, more and more media production companies belong to large media conglomerates and act on a global, not national scale (Chalaby, 2016; Hutchins, Li and Rowe, 2019). More than 60 media companies were acquired by other national players between 2014 and 2016 (KPMG, 2018) reflecting the increasing power the market leaders, who are concentrating their core value-adding competencies and collect additional enhancing capabilities through external providers (Oliver, 2013).

“Content creation is becoming less expensive, reducing barriers to entry. It is easier than ever to make high-quality, compelling content” (BCG, 2016). Content owners create their own pieces of content along with additional players, who appeared in the production ecosystem of sports media. “One must consider the full range of content producers, not only the professional enterprises that serve the legacy TV ecosystem” (BCG, 2016). The emerge of the internet also altered the definition of content creators. Professional amateurs (e.g. bloggers or special channels on social media platforms) and non-professional amateurs (conventional consumers, content communities) take advantage of the unlimited content space online and aim for attention. They create their own content on social media and in other online communities (BCG, 2016).

2.1.2 Multiple Aggregation Formats

With the content aggregation phase, relevant content is bundled under one brand and offered to larger viewer audiences (Chalaby, 2016). Technological developments led to the emergence of new delivery concepts that exist besides traditional TV channels. Due to changes in the market, old leaders face threats from innovative business models that provide sports content over-the-top via the internet (Deloitte, 2018b). The different business models can be subordinated into 4 main categories.

<p>Linear (free-to-air): Public TV channels Commercial TV channels</p>	<p>On-demand / non-linear (free-to-view): Websites and live-streaming services of TV channels Free streaming websites Multichannel networks Social Networks</p>
<p>Linear (pay-to-view): pay-TV platforms and channels</p>	<p>On-demand / non-linear (pay-to-view): Subscription-based OTT platforms Subscription-based platforms of leagues or clubs Subscription-based platforms of pay-TV channels</p>

Table 1. Content aggregation business models in sports broadcasting (Chalaby, 2016)

Linear providers (free-to-air) represent the traditional broadcasters, which are either financed by license fees and taxes (public TV channels) or funded through ads and sponsorships (commercial TV channels). Public channels have a contract with the government and their task is to show content that reflects the public interests. The past strategic behavior of traditional TV channels is shaped by technological advancements and the adaptation towards the upcoming technologies including the transitions from satellite, to digital and IPTV (Chalaby, 2016). Broadcasters are aware of the upcoming, digital changes and started to adapt the integrity of their business models. With the implementation of omnichannel broadcasting, viewers are now able to watch TV from different mobile devices. Moreover, producers are implementing

strategies that are combining the different screens used to improve the experience of viewers (EY, 2013), e.g. by offering live chats, social media content or additional perspectives besides the actual broadcasting screen. Even though the new revolution of TV has already started, it is crucial to pinpoint the continuing developments (Hutchins, Li and Rowe, 2019).

On-demand, non-linear content (free-to-view) describes online content that is supplemented by advertising or license fees. The websites of public and private TV channels feature different content and channel-owned streaming services that belong to this category (Chalaby, 2016). In this case, TV channels keep the linear market offering and extend it via an own OTT platform. Multiplatform strategies are a solution for linear providers to react to the emergence of pure OTT platforms. Without the multichannel approach, content is distributed only via TV. Multiplatform strategies consider many distribution approaches such as mobile, digital and TV that are embedded in content-related websites or on-demand video services (Doyle, 2015). TV channels started to innovate to sustain their leading position in the market as the primary source of sports consumption (Deloitte, 2018a). They are expanding and diversifying their offering (Hutchins, Li and Rowe, 2019) in regards to their linear as well as non-linear portfolio.

Moreover, other video platforms, which are mainly owned by specialized content creators belong to this category (Chalaby, 2016). Users simply log in and can consume the content live and on-demand as highlights. Social media channels are relevant in regards to their live video offerings and live streams (Chalaby, 2016).

The category of linear (pay-to-view) providers is captured by pay-TV channels who generate their revenues through a subscription-based business model. They are operating in a market that is still growing. According to the Association of private media in Germany (VAUNET), the revenues of pay-tv providers in Germany amounted to 3.5 billion Euros with an estimation to grow to four billion Euro in 2019 (Statista, 2019a).

On-demand (free-to-view) platforms enable viewers to access content live and on-demand through Internet streaming. The on-demand (free-to-view) category is based on the subscription video-on-demand (SVoD) business model that requires a subscription to access the platform. SVoD takes advantage of the OTT (over-the-top) technology that offers providers the opportunity to offer live and on-demand content via the Internet from different devices at any time (Gimpel, 2015). Within the last decade, many on-demand services entered the market (Chalaby, 2016). The global and pure OTT sports platform DAZN – initially launched in 2016, is the biggest player offering a wide range of different sporting events including the Champions League, Olympics, and the Bundesliga. Moreover, due to the increasing attractiveness of streaming along with its disruptive characteristics, rightsholders launched their own platforms

resulting in television blackouts (Burroughs and Rugg, 2014). Platforms owned by the rightsholders are Direct-to-Consumer (D2C) platforms. They build up a direct relationship with their viewer audience and offer content to their audience directly (Nielsen Sports, 2018).

Also relevant are the pay-tv channels with their own OTT platforms that complement their TV offerings with permanent online access to all events.

The increasing market penetration of OTT goes along with the TV ‘platformisation’ - a business model that makes use of the digital infrastructure that is available for distributing audio-visual content (Donders and Evens, 2018).

2.2 OTT Technology

OTT (over-the-top) is a streaming technology that offers viewers the opportunity to bypass traditional services and delivers “video content through fixed or mobile broadband Internet connections instead of over the broadcast TV spectrum or dedicated cable, fiber or satellite networks” (BCG, 2016). This technology allows the consumption of content ‘over the top’ anywhere at any time via the Internet.

Spotify and Deezer were the first OTT platforms in the music industry with Netflix as a corresponding OTT platform in the film industry. Their overall business model is based on OTT technology. OTT platforms aggregate content that is delivered through a company’s communication infrastructure as pay-tv or Internet service provision (Gimpel, 2015). Those platforms were launched within the last decade and now belong to the biggest digital enterprises worldwide (Marshall, 2015).

Although OTT channels are the first players that are associated with OTT, the technology can be applied by all kinds of broadcasters. Traditional and pay-tv channels use OTT for their digital offering but OTT also offers multiple content creators the opportunity to operate in the media landscape. Besides traditional professional content producers, OTT offers bloggers and non-professional amateurs a stage for creating their own content (BCG, 2016).

Through OTT, customers have access to a wide range of digital content through different mobile devices such as tablets, phones or laptops simultaneously. The content is not distributed through a multiple-service operator but rather “on top of” the current setup. Users can directly consume the content, which is supplied by the platform directly. In some cases, the content distribution stage is eliminated, if platforms directly acquire the rights from the corresponding sports league or event or produce the content themselves.

Therefore, OTT can be seen as replication of conventional consumer video offerings in the media market (BCG, 2016). The technology is an enabler of scale effects that are not possible with other content aggregation business models, e.g. the amount of available content, the

flexibility of consuming and placing the content as well as the flexibility in terms of pricing models and customers offerings (BCG, 2016). This thesis provides a broad perspective towards all potential OTT initiatives from different stakeholders that can impact the sports broadcasting industry in Germany.

3. Research Methodology

The following chapter carefully explains the methodological structure taken during the given research process and describes the data collection from both, quantitative and qualitative results to answer the research questions.

3.1 Research Approach and Strategy

Academic literature in the field of OTT in sports broadcasting is narrow from a managerial perspective as the technology is still in its early stages and continuously progressing. Therefore, it is difficult to make validated projections about the sports broadcasting. This offers the opportunity to constitute to new knowledge and to collect current insights about the topic. After conducting a literature review that outlined the latest developments within the industry and its main stakeholders, the analysis part studied insights and future trends about OTT and its effect on the sports media industry. By evaluating the qualitative insights from industry experts and secondary sources, RQ1 explains why OTT is currently disrupting the sports broadcasting industry in Germany. RQ2 deals with the future market development once OTT has taken full effect in the market. The results were based on evaluations of the experts and up-to-date secondary data such as industry reports, scenario analyses and analyses of comparable industries who are already further developed in regards to OTT.

3.2 Data Collection

Generally, two research methods are applied for this research. In a first step, secondary data and primary data will be analysed to answer RQ1. In a second step, RQ2 will be analysed by means of a mixture of qualitative primary data collection and qualitative secondary data collection to be able to predict future developments of the industry. Also, secondary quantitative data will be part of the analysis.

3.2.1 Secondary Data Collection

Firstly, a review of academic concepts via literature was applied to consolidate the current state of knowledge about the current developments within the sports media industry in Germany due to OTT as well as existing studies dealing with the future of the industry. Secondary data in the form of academic literature, scientific papers and industry projections were used in order to answer RQ1 dealing with the general question if OTT disrupts the German sports broadcasting industry. To ensure actuality, solely literature from 2010 to 2020 was considered for the analysis of OTT.

3.2.2 Primary Data Collection

The main part of the analysis was developed based on the outcomes of semi-structured interviews with different experts in the field of OTT. The experts selected vary in regards to their role and type of stakeholders in the industry to ensure a holistic perspective about the topic and to avoid a biased analysis. The interviewees consisted of OTT brands - both big and small players, pure OTT channels as well as an industry consultant.

Semi-structured interviews were conducted to consider the interviewee's expertise, attitudes, impressions and projections regarding the future development of the industry (Jennifer, 2012). This type of sub-category ensures an open interview environment and offers the participants the choice to decide, which content they consider as most relevant and interesting for the topic. Consequently, the exploratory approach opened the discussion for new and undiscovered opinions (Britten, 1995).

The qualitative interviews were relevant for both research questions. A summarized version of each interview is attached in the Appendix.

Interview	Stakeholder	Name	Company	Approx. Revenue (€)	Position
1	OTT provider	Patrick Mostboeck	Sportradar	335 million	Commercial Director OTT
2	OTT provider	Daniel Cebrian	Vimeo OTT	160 million	Sales Director EMEA
3	Pure OTT channel	anonymous	DAZN	278 million	Head of Strategy DAZN
4	Consultancy Firm	anonymous	Sports consultancy	750 million	Consultant Sports Business Advisory

Table 2. Primary qualitative data from qualitative interviews

3.2.3 Consolidation from Expert Panels and Interviews

Moreover, qualitative data was studied by means of qualitative primary data from industry-specific panel discussions and interviews that were held during the 2019 OTT Summit in Madrid from November 19th – 21st. The innovativeness of the subject outlines the relevance of the insights from this event that hosted approximately 40 expert speakers. The primary qualitative data from the OTT Summit interviews were an additional source of insights to Enhance the insights from different industry stakeholders. The results provided results answering both research questions.

Type	Stakeholder	Name	Company	Approx. Revenue (€)	Position
Panel Discussion (P1)	Rightsholder	Micky Lawler	WTA		President
	OTT Channel	Veronica Diquattro	DAZN	278 million	EVP Southern Europe
	Broadcaster	Sergio Oslé	Movistar	48 billion	President
	Rightsholder	Craig Hepburn	UEFA	2,79 billion	Head of Digital
Panel Discussion (P2)	Rightsholder	Aneesh Madani	IOC	~1,3 billion	Global Head of Digital Partnerships
	Broadcaster	Louisa Clark	BT Sports	27,9 billion	Head of Business Development & Broadcast Partnering
	Social Media Platform	Simone Tomassetti	Twitter	3,19 billion	Head of Sports Partnerships Southern Europe
	Video production company	Gareth Capon	Grabbyo	2,5 million	Chief Executive
Panel Interview (P3)	Rightsholder	Frank Arthofer	Formula 1	1,83 billion	Global Head of Digital and Media
Panel Discussion (P4)	Research firm	Alexios Dimitropoulos	Ampere Analysis	-	Senior Analyst
	Research firm	Minal Modha	Ampere Analysis	-	Head of Consumer Reseach
Panel Interview (P5)	OTT Provider	Gerhard Borchers	Airtango	-	CEO

Table 3. Primary qualitative data from expert panels and interviews

4. Data Analyses and Discussion

4.1 Introduction

The following chapter contains the data analysis of RQ1 and RQ2. Finally, a discussion and limitations of the results will be provided.

4.2 Disruptiveness of OTT in Sports Media

The subsequent discussion focuses on RQ1 dealing with the question, how OTT will disrupt the sports media industry. In the first step, the different tiers of sports rights were classified. Moreover, the relevant stakeholders who are influencing the further development of OTT in sports media will be identified. A classification of primary stakeholders, secondary stakeholders and influencers will be done. The second part presents current and future industry dynamics as a base for the answer of RQ1 and the potential scenarios that are covered by answering RQ2.

4.2.1 Differentiation of Sports Rights

The sports content that is produced, distributed or aggregated differs in its value depending on its price and popularity. The sports industry divides among top tier (premium) rights, secondary and third tier rights that are available in the market (I4.4, I2.3).

Top rights are the most expensive rights and characterized by a global and national interest in the population (I3.1). In Germany, 92,5% of the traded sports rights are allocated to soccer (BMW, 2018) with Bundesliga leading the premium right section and followed by the international leagues of the football associations FIFA and UEFA with their rights for the World and European championships. Moreover, the Olympic Games are part of the top category of sports rights. Due to the high demand in the market, there is a high willingness to pay for the consumption of top tier content. The rightsholders within this category are called ‘top rightsholders’.

Second tier rights have a lower status than the top rights but are generally liked by a majority of the population. This accounts for disciplines such as handball, basketball or winter sports in Germany. Also, international leagues, which account for premium in their home country, can have a secondary relevance abroad. One example is the Premier League, which also attracts significant fan bases in Germany (P4.6).

Third tier disciplines are requested by a specific target group and address niche markets. Mainly second and third leagues belong to this category such as the third soccer league, the second basketball league or niche sports disciplines like ice-hockey or horse riding.

Moreover, it is also important to differentiate between live, on-demand or highlight rights (I2.3). Generally, live rights belong to the category of top tier rights as they are exclusive and timely constraint (I4.1). Live rights of top tier events represent the most valuable sports rights. However, short content formats are gaining more and more relevance especially for Generation X and Z, who is timely constraint asking for flexibility in consumption (P5.1). Highlight and on-demand rights for premium events can be still considered premium as they are highly valued by the sports audience.

An essential part of the thesis is to identify the level of OTT disruptiveness in the German sports broadcasting industry. As the impact of the spread of OTT is higher at the top tier level than for third tier disciplines, it will be crucial to analyze the application of OTT for the top tier level while not underestimating the potential for OTT in niche markets. For Germany, this will mainly concern soccer as the most attractive sports discipline. A general tendency is that top tier rights gain in relevance and all secondary rights stagnate (I3.2).

4.2.2 Stakeholders

Stakeholders are a group or an individual who affects or is affected by an organizations' results (Freeman, 1984). Among all relevant stakeholders in the sports media market, it is crucial to differentiate between (1) primary stakeholders, who drive industry change, (2) secondary stakeholders, who follow the change and (3) influencers who have an effect on how stakeholders adopt the change. Porter's five forces method will be applied in order to present the current situation of the main stakeholders and to outline the competitive situation.

4.2.2.1 Primary Stakeholders

The strategies of primary stakeholders drive the overall sports media industry change with lasting effects on the market structure, technological standards and consumer habits. In Germany, the major stakeholders are represented by top rightsholders of sports media rights such as federations and clubs who decide about the channels to broadcast their event. "Unlike first-run quality drama, sport is relatively inexpensive to produce and is distributed in the same way, but the acquisition of rights to its most popular forms is challenging, irrespective of the platforms on which it is delivered" (Hutchins, Li and Rowe, 2019). Therefore, the allocation of intellectual property rights in sports defines the power of the different players who sell and acquire them (Hutchins, Li and Rowe, 2019).

The rise in content availability through the emerge of the Internet has strengthened the demand after high-quality content (BCG, 2016). In Germany, first league soccer rights capture the most valuable sports. A 85% price increase for the last right allocation period 2017/18 – 2020/21 (DFL, 2017) outlines the increasing demand of content aggregators due to the high popularity

within the population. A total of 4.64€ billions in revenues were generated for the first soccer league in Germany (DFL, 2017). Another example are the media rights to broadcast the FIFA World cup on a national level, which increased by more than 900% within the last 20 years (Hoehn and Kastrinaki, 2012). Although ‘Bundesliga’ captures the highest valuable domestic sports right, the international leagues LaLiga (Spain), Premier League (UK) Seria A (Italy) and Ligue 1 (France) are also considered secondary tier rights, which are very attractive and experience a high demand in the German market.

As major decision-maker, rightsholders will fundamentally guide, if OTT will grow as a content aggregation format or not. The market situation outlines that rightsholders of top tier sports media rights currently have a business advantage that offers them negotiation power (I3.7).

The second group of primary stakeholders is represented by content aggregators who make the content available for the viewer. Currently, pay-tv channels are the most powerful aggregator in Germany as they own the major sports rights and are still growing (Statista, 2019b). The biggest European Pay-TV channel Sky generated total revenues of around 19.2 billion USD in 2019 (Statista, 2020). Sky Germany acquired the majority of Bundesliga rights for the current period 2017/18 – 2020/21 (see Table 4) followed after Eurosport Germany, who acquired the rights for Friday matches.

Type:	Rights:	Channel:
Pay-TV	Friday 20:30	Eurosport
Pay-TV	Saturday 15:30 Conference	Sky
Pay-TV	Saturday 15:30 Single Matches	Sky
Pay-TV	Saturday 18:30	Sky
Pay-TV	Sunday 15:30 & 18:00	Sky
Linear	Bundesliga Free	ZDF

Total revenues for DFL: 4,64€ Billion

Table 4. Bundesliga rights bundles in Germany 2017/18 – 2020/21

The rights to broadcast the Champions League in Germany from 2018 – 2021 are also fully owned by Sky Germany, who sublicensed a big part of the matches to DAZN.

Pay-tv operators start to challenge OTT platforms by offering their services on-demand to their viewers (Waterman, Sherman and Wook Ji, 2013). Their platform innovations have the objective to sustain their leading position in the market (Deloitte, 2018a) through OTT products such as Sky Ticket or Eurosport Player. This enables subscribers of pay-tv channels to either follow the content via TV or online.

Besides pay-tv channels, traditional channels such as ARD and ZDF and commercial channels such as RTL and SAT1 have to be considered. They were leading the industry before pay-tv and OTT entered the market. With the production of first-class content, traditional broadcasters

are known for “a well-funded ecosystem of studios, production houses, and professional talent” (BCG, 2016). Since the prices of sports broadcasting rights have increased substantially, public channels have problems to justify the expenditures into sports live content. There is a dilemma between the increasing fees and their function to serve the interests of the population (I3.9). Moreover, there is a law in Germany that ensures that top sporting events with German participation have to be broadcasted by free-to-air channels to a certain degree. Therefore, public channels will continue to play a role in the sports broadcasting landscape (I3.9). For example, Telekom acquired the overall rights to broadcast the Euro 2021 (European soccer championships) with their OTT channel but will be forced to give away a part of their rights to free-to-air channels such as ARD or ZDF due to legislative requirements (I3.9).

Due to the changes in the market, the incumbents face threats from innovative business models that provide sports content over-the-top via the Internet (Deloitte, 2018b). The pure OTT channel DAZN exhibits an aggressive commercial strategy that differentiates from competition through their extensive multi-sport content offering including several top rights (Hutchins, Li and Rowe, 2019). In Germany, DAZN sublicensed the ‘Friday Bundesliga package’ from Eurosport for the Bundesliga seasons 2019/20 and 2020/21 (see Table 4) illustrating their growing influence in top content. Their global strategy creates synergies between the markets giving DAZN the opportunity to use content, data and technological resources for multiple markets (Hutchins, Li and Rowe, 2019). Besides of top tier rights, DAZN broadcasts more than 8.000 Live sports events per year and partners with different rightsholders such National Basketball Association, National Football League, FIBA and FIS. The OTT player records a growing subscriber base (more than 9 million subscribers worldwide).

Besides of traditional broadcasters and pure OTT sport platforms, big streaming platforms and digital giants such as Amazon and Netflix have to be considered as major stakeholders.

Even though their current investments into sports rights are limited, they have huge financial and technological resources plus an extensive network that can be easily leveraged in the sports media sector (I1.2). Amazon currently follows an attentive rights acquisition strategy of top rights, “calibrated to draw subscribers into Amazon’s closed ecosystem of retail offerings and consumer technology products” (Hutchins, Li and Rowe, 2019). Currently, Amazon selects specific rights in order to strengthen the AmazonPrime platform and gathers user data to grow their e-commerce business (I2.6). Their business model is based on recommender systems, which track user data to optimize the information about each customer or fan. One example is the acquisition of 16 Champions League matches for the upcoming period 2021/22 in Germany.

The investment of AmazonPrime into the Champions League removed the entire pay-tv business from this asset leading to an exclusive sports broadcasting right for Amazon.

Telecommunication companies are communication infrastructure specialists for OTTs helping them reach customers and to ensure streaming quality (Chalaby, 2016). However, Telecommunications are more than OTT suppliers as they are becoming media organizations and OTT's themselves (I2.2). In Germany, Telekom launched their own OTT channel called MagentaSport in 2011, which exclusively broadcasts the third soccer league in Germany as well as the first league of basketball and ice-hockey. As the biggest team sports OTT platform in Germany, MagentaSport also acquired the entire media rights for EURO 2024.

4.2.2.2 Secondary Stakeholder

Besides platforms dealing with premium sports rights, there is a growing market potential for long-tail platforms focusing on the transmission of regional and niche sports content (I1.2, I2.9). The strong relationship between local fans and teams is a driving force to offer OTT livestreams for secondary leagues (P5.2) "to a fragmented but devoted audience" (BCG, 2016). As sports is a fiercely regional experience with loyal fan bases and relatively low acquisition costs, long-tail OTT channels gain further relevance (I1.2). Long-tail platforms usually broadcast secondary or third tier content with an basic OTT platform that offers free features. Therefore, long-tail platforms generate lower turnovers than top OTT channels.

Social Media platforms such as Facebook, Twitter and Youtube are relevant tools for rightsholders and aggregators to create additional monetization of content and to reach additional audiences (P2.4). 25% of the millennials are not reachable through traditional media, whereas social media attracts this target group. Social media can help to close this gap by spreading sports stories channels through social platforms. Moreover, enhancing content through social media offers rightsholders and OTT channels the opportunity to boost subscription on their own platform and thus refinance previous rights acquisitions (P2.6).

Additionally, white label OTT platforms who are selling OTT solutions are considered as secondary stakeholders. Their customers are rightsholder, sports leagues or smaller OTT platforms who need a backend solution for their platform. Depending on the requirements of their customers, they offer customized platform solutions.

4.2.2.3 Porter's 5 Forces Analysis

The aim of Porter's 5 forces model is to assess the degree of competitiveness in a certain industry. The model is based on the principle that a company's strategy should consider the industry dynamics structures by exploiting the opportunities and managing threats (Bruijl, 2018). The following figure illustrates the degree of impact of each stakeholder's actions on the degree of competitiveness of the industry. The following analysis will be conducted from the perspective of traditional TV channels to outline the arising competition from innovative business models.



Figure 2. Porter's 5 forces analysis of the German sports broadcasting industry

Rightsholders act as suppliers with their media rights that are offered to broadcasters. Due to the high demand after top tier sports rights of content aggregators and broadcasters, rightsholders can ask for high prices (I3.2). Sporting events happen live and fans request the broadcasting in in-real time. Therefore, sports rights are valuable, unique and the substitution through alternative content is almost impossible. The uniqueness of live sports content underlines the strong impact of rightsholders. Being the owner of valuable sports content, rightsholders have a strong bargaining power over content aggregators and a strong impact on the overall competitiveness in the industry. (I.2, I4.4). Top rightsholders further will gain relevance with the spread of OTT and can also put pressure towards broadcasters with their option to penetrate direct markets (I3.2).

Content aggregators including TV channels are interested in buying the broadcasting rights. With an increasing number of operators in the market, the offers become cheaper and the prices for sports rights higher. This challenges content aggregators as they have to scale up their resources, content and investments into technology constantly to compete in the market (P1.2).

Due to the strong power of the rightsholders, the impact of aggregators' actions on the industry competitiveness is low as they have to deal with the market offering that is defined by the rightsholders.

The number of substitutes has increased with the emerge of OTT channels and the initiatives of big digital giants such as Amazon who also entered the sports broadcasting market. Those players represent a realistic substitute that is increasingly favored over traditional TV. Pure OTT channels such as DAZN and digital giants such as Amazon belong to the category of substitutes. Whereas DAZN follows a multi-sport approach, Amazon acquires specific highlight rights (e.g. the Champions League in Germany) in order to retain existing Amazon Prime consumers or to acquire new premium users for their platform. As the percentage of OTT as distribution format is increasing, the impact on the market competitiveness is high.

OTT did not only boost competition but also removes different barriers to enter the market (BCG, 2016) leading to a high threat of new entrants. "OTT is an opportunity for new competitors to enter the market without a lot of investments...therefore, the dynamics in the market and the competition will continue" (P1.1). Moreover, players with a digital competence who were traditionally operating in other sectors, entered the sports broadcasting market with different business models (I3.2). Several digital companies such as Netflix, Google or Facebook did not enter the sports broadcasting market in Germany, yet. However, the low market entrance barriers and their strong financial resources would enable them to easily enter the market. The new market players pursue the goal to gain a significant market share by offering competitive prices for their subscription services. The size, power and financial resources of digital giants who could enter the market with different business models can have a strong impact on the competitive situation in the market as they have the power and resources to reshape the allocation of sports rights in the industry.

The German sports broadcasting industry is characterized by a strong rivalry among existing competitors due to the high number of broadcasters who are betting for sports rights. The switching costs among broadcasters are low because the criteria to choose an offer is based on the content. Players who own valuable content of top tier rights will experience strong fan loyalty. However, as the rights offering change depending on the duration of the right period (I3.1), fan loyalty is only stable during the rights period. Therefore, the competitive rivalry of content aggregators, both OTT and TV channels who aim to acquire top premium rights, highly impacts the competitive situation in the industry.

4.2.2.4 Influencers

OTT as technology is influenced by governmental regulations, which impact the further spread of OTT. The following legislative areas have a relevant influence: data security rights, competition law and corporate taxation (Arthofer *et al.*, 2016).

Data security rights play an important role because OTT as technology is built upon how to use data. Decisions of an OTT player are driven by data justification (Hutchins, Li and Rowe, 2019). In Germany, the disadvantage is that the government historically was a 'control state' (I3.8) and therefore, there are a lot of data security regulations that hinder OTT players to progress. The value creation with data happens abroad boosted by Amazon, Apple and other digital giants (I3.8). Therefore, national telecommunications such as Telekom are forced to compete against OTT service providers while complying with strict regulatory requirements. They argue that equality of competition is necessary and this goal can only be achieved if all service providers are regulated equally instead of having different sets of rules (I2.7).

Competition law plays an important role in terms of regulations for strategic partnerships and the bundling of online products (I4.4). The high fragmentation in the market and the high sums that content aggregators need to pay for sports rights led to the establishment of strategic partnerships. By subcontracting specific rights to competitive broadcasters, the competitors can share the costs of rights acquisitions and divide the audience (I4.4). This is a useful strategy to consider if the revenues from a specific sports league are underperforming. However, the choice of consumers is limited, if the market players buy different rights, put the rights on the same pay-wall together and increase the subscription fee (I4.4). New legislations are announced to limit the strategic partnership options to ensure fairness for consumers.

Corporate taxation is affecting as big digital giants such as Facebook or Amazon, have their headquarters in tax havens such as Ireland. They pay substantially fewer taxes compared to other OTT players (I1.4), e.g. DAZN who is based in the UK or German Telecommunication companies and public TV channels. Due to tax advantages, digital giants have a competitive advantage over companies such as Sky and DAZN, which are legally bound to tax laws of countries where top sports rights are produced and distributed (I1.4).

Telecommunication companies influence the OTT market as broadcasters with their own OTT platforms but also as Internet providers, who cover the connectivity of the overall market. The further implementation of 5G in Germany will have a substantial, positive impact on the OTT market offerings and the streaming quality as 5G antennas offer 10 times better Internet coverage than current 4G antennas (I1.4). With this technology installed throughout the countries, OTT providers will be able to deliver more complex content to more users.

4.2.3 Market Dynamics around OTT

A market dynamic analysis will provide a more comprehensive impact analysis of OTT on the sports media industry and provides a framework for the future scenarios. The trends were selected based on a categorization of the identified topics on a scale from 1 to 5 in regards to their impact and relevance for the industry (See Appendix 1).

4.2.3.1 Digital Rights Extension

”In terms of revenue streams, digital media rights are expected to be the key driver of overall growth, with growth rates of 9.7% expected over the next 3-5 years” in Germany. (PWC, 2019c). This is mainly due to the rise of digital formats in media consumption (Deloitte, 2018a) and the extension of traditional, linear formats (Burroughs and Rugg, 2014). Different digital devices such as tablets, smartphones, and smart TVs are able to deliver sports content to the fans from anywhere at any time with high-speed Internet (EY, 2013; Deloitte, 2018a). Therefore, the rights packages for digital channels were developed, which enlarge the indispensable rights for license arrangements (Chalaby, 2016). Rightsholders increasingly diversify the media rights that are available for conglomerates and offer different packages for both, digital and traditional rights. Due to bundling and the increasing rights amount, the costs for broadcasting rights substantially increased over the last years (Hutchins, Li and Rowe, 2019). For example, the media rights to broadcast the FIFA World Cup on a national level increased by more than 900% within the last 20 years (Hoehn and Kastrinaki, 2012). When comparing the rights packages offered by DFL for Bundesliga for the different periods, the digital media packages were expanded including match-in clips, highlights and on-demand content (DFL, 2020). Different formats are created for multiple channels with specific requirements “including television, interactive television, format (or remake), video-on-demand, or new media” (Chalaby, 2016). The increasing percentage of digital rights in sports broadcasting supports the growth of OTT as a technology that can be applied in order to activate digital rights for scale.

4.2.3.2 Market Fragmentation vs. Strategic Partnerships

During the last years, the diversification of sports media rights caused a high degree of fraction in the German sports media market (P1.1, I1.2). Many leagues distributed their rights across different providers. For example, if fans want to watch the Bundesliga in Germany, they currently need four different subscriptions to be able to view all matches as the rights are split up among different players. The market fragmentation exists for different top tier rights, where rightsholders experience a high demand for their rights and can exploit the revenues by selling different right packages and split them across different players.

However, from a consumer's perspective, this situation is not satisfying and sustainable as it creates barriers that have to be solved before sports fans are able to consume the full, desired content (P1.2). Moreover, there is a risk of subscription fatigue of fans that occurs, if the willingness to pay for a certain sports event is exceeded (P1.2) resulting in churn rates of channels.

Also, from a business perspective, the revenues from top sports rights are often below expectations and it is hard for the aggregators to balance the spending for the rights. Many players follow business cases that are not profitable (I4.6) and overpay the rights. For instance, DAZN is challenged with the costs of broadcasting rights increasing substantially faster than the revenues (I2.5, P4.4).

Due to this disbalance, the broadcasters decided to subcontract their rights to other suppliers (I3). It is a win-win situation for both parties. Strategic collaborations are a solution for broadcasters to increase the content portfolio on their platforms and strengthen their aggregator position (P1.1). Reselling rights helps to balance the investments from rights acquisitions. DAZN and Sky integrated the Eurosport Channels 1 and 2 with their Bundesliga rights onto their platforms. Telekom bought Bundesliga content of Sky. The same applies to highlight rights that are passed on to different media partners. Moreover, DAZN states that collaboration with mobile providers would be interesting to benefit from the technological resources and distribution while providing Telecommunications with the content from their platform (P1.1). In the highly fragmented sports broadcasting market, OTT is a flexible technology that complements and supports the sublicensing of different rights across the different players without the need for an additional back-end technology. However, strategic partnerships do not reflect an ideal market position (I4.2). Channels only enter strategic partnerships, if their revenues derived from the sports rights are not satisfying (I4.2).

The overall challenge for the future is to make OTT frictionless "while also retaining the value in the market place, which is having broadcasting partners" (P3.1).

4.2.3.3 Improving Fan Experiences

In the digital age, sports fans request tailored content based on their individual preferences, motivations and timings (PWC, 2019b). Therefore, technologies that improve fan experiences were identified as important sources of revenue generation (PWC, 2019c) and main innovation driver (I3.4). In comparison to other industries, the sports media industry is far behind due to a non-frictionless experience for fans (P3.1). By distributing sporting events by means of OTT, it is possible to apply technologies that improve customized services and offer a better experience for sports fans. This is mainly due to fan and usage data that can be gathered and

analyzed by OTT platforms. This includes every step of the customer journey, before and after the match. For example, features that allow fans to go back within the live stream, match analytics as well as different payment methods (I3.4) or highlight clips after the match.

With the further spread of 5G, fan experiences via OTT will become frictionless with fewer interruptions and a better streaming quality (I4.8).

4.2.3.4 D2C

“In all kinds of markets, the Internet has eliminated the constraint of shelf space” (BCG, 2016). As a result, content creators can access audiences directly through the Internet and the constraints and barriers of content distribution have been reduced (BCG, 2016). Also in sports, there is an increasing trend of big and small federations or clubs to consider the monetization of direct markets by creating their own OTT distribution format (I2.2, I3.2). Direct-to-consumer platforms (D2C) eliminate the distribution stage through direct market penetration, which can lead to additional media revenues and help to reach further reach and viewership. Rightsholders benefit from a direct relationship with fans and get access to valuable information about fans through their interaction with the platform (I2.2). Through the commercial exploitation of fan insights, rightsholders have the opportunity to develop innovative sport formats (PWC, 2019c). The decision to create an own D2C OTT platform depends on the ratio between media right revenues generated through selling media assets to external broadcasters and the potential revenues generated through the sports rightsholders’ own platform (I4.1).

If rightsholders decide to apply a D2C strategy, they currently consider three options. The first option is to create a complementary D2C platform that enhances the experience for fans (P3.4) but does not influence the business of broadcasters. Content of a complementary D2C is additional content around the league, stories from athletes mainly as an on-demand offer.

Free-to-air D2C consolidates compelling and exclusive content for the mass audience as an add-on to traditional broadcasting (P1.2). This is an approach mainly used by sports leagues experiencing a low willingness to pay and rather attract specific audiences (P4.6). As the IOC acts as representative for the various Olympic sports disciplines, the Olympic channel uses a free-to-air D2C as a tool to spread content around the Olympic Games and their athletes to a wider audience (see Table 4).

The second option is to offer a side-by-side subscription-based product next to the traditional sports broadcasting offering on TV. This approach aims at attracting specific fan bases for the platform who are willing to pay for the content while maximizing the overall audience through traditional broadcasters. In this case, federations outline the importance of having broadcasting partners to drive mass audiences and revenues from selling media rights (P3.1) while exploiting

the potentials of a specific D2C offer. In this case, rightsholders see the benefit of consolidating unique content to tell fans compelling stories on their platform. Advocates of this model are Formula 1 and WTA who broadcast their live events and generate unique, value-adding content to address a committed fan base, which is requesting additional content besides the live event (P3.2). As this specific fan base is willing to pay for exclusive content, federations can exploit the potential of a subscription-based fan product (P3.2). By cooperating with broadcasters who authenticate fans onto the D2C platform, the goal is to find a collaborative strategy. For example, F1.tv, is a global product for hardcore fans that enhances the traditional Formel 1 experience with unique fan engagement features, whereas broadcasters serve as regional partners serving the mass audience and reach the broad audience (P3.1).

Rightsholder	D2C	Content	Business Model
Formula 1	F1 TV	Side-by-side platform (Live content, exclusive perspectives, on-demand content)	7.99€ per month 64.99€ per year
WTA	WTA.TV	Side-by-side platform (Live content, exclusive perspectives, on-demand content)	8.93€ per month 67.05€ per year
IOC	Olympic Channel	Free-to-air channel (additional on-demand content, athlete stories)	Free to air
UEFA	UEFA TV	Free-to-air channel (additional on-demand content, historic moments, athlete stories)	Free to air

Table 5. Examples of D2C platforms

The third option is an exclusive distribution of the content by broadcasters that eliminates broadcasters as content distributor from the value chain. In this case, rightsholders take over the full risk of broadcasting. Therefore, they are also responsible for marketing activities, operations and the technical configuration of the event venues. The Premier League recently announced the consideration of a full D2C strategy for the future.

Independent of the type of D2C implemented, the direct penetration of markets will boost the spread of OTT within the sports broadcasting industry as it creates additional platforms that are distributing digital content over-the-top.

4.2.3.5 Regional and Niche Targeting

With sports media rights becoming more diverse and with rightsholders identifying the opportunities to sell different rights packages to several conglomerates, the geographic licensing of content is an attractive tool to penetrate regionally split audiences (P4.3). For example, Bundesliga sells their rights to different operators per country and also splits among digital and on-air rights as well as live and on-demand rights. The diversification of rights across

the different markets maximizes the revenues from broadcasting and increases the overall reach of fan bases.

DAZNs business model is also based on a market-by-market strategy with the objective to combine the most attractive content from the perspective of the regional fans (P1.2, P4.3). This means that DAZN does not acquire the overall rights for one event, which would also be too expensive, but only for the regions where they think that the content is relevant to the local fans (P1.2).

Besides of big OTT players using regional targeting to better satisfy the regional fan needs, there is a rising business model that also small, long-tail OTT brands appear (P5.2). As the OTT technology lowered the entry barriers into the sports media industry, it is becoming interesting for small OTTs to compete in the market. Long-tail platforms offer a basic platform and buy second tier sports rights for a specific fan segment to penetrate niche markets (P5.1). One example for a niche OT in Germany is Airtango, who broadcasts all matches of the second basketball league in Germany or Sportdeutschland.TV, which is a free OTT channel of the German Olympic Federation.

OTT creates a new market for niche sports disciplines, who did not receive a spot in TV programs due to their limited audience. With a basic OTT platform, long-tail platforms can address the specific audience and create a profitable business case. A strategy for niche targeting with individual packages increases viewership and revenues for rightsholders and channels. Consequently, OTT can leverage niche and regional targeting better than the incumbent technology.

4.2.4 RQ1 in a Nutshell

The analysis of RQ3 demonstrated that there are different market dynamics taking place that highly impact the spread of OTT within the German broadcasting industry among different tier levels. The OTT technology is an enabler of scale effects, cost advantages (I1.1, I4.5) and a maximized reach of sports fans with individualized content. With the increase of digital rights and the development of D2C platforms, the relevance of the OTT technology will grow. Top rightsholders consider to penetrate direct markets with their own OTT platforms but also niche OTT platforms are gaining relevance. According to the PwC Sports Survey 2019, an improved media offering through technology and OTT platforms will be a top opportunity to increase revenues in the sports industry (PWC, 2019c).

All stakeholders including content aggregators, content producers and rightsholders are considering or already implementing OTT as technology for sports content distribution. Therefore, RQ1 can be confirmed.

However, the question arises what influence the future spread of OTT has on the German sports broadcasting market. Specifically, how will the trends and the market structure further evolve? Which type of OTT platforms will lead the market? Is it the ones of rightsholders, the ones of digital giants or will many players be penetrating the market?

4.3 The Future of OTT in Sports Media

The second research question aims to answer the question “how the German sports broadcasting industry will look like once the disruptor has taken full effect”. Different scenarios were created. The three most likely options were chosen to outline how the market could potentially evolve in the future.

4.3.1 Scenario Building

The scenario planning approach compares strategic decisions and developments of the major stakeholders in the market based on in-depth insights of the expert interviews and panels as well as quantitative findings.

Whereas conventional strategic approaches are often not suited for future projections in uncertain environments, the scenario building approach enables a long-term perspective beyond the normal horizon of three to five years (Deloitte, 2018b). The presented scenarios were analyzed within a 5-10 year horizon.

The goal of scenario building is not to foresee future market structures but to outline important dynamics that will lead to relevant changes in the market. Therefore, the scenarios do not reflect strategies that marketers should implement. However, they include valuable insights that can be used to define their future strategies and market positioning (Deloitte, 2018b)

The three chosen future perspectives on the industry resulted from an in-depth scenario building approach that considered an optimistic, neutral and worst-case adoption of OTT in the German sports broadcasting market. As the industry is characterized by dynamics like uncertainty, turbulence (Oliver, 2013) and quickly changing consumer requests, “the strategic steps of relevant stakeholders will be crucial factors influencing the future market landscape” (Deloitte, 2018b). As RQ1 outlined the strong current and future impact of OTT on the industry, two out of three scenarios assume a wide spread and growth of OTT. However, the difference between the scenarios is the type of stakeholder who is applying the technology and leading the sports broadcasting market. As rightsholders are the content owners, they decide how the content is distributed to viewers and which market player will receive their rights. They will lead the market in one of the directions of the presented scenarios regarding how the spread of OTT will evolve in the sports broadcasting market.

Scenario 1 projects a consolidation in the sports media market dominated by globally operating digital giants. Scenario 2 is also characterized by a future market consolidation along with starting initiatives of top rightsholders to penetrate secondary markets directly. Scenario 3 considers both, OTT and TV as a relevant medium to broadcast sports mainly due to regulations that hinder the exploitation of OTT data and usage. Therefore, the third scenario is characterized by a diverse sports media landscape.

Table 6 presents the scenarios resulting from potential best-case, neutral and conservative developments around OTT in sports broadcasting for all stakeholders and the main influencers. By analyzing the weightings of the experts regarding future scenarios, it will be possible to come up with an estimation, which of the proposed scenarios will prevail. All scenarios were consolidated, leading to three scenarios that might appear in the future. The individual scenarios are further explained in the subsequent chapters.

Role		Conservative scenario	Neutral Scenario	Optimistic Scenario
Rightsholder	Primary Stakeholder	BROADCASTERS AS MAIN DISTRIBUTION PARTNER: Rightsholder continue to distribute their content only via media partners and exploit revenues by offering different rights packages.	OUT OF MARKET D2C: D2C's are created for secondary markets of top rights while using media partnerships for main markets. Some niche sports leagues are distributed via D2C.	CONTENT ENDGAME WITH D2C: Major and minor rightsholders follow a complete D2C strategy based on OTT. D2C platforms are constantly updated with technological innovations improving the fan experience.
Traditional channels	Primary Stakeholder	REVENGE OF TRADITIONAL TV: TV channels acquire have a limited content offering and only broadcast via traditional cable TV.	COMBINATION OF DIGITAL AND TRADITIONAL TV: TV channels only receive secondary sports rights and broadcast their content by using a mixed combination of digital and traditional TV solutions	DIGITAL REVENGE OF TRADITIONAL TV: TV channels own highlights of top rights as well as secondary rights and broadcast the content via digital platforms only.
Pay-TV channels	Primary Stakeholder	REVENGE OF TRADITIONAL PAY-TV: Pay-TV channels have limited broadcasting rights and go back to traditional cable TV broadcasting.	COMBINATION OF DIGITAL AND TRADITIONAL PAY-TV: Pay-TV channels receive only top rights and offer a mixed from digital and traditional TV content.	DIGITAL PAY-TV ON RISE : Pay-TV channels own top sports rights as well as secondary rights and broadcast the content via digital platforms only.
OTT Platforms	Primary Stakeholder	DECLINE OF OTT CHANNELS: OTT channels loose top rights over D2C distribution get into financial struggles	SOLID OTT CHANNELS: Retain portfolio of own top rights and constantly increase their subscriber base without major technological innovations	OTT CHANNELS ON RISE: Expand portfolio, own top rights and scale up their platforms due to 5G improvements. OTT platforms are constantly updated with technological innovations improving the fan experience.
GAFAs	Primary Stakeholder	GAFAs TURN AWAY FROM LIVE SPORTS: Leave the sports broadcasting market again and focus on the movie industry	HIGHLIGHTS OF TOP RIGHTS: Acquire highlight rights to promote their core business without increasing the investments into sports rights.	SPORTFLIX AND GAFAs BECOMING MARKET LEADERS: Expand their portfolio of top rights and scale up their core business by placing live sports and own sports content productions on their own OTT channels.
Telcos	Primary Stakeholder	DECLINE OF TELCO PLATFORMS: Telcos have limited broadcasting rights , mainly second tier disciplines	SOLID TELCO: Retain portfolio of secondary rights without major technological innovations	TELCOS ON RISE: Own specific top rights and secondary rights for their OTT platforms
Long-tail platforms	Secondary Stakeholder	DESTRUCTION OF NICHE PLATFORMS Niche platforms loose rights over D2C and big OTT channels	NICHE PLAYERS STAY RELEVANT: Niche platforms	BOOMING OTT NICHE SEGMENT: Niche platforms successfully penetrate specific fan bases and distribute second and third tier content via long-tail platforms. They also benefit from 5G improvements due to better technological conditions at sport venues
Social Media Platforms	Secondary Stakeholder	SOCIAL MEDIA ON DECLINE Social media loses relevance as content tool for sports	MODERATE SOCIAL MEDIA INVOLVEMENT: Mainly highlight rights and on-demand content are distributed via Social Media	SOCIAL MEDIA GAINING RELEVANCE: Social Media Channels acquire specific secondary rights to drive engagement on their channels. Highlight clips of both, top and secondary leagues gain further importance for Social Media Channels.
Data Security	Influencer	NO WIDENING OF DATA SECURITY: Data security rights in Germany stay conservative. OTT players are challenged to keep up with international players who are more flexible in regards to data security	PROGRESS IN DATA SECURITY: Data security rights are progressed but are not on the same level compared to global standards	DATA SECURITY AS NEW NORMAL: Data security regulations in Germany and the EU are fundamentally transformed and generalized for all stakeholders
5G	Influencer	VERY SLOW 5G EXPANSION: 5G is expanded slowly and many sports venues are still equipped with 4G antennas or lower standards. Streaming continues to interrupt	STEP-BY-STEP 5G EXPANSION: 5G is further installed across Germany giving more and more sports leagues access to 5G.	NATIONWIDE 5G EXPANSION: 5G will be a standardized technology that can be accessed by sports leagues across all tier levels. Digital live broadcasting can provide better, frictionless online transmissions.

Table 6. Scenarios

4.3.1.1 Scenario 1: Amasport Prime, Sportflix & Co.

Consolidation in the sports media industry is defined by “the concentration of more and more media outlets into the hands of fewer and fewer companies” (Schultz, 2005). Industry reports say that “the global media industry will be partly consolidated” (Deloitte, 2018b). Market consolidation is already experiencing its peak in the online film industry with the digital giants Netflix and AmazonPrime leading the market. There are a few national players but they generate a low percentage in revenues compared to the big players. In the current globalized world, there is the opportunity to generate strong global scale effects, which makes it hard for a national player to stay competitive in the market in the long-term (I 3.7).

As this trend is happening in many growth markets, it is also a potential scenario for the sports broadcasting industry (I3.8) across different tier levels (I3.11). In this scenario, a few global digital giants will be leading the market and smaller platforms, e.g. of traditional broadcasters (I1.2). Due to the increasing prices of sports media rights, many smaller or traditional media houses cannot keep up with the prices and big, financially strong players take over the negotiations (I4.6). Traditional broadcasters cannot justify the sums for top tier rights anymore and give away the rights to the players willing to pay the required sums. Therefore, the media rights of top leagues are becoming very concentrated and the diversity of competitors decreases (I4.6). The strong financial resources of digital giants enable them to acquire major sports events. By taking over the overall value chain of content production, the digital giants will develop a strong position in the media market not only in Germany but also globally (Deloitte, 2019).

Amazon was the first digital giant to enter the German sports broadcasting market by pursuing a selective highlight strategy. Currently, Amazon acquires specific top tier rights to strengthen the Amazon Prime platform and to drive revenues for their main business. After trying out their initial sports live content case with the audio rights of the Champions League (I4.3), they decided to acquire the majority of the Champions League rights in Germany for the upcoming period 2020/21. Amazon also follows this strategy in other markets. Amazon Prime owns parts of the NFL rights and the Premier League in the U.S. In the UK, Amazon Prime also holds parts of the Premier League. Although Amazon limits current investments into live sports, they have the financial resources and technological know-how to extend their rights portfolio.

Amazon, Facebook, Google, Youtube and Netflix are potential candidates to enter the sports broadcasting business.

This scenario assumes a growth of OTT that is supported by loose, transparent legislations that enable digital giants to further exploit the potentials of the technology in a proactive way.

Regulators have the opinion, that the digital giants are successful in providing sports fans content based on the individual and regional requests in high-quality.

This scenario will take place, if one of the digital giants decides to shift their business case from a selective strategy to a holistic sports broadcasting strategy (I4.6) and if the rightsholder aim to further exploit the revenues from selling broadcasting rights. Even though DAZN and SkySport will be highly challenged to keep up with the digital giants, both platforms could be included into the market consolidation due to their global platform structure and sports expertise. If they manage to further growth with their current sports portfolio, they will be able to keep up with the digital players for a certain time.

However, the main consequence of scenario 1 will be that digital giants outbid small, national OTT channels and traditional broadcasters.

4.3.1.2 Scenario 2: Market Consolidation and Start of the Content Endgame

Scenario 2 is generally based upon the assumptions of scenario 1 with the exception that top rightsholders in Germany will start the content endgame in secondary markets. By assuming that rightsholders will continue to sell their top rights packages to big platforms who are willing to pay high sums for their rights, the D2C solution will be implemented for secondary markets outside of Germany.

One of the industry trends was that rightsholders increasingly consider the direct penetration of markets with different D2C strategies (Nielsen Sports, 2018). Scenario 2 regards the rightsholders as winners of the market development who have the power to decide about the distribution of their content. Indeed, they have the opportunity to exploit the potentials and scale effects of digitization with their own OTT platforms.

However, the quantitative and qualitative findings both showed that rightsholders will consider this approach with caution. Currently, the majority of revenue from rightsholders is generated with the sale of broadcasting rights (I2.2). By selecting media partners as content distributors, the full risk of broadcasting is transferred to the media partners (I4.1). Therefore, a D2C strategy only makes sense, if the revenues from distributing the content directly to consumers exceed the income from the sale of media rights (I3.1).





Figure 3. Revenues from broadcasting rights of top European soccer leagues (P4.1)

The example of Bundesliga shows that a D2C of the first soccer league in Germany has to bring revenues of a minimum of 1.2 billion Euro (the current revenues from selling broadcasting rights) to be worth the investment. In this case, all operating and additional costs that arise are not included, yet. This means that Bundesliga would need to acquire a big user base for its platform within a short period (I3.1) (e.g. 11.5 million users with a price of 10€ per month). A full D2C strategy would bear too many risks facing the market dynamics (I4.1). An exclusive D2C is very unlikely to happen within the next 8 years (I4.1).

However, the economically reasonable strategy is to exclude the domestic, most attractive market and only apply D2C in secondary markets, where D2C has the potential to bring higher revenues than the income of broadcasters. For example, Bundesliga has fans in the UK who are willing to pay for the content. Therefore, D2C platforms make sense for out-of-market penetration (P.4.6) while also retaining the value in the marketplace, which is having broadcasting partners in top markets. The business model can only work for leagues with a global interest such as Bundesliga. For secondary leagues, the interest is not strong enough and therefore, selling the rights to broadcasters will stay the saver model (I3.1).

In scenario 2, rightsholders exploit the revenues from broadcasting rights by only penetrating markets directly that were not lucrative before. This scenario considers that a selective number of content aggregators has the power to avoid a fast spread of the D2C business model due to the extensive sums that are offered for top sports rights. The market consolidation trend will also be activated in scenario 2. Only the biggest and financially, strongest content aggregators can bet for top rights leaving behind small and traditional media companies.

The implementation of a comprehensive D2C strategy will still take time until rightsholders acquired the needed expertise in operations, IT and marketing management to commercialize their platform successfully.

4.3.1.3 Scenario 3: Lost in Variety

Scenario 3 assumes a mix of global and national players operating in a diverse ecosystem without a dominant market leader. Most of the rightsholders will continue to pass on broadcasting rights to media partners with exceptions of a few rightsholders following a D2C approach (P1.1). In this scenario, the fragmentation of rights will continue to increase as different aggregators acquired rights packages resulting in an oligopoly (P1.1). Sports fans will continue to use different platforms to follow their favorite sports content. They are not loyal to one provider as their motivation is the content and not the platform.

The market will still request domestic content leading to numerous strategic partnerships between global and national players. Moreover, as national broadcasters do the production for many sporting events, the dependency on them stays high (I2.4).

This scenario is characterized by a high variety of different market players ranging from digital giants who continue their selective rights strategy (I3.2), pure OTT platforms who aim to follow their multi-sport approach (I3.3), traditional channels who are still relevant in the second tier area and telecommunication companies who profit from their technical know-how and offer high-quality platforms with sport content.

An additional market for long-tail platforms will stay relevant who manage regional and niche rights (I1.2). Their strong relationship between local fans and teams is the driving force who differentiates them from big platforms (I5.2).

Scenario three is shaped by a lasting power of TV as a source of media consumption that managed the digital transformation well. Online services of traditional TV channels are further developed and the channels still play a game in acquiring TV rights of selected sports events.

In this scenario, the government regulates the market by securing a unified set of regulations for all players applying OTT irrespective of their type of entity (I2.7). The legislation will also strongly ensure the protection of national channels and widen the data security regulations to enable them to compete with global operators.

5. Conclusions, Limitations and Future Research

The purpose of this study was to enhance the understanding of future developments in the German sports broadcasting industry considering the impact of the disruptor OTT. This chapter aims to present the conclusions on the topic. Moreover, limitations are presented, and suggestions for future research are being made.

5.1 Discussion

The thesis outlined that the German broadcasting industry is very dynamic. Many innovations that are currently developed are connected to OTT. Due to the shift towards digital, OTT will become a major strategic component of all players and the disrupting effect of OTT can be confirmed. The disruptor helps marketers to operate at scale and to save many costs in the long-term. Moreover “OTT platforms are harbingers of a global media sport marketplace, altering the structure of rights markets and media systems” making media value chains more efficient and globally useful (Donders and Evens, 2018).

However, the research also showed that the sports broadcasting market is shaped by many dynamics and turbulences that make it hard to predict how the industry looks like once the disruptor has taken full effect. Among industry experts, there is no consensus regarding the future market structure of the industry. Different market players praise for their business model to become the most successful and rightsholders are very defensive regarding the D2C development as they are currently still dependent on media partners and aim to sustain this relationship.

However, one trend was mentioned by the majority of experts in this study. The German sports broadcasting market will experience a trend of market consolidation (I1.3, I2.9, I3.8, I4.6), which follows the general trend of growth markets who all consolidate at one point. Due to current dynamics, consolidation will likely become the most relevant topic in the German sports broadcasting industry for premium rights in the future. Rightsholders have the goal to reduce the high market fragmentation and avoiding a saturation point without losing revenues from selling media rights to multiple conglomerates.

After reviewing all scenarios, this thesis considers scenario 2 as the most likely scenario to succeed in 5-10 years. Rightsholders’ ultimate objective for the future is a content endgame enabling them to penetrate direct markets at maximum scale. The technological opportunities and access to valuable fan data are the key reasons that have major importance for leagues in the future while ensuring stable revenues from subscriptions. A D2C platform enables

rightsholders to access crucial fan data and insights. This will help leagues to optimize their offering and to add additional revenue streams such as merchandising or ticketing. Ultimately, being responsible for the overall distribution creates a lot of synergies and helps rightsholders to further growth as an organization. Some big European rightsholders already announced their future D2C strategy and big German sports leagues will follow. Some international federations such as UEFA, FIFA or the IOC already implement a D2C approach free-to-air. However, currently, rightsholders' biggest revenue source is represented by the sale of media rights, e.g. 4.64€ for the sale of Bundesliga in 2017 (DFL, 2017). Therefore, it will take more time until rightsholders have the necessary knowledge and resources to monetize a D2C business model successfully and to attract the needed subscribers.

A first start to draw attention to the D2C model is to start with secondary markets and then attract more sports fans. Once the first D2C initiatives prove their success, this strategy will be further expanded.

It will be interesting to follow, how the sports investments of big digital giants and platforms will evolve. If the digital giants decide to expand their sports rights, they will be able to outbid the revenues from D2C and further postpone the full D2C model. Another relevant question will be, if soccer stays the most attractive sports discipline of Germans or if a new discipline will emerge (I3.2). It could be possible that soccer loses its relevance over top international leagues such as NBA or NFL reshaping the overall broadcasting market in Germany.

5.2 Recommendation and Managerial Implication

The thesis outlined the strong current and future impact of OTT on the overall sports broadcasting industry in Germany. The disruptor is well-established among content aggregation platforms and constitutes a lot of value creation for the operators and for the fans. The big players will constantly expand their features, improve the streaming quality and global reach to stay competitive in the market of sports rights. For the rightsholders, it is crucial to develop the necessary technical expertise about the OTT and streaming business to ensure upcoming rights negotiations at eye level with the content aggregators. Only if the rightsholders confront themselves with the D2C concept early, they will be able to develop a business model that can be superior to media partnerships in the future. At the same time, it is a challenge for rightsholders to ensure a complementary relationship with broadcasters as long as a full D2C strategy is not profitable. Federations are not and will never be IT experts. Therefore, they should consider venture capital activities or collaborations with IT companies to gain in-depth knowledge about the possibilities and challenges of OTT. The conversion from broadcasting

partners to direct market penetration leads to a restructuring of the overall media value chain and requires a step-by-step process that prepares all stakeholders for the business model.

5.3 Limitations and Future Research

Although this thesis used a mix of both, quantitative and qualitative data, the majority of findings from the analysis were based on qualitative findings from industry experts, which do not offer a fully holistic perspective on the dynamics in the German sports broadcasting industry. Additionally, the qualitative interviews included a set of predefined questions, which limit the freedom of the interviewees to share their expertise about the topic.

The panel interviews were a valuable tool to get insights about the industry from recognized experts in the industry and to learn about innovative approaches the top companies are choosing. However, their insights given do not specifically concern Germany as a geographic area. Moreover, both qualitative approaches failed to fully integrate a holistic perspective of pay-tv channels in Germany.

A validation of the results of this study could be reached by conducting a quantitative analysis about the future development of OTT in the Sports broadcasting industry including all stakeholders.

While this analysis defined OTT from a broad perspective including all stakeholders who are implementing the technology, it would be interesting to study the disrupting effect of pure OTT channels on the German sports broadcasting industry specifically. Channels such as DAZN substantially grew in the near past but it is hard to predict if their business model will be able to succeed in competition with big digital giants such as Amazon or Netflix (I2.5, I4.6).

Moreover, a future study that specifically analyses the future aggregation developments for niche and secondary sports rights would be highly valuable.

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7. Appendices

Appendix 1: Categorization of identified trends (relevance/impact)

Is OTT disrupting the sports broadcasting industry in Germany ?

Industry Trend	Secondary Data - 25%		Primary Data - 75%												Total weighted impact	Total weighted relevance													
	Secondary	Analysis	Interview 1	Interview 2	Interview 3	Interview 4	Panel 1	Panel 2	Panel 3	Panel 4	Panel 5																		
D2C	4	5	5	5	5	4	4	3	4	4	4	4	3	5	5	4	5	4	4	4	4	4	4	4.29	4.33				
Digital rights extension	5	5	4	4	4	4	5	4	5	4			4	4	4	4	4	4	4	4	4	4	4	4	4.44	4.25			
Fan Experiences	5	4	4	3	4	5	4	5	4	4	3	4	4	4	5	4										4.13	4.13		
Market Fragmentation	4	3	4	5	5	4	5	5	4	3	4	4			3	4	4	3	4	3						3.97	3.78		
Strategic Partnerships	4	4	5	3	4	4	5	5	4	3	4	5			4	5										4.25	4.13		
Regional Targeting	3	4	3	3	3	3	3	4	4	4	4	4			4	3	4	4	4	4						3.59	3.59		
Niche Platforms	4	2	4	3	4	3	3	3	2	3						2	4	2	4							2.88	3.25		
Complete Content	3	4	4	4	3	4					4	4	4	4	4	4				3	4					3.63	3.88		
Scalability effects	4	4	3	4	4	5	5	5	4	4	3	4			5	5											4.00	4.32	
5G			4	4	4	4	4	5	4	4	4	4															4.00	4.20	
AI Broadcasting						2	2	2	2	2												2	2	2	2			2.00	2.00

Appendix 2: Interview Guide

Note: Semi-structured interviews as selected type of qualitative approach, lead to an open interview environment. Therefore, the questions asked during the different interviews may differ to a certain extent. However, the following questions were used as an interview guide:

Questions:

- Start off with current topics from the news around OTT in Sports (e.g. “The Premier League is planning to launch a D2C. What do you think about it”? or “The upcoming Bundesliga rights are going to be distributed in spring 2020”. What do you expect from the rights allocation?)
- What are trends in the German sports broadcasting Industry / How will the market develop?
- How would you describe the competitive situation in the German sports broadcasting industry?
- What are consequences of the increasing pressure of rightsholders?
- Do you think that OTT as disruptor will push through in the future and why?
- How is OTT accepted by rightsholders, media companies and traditional broadcasters?
- What is the future strategy of sports rightsholders/OTT platforms?
- What role will direct-to-consumer(D2C) platforms play in the future media landscape?
- What influencers must be considered for OTT and why (e.g. politics, regulations, other technologies ect. that influence the further spread of the disruptor OTT)?
- In your opinion, how will OTT develop in the future?

Appendix 3: Interview Summaries

Interview (II):

Interview Partner: Patrick Mostböck – Head of Sportradar

Date: 17.01.20 – Time: 16:00 – Location: Munich, Germany

1.1 OTT is a disruptor and will push through in the future due to cost advantages.

1.2 Future development on the market: Currently, media rights are expensive, due to many, diverse operators in the market causing market fragmentation. This is positive for rightsholders. In 5-10 years, the giants will lead the market. Global platforms will share the main rights, this will only concern premium right. An additional bubble for publisher and rightsholders will emerge, who will manage niche and regional rights.

If broadcasters stay in the market, then only as a digital player among others. This is not likely as they are far behind with digitalization, media rights increase but broadcaster (especially public ones) cannot afford it.

Smaller leagues will continue to offer their own, long-tail platform for regional fans. It makes sense for them to own fan contacts. They have additional revenue sources from merchandise, ticketing, sponsorship.

Currently, Amazon is following a highlight strategy in the sports sector and pick specific rights. But with their financial strength, they can easily disrupt the sports sector.

1.3 Partnerships: The big players will enter strategic partnerships. Consolidation thinking is increasing. How can I connect offerings of different players to generate an added value for my viewers? It will be more convenient for consumers.

1.4 Regulations: Facebook and other big players pay lower taxes which benefits their business, broadcasters face many more regulations regarding what they broadcast. 5G: in disciplines such as Basketball, Handball in Germany, the connectivity and technological conditions to offer streaming are very low, niche platforms will be influenced from future developments, currently: production and content is good, streaming quality/connectivity is bad. The impact will be big: 5G antennas offer a 10 times better internet coverage than current 4G antennas.

1.5 Additional trends about the future of OTT? Live, Content, Analytics, Personalization, Localization (Netflix offers a lot of content and is able to personalize it, this will increase in the sports media landscape, User Engagement (across different devices, a lot of options for interaction such as chat).

Betting and media market will consolidate: betting brands will become broadcasters, they take advantage of their strong customer relation (know how and when they spend money)

1.6 D2C of UEFA: Currently they do not show live content, they still work together with broadcasters. It will take time until they are courageous enough to show live content.

Interview (I2):

Interview Partner: Daniel Ceprian – Vimeo VP OTT EMEA

Date: 31.01.20 – Time: 11:00 – Location: Munich, Germany

2.1 Variables for good OTT: Technology, Content, Promotion (you need a balance of those 3 areas, technology cannot stand over content)

2.2 Opportunities in the OTT/digital space in sports broadcasting? Traditionally, sport organizations gained 50% of their revenues with media rights (sold to broadcasters in local territories, some countries in middle east and china were overpaying rights in Europe, they are not paying anymore, revenues go down). Now, there is a market opportunity for leagues to create OTT platforms to monetize direct markets.

Benefits: 1to1 conversation with fans: with OTT you have consumption data of fans and you can have a 1to1 conversation with fans (broadcasters don't have it), also a commercial conversation to increase revenue in other areas that are not OTT (merchandising/ticketing promotion based on user data)

Big Telcos are becoming media organizations and OTTs (Germany = Telecom, France = Orange, Spain = Movistar).

2.3 Rights differentiation: It is important to differentiate btw. normal (on-demand) and premium rights (live events). Bundesliga will offer on-demand content for all countries, but live streaming only in less relevant markets due to the dependency on media rights paid by big broadcasters in their home country, showing live matches via OTT platform in Germany will not generate as much revenues as all the media rights sold to the different conglomerates.

2.4 Challenges compared to traditional TV broadcasting: National broadcasters traditionally do the production; therefore, dependency is very high.

2.5 Why DAZN will never lead the market: Selling rights to DAZN is same way as selling rights to broadcaster (selling rights to 3rd party), DAZN is a media corporation that trades with rights and is a digital broadcasters; "DAZN is prisoner of their own business plan": Their level of investment is too high, because they only own the rights for a limited time, afterwards they need to buy again, even though the revenue is growing, the costs are growing much faster (10 times more). They are not profitable. Having live content is so expensive because DAZN is overpaying to beat traditional broadcasters (same price for 100.000 views that traditional

broadcasters are paying for 3 million views). DAZN will be sold to a traditional broadcaster like (ESPN, Fox) in the future but DAZN will never become profitable.

2.6 Why Amazon Prime will never lead the market: Investing in media rights/content is like investing in promotion. Their main revenue is done with e-commerce. The reason why they invest into AmazonPrime (also sports like WTA) is due to the information that they get about users. The business model is based on recommender systems that optimize customer profiles. This helps them to grow their main e-commerce business.

2.7 Influencers: “The challenge of OTT is that OTT is global”. The legislation in countries differs. At some point, local regulations will be unified to offer a regulation for OTT business.

2.8 AI broadcasting: At the moment, recording 1 game is very expensive as you need different cameras and staff to broadcast (e.g. 3000€ for 3 cameras) AI broadcasting is an emerging technology that saves costs (appr. 300€ per camera), then more federations can do their own OTT without any media partners. Rightsholders are figuring out that the technology is not the most important, content is more important.

2.9 Market consolidation: more the business intelligence of federations in terms of defining the price for their rights is needed, top tier 1 rights will go into big platforms (Amazon, DAZN), sports: will be D2C or small OTT’s

Interview (I3):

Interview Partner: Head of Strategy of Pure OTT Platform

Date: 29.02.20 – Time: 10:00 – Location: Hamburg, Germany

3.1 D2C model: If you have a big, international user base, you can generate high returns with a relatively low price. Federations normally sell their rights for a specific period (e.g. Bundesliga for 4 years). In case of D2C you have constant, monthly revenues that can exceed the revenues from selling broadcasting rights without waiting for the next sales period. The model only works for leagues with global interest, e.g. the Premier League. For secondary leagues, the interest is not strong enough and therefore, selling the rights to broadcasters is the saver model.

3.2 Competitive situation: New business models entered the market with the emergence of big digital giants such as Amazon. Amazons strategy is to sell specific products, e.g. merchandise to the specific fan group who is watching the sports content. Total revenues generated through sports rights can increase. To succeed, Amazon does not need the full range of sports rights, specific highlight rights are enough. Strong global rights will gain more relevance. Top rightsholders can put pressure towards broadcasters because of the option to penetrate direct

markets. At the moment, top tier, global broadcasters gain in relevance and all secondary rights stagnate. Potentially, a discipline will become interesting (e.g. Drone Champions League).

3.3 Increasing prices of broadcasting rights: We stay realistic and we do not pay every price just to acquire a right. As a global player, we are flexible regarding the acquisition of rights, e.g. we can shift budgets country-by-country and balance our spending across the different countries. In Germany, many sports rights are traded periodically (every 2-3 years). This decreases the risk compared to the U.S. where many premium rights are sold for up to 8 years. We select rights that help us to grow.

3.4 Our future innovations will mostly concern the user experience.

3.5. At the moment, AI-based cameras will influence our business indirectly as we are not the rightsholders who provide the main TV connection inside the stadium.

3.6 Role of strategic partnerships: Market fragmentation is increasing (see Disney Plus, Apple, D2C trends), means that it is very interesting for players to take the position of an aggregator who bundles different content and brings more structure in the ‘land of plenty content’.

3.7 Market in the future: You can differentiate between the axes national/global and content owner/aggregator platform. I have a strong position regarding the axes national and global – in the current globalized world, there is the opportunity to generate strong global scale effects, which makes it hard for a national player to stay competitive in the market in the long-term. Example: Telcos (e.g. Telekom) generate benchmark returns but not only in Germany. They are a global player (e.g. merged with Sprint in the U.S.) who benefits from the global scale effects. The shift towards global will increase. Parts of the content endgame scenario make sense as there are some global players in the market who are able to penetrate their own markets successfully and have bargaining power against content aggregators. In the long-term, it is likely to occur that a few global players will share the main sports broadcasting rights. There might be exceptions that some powerful rightsholders apply the D2C model (e.g. Premier League, NFL). 2nd tier rights: in this case, there is a higher probability that domestic players stay in the market (they serve a niche market by acquiring affordable rights). Example: Telekom owns the different secondary, national rights (1st basketball league, 3rd soccer league and the Ice Hockey league). Those are national competitions with a national relevance but they are not as expensive as tier 1 rights allowing to address a niche market. However, DAZN as multisport channel has the opportunity to place both premium and niche disciplines onto the platform.

3.8 Influencers; Data security culture in Germany: if you look at the German history, we were a “control state” and it is hard for us to accept that the currency of this millennium is data. Data is not well processed in Germany. We are rather protective with data compared to other

countries. The value creation with data happens abroad (see Apple, Amazon etc.). 5G use cases are mainly happening around the stadium experience. For broadcasters, this topic is becoming relevant once 5G can be transferred to the homes of fans. 5G is very relevant for DAZN in terms of the mobile component – once the Internet connection will become stronger and fans are able to follow live sports on the go without interruptions. Another interesting topic will be how the aggregation game around the sports rights is developing and how the value generation is developing, for sure an overall aggregation will take place – all growth markets consolidate at one point and this will also apply for the OTT sports market.

3.9 Future strategy of rightsholders: There is a state contract for radio and TV broadcasters in Germany that also says that major sporting events with German participation have to be broadcasted by public channels. The "Mediatheken" of ARD/ZDF are quite good, especially for on-demand services. However, those channels will not bet for premium rights as they are not profit-oriented companies who have to justify their spending in front of tax payers. Privat, commercial channels are following an interesting strategy. The RTL group acquired the rights for the Euro League 2021 and apply an interesting Eco-system: they have a main family channel (RTL), they have a niche channel (RTL Nitro) that also covers sports content and then they also have the OTT offer TV.now. This means, RTL can broadcast the Euro 2021 across different channels and apply exclusiveness.

3.10 Sky Sports biggest problem is the anticipated deterioration of the status quo offering and the challenge to retain customers with a lower service portfolio.

A potential solution is to acquire different sport or movie rights to balance the loss.

3.11 Additional trends or concepts: User experience developments. The biggest and most exciting trend is the consolidation of sports broadcasting players across different tier levels not only in sports but also in other entertainment areas.

Interview (I4):

Interview Partner: anonymous, Consultant Sports Business Advisory

Date: 19.01.20 – Time: 19:00 – Location: Munich, Germany

4.1 D2C plans of Premier League: There are two aspects: 1st it offers a base for negotiation as the broadcasting rights. Live rights are very valuable. It increases the pressure towards content aggregators. It would be a huge step to go D2C. With the current system, the OTT players and broadcasters take over the full risk. The Premier League and every big soccer league have a planning security over the revenues from selling broadcasting rights over different years. With a D2C, this is a completely different and new business model. You also need marketing,

operations management, technological solutions. I don't see this business model coming within the next 4-8 years, especially not exclusively. Someday, it will make sense when technology is able to execute it. Then it would be a useful strategy for the top leagues only because the others are not strong enough for self-financing. Top rightsholders can also consider to penetrate secondary markets directly. This is a different business case: you build up the platform (maybe with a partner) and you offer rights that you did not sell.

4.2 Upcoming DFL rights allocation: DFL has a huge momentum. Amazon announced that the first sports packages were successful. I can imagine that tech giants enter the German sports broadcasting market (besides of Sky, public channels). The goal is to bundle the rights without facing legal problems and at the same time, consider the interests of fans (avoid critics of ultra fans).

4.3 GAFA's strategy: It is hard to predict the strategy of Amazon, Facebook, Youtube, Google. and to get insights. Audio rights of Champions League and Premier League rights were the first sports investment of Amazon. Seems that Amazon monetized them by gaining additional prime customers and by increasing the revenues for their core business. If this is the case, they will now focus on highlight rights and consequently acquire the rights for relevant markets with relevant content.

4.4 Competitive situation: Substitutes: There is the risk of wrong speculations (too much fragmentation – saturation point. For example, I could imagine that soccer will lose relevance again over top leagues from the U.S. such as NFL, NBA leading to new budgets of broadcasters for different disciplines. Suppliers: We differentiate between first tier, second tier and third tier rights. First tier rightsholder include FIFA, IOC, UEFA (top leagues). They have a huge bargaining power. Regarding second and third tier rightsholders, the development goes against zero. They face huge problems in selling and spreading their rights. They did not find an optimal solution, yet.

4.5 The essence of OTT is the distribution format which is replacing cable. You distribute content directly to consumers via the Internet. This technology is independent of players like DAZN. All classic broadcasters offer OTT. If you consume TV digitally, this is also OTT. OTT offers rightsholders to distribute their content directly to consumers. In my opinion, it is a long way to go until this will happen. They are in such a comfortable situation. Imagine, a car reseller would guarantee to buy all VW's that are produced in a certain period. (no matter what happens in the market). As long as this is working out, I don't see a point in taking over the whole risk. This strategy only makes sense if monetization is exceeding the current business model dramatically. Does the technology disrupt the industry? Yes, without doubt. Other distribution

formats will not be relevant anymore (cable, satellite) in maximum 10 years. As long as rightsholders are not moving, the business models will stay the same with exception of big technology leaders (e.g. Amazon) who follow a different goal. Use rights for customer acquisitions. Reasons: costs, consumer demand (individualization, information). This can only be realized via OTT.

4.6. Future projections: If you analyze top leagues, diversity will go down due to cost reasons, which lead to a consolidation of the market. Currently, we already do not have a lot of diversity (e.g. Bundesliga = max 2-3 players). There are more players who try to get a piece of the cake, Due to cost reasons. Many players follow business cases that are not profitable. They will be driven out of the market by stronger, bigger players who have stronger financial resources.

Broadcasters have limited opportunities to acquire rights due to their public origin. It is hard to justify the prices of top leagues. They will stay relevant for niche disciplines. If you analyze it globally including second and third tier rights, there is diversity. If you check the current audience of free-to-air, it is impressive how many people are watching their content, especially elderly. Those are disciplines with a low WTP (e.g. European swimming Championships). Public channels will stay relevant in the most attractive mass sport disciplines. Traditional channels have a public contract with the government and are financed by taxes. Their task is to broadcast sporting events that experience a strong public interest. It is a political question for how long they will acquire the rights of global sporting events such as the Olympics. Example: Discovery. The rightsholders do not care about any national regulations but want to exploit the revenues from broadcasting rights. Until now, public channels always decided to acquire those rights (from others who bought the rights) due to political pressure. In the future, they could decide against it. Big international conglomerates will take over the market, if rightsholder continue to increase their prices. DAZN will be challenged to keep up. There is a big doubt, if their business model can become profitable. To reach this, they need additional revenue sources because to balance the huge spending of their current rights portfolio.

4.4 Strategic partnerships: makes sense to transfer viewers from A to B, to divide costs and to share the audience. However, the WTP is not infinite. It is a middle-term solution and helps channels to balance costs of acquisitions, if they are less successful than initially planned. It is not realistic to continue their business based on strategic cooperation's. Moreover, competition law be enforced: if the market players buy different rights, put the rights on the same pay-wall together and increase the subscription fee, consumers have no choice and prices increase. Consolidation= yes, partnerships= yes, but consider, why they enter partnerships (because their

individual business is not going well). If three operators are addressing the same client, this cannot be a successful business model.

Appendix 4: Panel Summaries

Panel (P1): OTT Summit Madrid – Will there be a saturation point? – 12.11.19 (42:05)

Panel: Micky Lawler (President WTA) Veronica Diquattro (EVP SOUTHERN EUROPE DAZN), Sergio Oslé (President, Movistar), Craig Hepburn (Head of Digital Transformation, UEFA), Anna Chanduvi (Sports Media Partnerships, Facebook)

1.1 Collaboration vs. Fraction:

Craig Hepburn: The more offers are in the market, the cheaper the services will be but it will become a challenge for operators as they need more resources, content, investments into technology to compete in the market. Having 10-15 app will not be sustainable. Therefore, collaboration will increase. Regional fragmentation is a challenge already. We need to make OTT frictionless!

Sergio Oslé: The future will look similar to past (Oligopoly). Rightsholders give away the risks of broadcasting by selling them to the distributors, distributors will continue to manage the market of buying the broadcasting rights. Netflix is not a B2C anymore they are a major in B2B. The market will go back to a normal point where the people who have the content market but the players/majors will change -> but the dynamic will go back to rationality

Veronica Diquattro: Current stakeholders in the market are not satisfied. There is an urgency for change Future: 1.Small opportunity: Aggregation of content of the players who survive; OTT Platforms aim to aggregate more content to make more relevant content available for the viewers leading to more collaborations with traditional digital channels such as Eurosport or club channels (Serie A). 2. opportunity: How distribution is going to aggregate all these players? Aggregation through distributors with mobile providers (Telekom ect), give OTT reach and provide mobile providers with relevant content. As their distribution is much wider than the one of DAZN. Result: make individual content easier to find, consume, better in terms of streaming quality. Both combined will be the right recipe for future growth.

1.2 Opportunities to enter the OTT market for the different stakeholders:

Micky Lawler: 1) Completeness: put ALL matches online and make it available for fans
2) Content: tell compelling stories of athletes (create own content) as they drive audience
2) Regional targeting 3) Make highlights easily available for fans in order to increase interest of fans

Veronica Diquattro: There was a gap in the market of pure multisport dedicated service on a global level. DAZN uses technology to produce, program, and show content to create experience at scale and to reduce lead time in comparison to traditional technologies. Challenge is that current/modern user is not fully satisfied with current market offering due to market fragmentation (content, access, need to subscribe for different services). Next strategy is to understand market by market the right combination of content that is requested by fans.

Sergio Oslé: The true power still remains in content. Technology is not a competitive advantage. We want to provide best content! We are challenged to generate our own content but it is also an opportunity.

Craig Hepburn: Digitizing unique content of UEFA that is relevant to fans but available among traditional broadcasters (Futsal, U19 Youth League), Consolidation of content for internal use and for fan

Veronica Diquattro: “The more sports they watch, the longer they are staying. On the platform...the less likely they are to churn”. The success strategy is to focus on responding to the different needs of the viewer that emerge with new technology.

Sergio Oslé: “OTT is an opportunity for new competitors to enter the market without a lot of investments. Therefore, the dynamics in the market and the competition will continue”

Panel (P2): OTT Summit Madrid – Social disruptors of TV broadcasting? – 12.11.19

(36:09)

Panel: Aneesh Madani (Global Head of Digital Partnerships IOC), Louisa Clark (Head of Business Development & Broadcast Partnering BT Sports), Simone Tomassetti (Head of Sports Partnerships Southern Europe), Gareth Capon (Chief Executive Grabyo)

2.1 Intro Louisa Clark: We partnered with social rights from the beginning. We try to complement a pay product with a free and accessible social piece in a way that it adds value. We do programming on social and then transfer it to traditional channel, we reverse traditional broadcast methods to see what will attract audiences in a different way.

2.2 Intro Simone Tomassetti: Our job is to make their business model complementary with an open explanation of content. We help rightsholder to monetize their content, reach additional audiences, to enrich platform with good content.

2.3 Intro Gareth Capon: 1. More people are claiming to have a paid OTT service than a traditional pay TV service. 2. More people are talking about engaging with video on other platforms than TV. Social video is not going to be greater than TV but more consistently a having a video experience on a device which is not likely to be TV.

2.4 Aneesh Madani: The IOC uses social, traditional TV and D2C. How do you spread to ensure the value exchange for every channel? What is your approach?

1. Clearly identifying the roles

Channel = Telling the stories of the athletes around the games on our own platforms, which is exclusive. Here, we tell deep-grid stories on our own platform.

Platforms = Taking what we have and bringing it to more people so they enjoy the experience. See how the value exchange with platforms looks like. We tell exclusive stories and we aim at enhancing the stories through social platforms.

2.5 Louisa Clark: What is logic of placing content? How do you decide where you place which content on the different platforms?

1. Depends on the type of rights (some rights come with free to air element and then there is the question, where to put them on social) 2. We pay for the rights, so we also need revenue from rights. We need the right balance between people who pay for our content and not upsetting them that we are giving away too much content for free (rightsholders who is asking for more air time vs. views)

2.6 Simone Tomassetti: Monetization

Our partners: platforms, rightsholders, brand, audience = we connect all of them by boosting the public conversation about topics

Viewers perspective: want to follow and engage with topics they like and run a conversation around it

2.7 What is a deep partnership?

Louisa Clark: We speak about partners, not suppliers. One of our partners is Amazon (reverse partnership). On the one hand, they are our competitors because they have rights that we do not have (e.g. Christmas pack UK for premier league).

- Arrangement a): We help them to retail their rights in commercial premises (e.g. pubs); they do not have presence in the market but we do through the distribution on the sky platform.

- Arrangement b) Production is done by BT Sports under the guidance of Amazon. We are delivery partner. This volume of production requires a lot of expertise that you only have if you are in this business for many years (they do not have it)

2.8 Simone Tomassetti: It's more than just monetizing the content of our partners. We only select premium partners because we want to offer users the best possible experience.

2.9 Upcoming challenges:

Louisa Clark: 1. Rightsholders are going direct to consumers – how do you consume this content, if it is not aggregated. Broadcasters bought many rights to fill channels/schedules with

attractive content. You have to be conscious if viewers say “I want to break this up according to the sports I am interested in”. You need to provide something above that, the reason why you would buy a package of channels across different sports disciplines. 2. You cannot take away the social side of live sports.

Panel (P3): OTT Summit Madrid – Formula 1 going D2C – 12.11.19 (32:17)

Panel: Frank Arthofer - Global Head of Digital and Media of Formula 1

3.1 What opportunities do you see in the OTT/digital space in sports broadcasting within the next 1-5 years? If we compare the sports industry with other industries, we are far behind due to the non-frictionless experience in sports broadcasting

a) if I login into Netflix, I can watch the videos from anywhere in the world and I have the same product, b) if I am an F1 fan going abroad, I can't watch the service (neither as a broadcast TV subscriber nor with F1 TV). The challenge is to create a frictionless experience by keeping pace with Netflix (who enable me to do everything, everywhere) while also retaining the value in the market place, which is having broadcasting partners.

Solution: F1 works with broadcasting partners to authenticate their customers on F1 TV in a way it's collaborative and makes sense for them, because F1 TV is a global product and broadcasters are regional partners (centralized, convergent philosophy)

3.2 Is F1 TV only complementary to broadcasters or does it find a standalone audience?

- standalone for fans that are not traditional subscribers of TV broadcasters (e.g. US is a good example)

- fundamental reality of F1 TV is to offer a hardcore fan product (a specific fan base willing for exclusive F1 content)

3.3 What's the future in order to better target the local fans? collaborate with in-market partners (e.g. Italy -> focus on Ferrari), co-production of content with a mutual incentive

3.4 Long-term broadcast partners vs. OTT product

- side-by-side product

- we have a fan product: enhances the traditional TV F1 stream, fans pay for the service because the features are better

- broadcasting shows all our races in different countries -> to reach our broad audience

- therefore, we have a good relationship and both channels are important

3.5 F1 TV

- Average. Fan = uses 10-12 apps, 4-5 are commoditized => convince people to download F1 app and OTT app is challenging in a market that becomes more and more frictionless =>

- solution: bring commoditized information inside the F1 App (standings, results, data), long-term approach is to include everything onto the F1 TV and force people to download/pay F1

3.6 How do you use digital to increase the value of F1 for fans and drivers ? We continue to invest into all areas of the funnel; invest into new fans and reach new people through other channels that we normally use. (e.g. collaborate with Twitch through co-streaming F1 and commentating)

Panel (P4): OTT Summit Madrid – OTT and D2C – 13.11.19 (28:18)

Panel: Minal Modha (Head of Consumer Research at Ampere Analysis) & Alexios Dimitropoulos (Senior Analyst at Ampere Analysis)

4.1 Growth of Sports OTT and its place in the wider sports media landscape:

Trends: 1) Fragmentation of media as consumers have more choice, 2) increase caught cutting, 3) price increase in sports rights => competitive media landscape (rightholders to retain premium rights, TV compete with OTT)

- Growth: 6% of users have access to OTT

4.2 Market Potential: currently only 2% use OTT of all of them who would be willing to pay for sports content globally, there is a possible 533M further fans to convert => high addressable (m) => huge opportunity for the sector. In short-term, OTT platforms will not be replacing traditional TV operators as the main broadcasters but they play a significant role (especially for the future). OTT platforms can be used to grow younger fanbases through access to children in the household, mobile first => mobile only packages might become attractive

Do economics of sport OTT stack up? Currently, OTT channels make up only a little bit of total sports media rights spent = less than 2% in 2018, projection to grow to 5% on 2021

4.3 Netflix vs. DAZN:

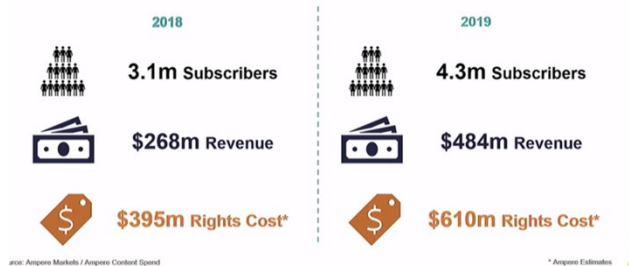
Both: large infrastructure + high production costs, multi-market strategies, localised content and interface, low consumer pricing

Differences: LIVE: in Sports there is more LIVE content; more infrastructure costs needed due to streaming and number of users on the platform, Original rights ownership: Netflix have access to all original content, able to make it available for consumers quickly, consumers can watch it on-demand. DAZN has a time constraint regarding access of rights.

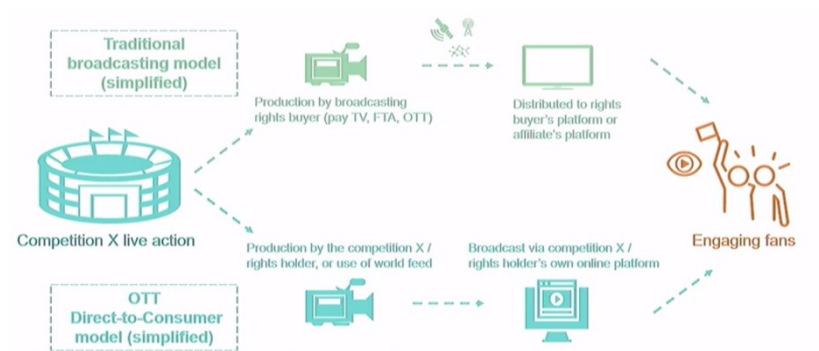
Geographic licensing of content: geographic licensing of sports content, whereas entertainment tends to be sold on a wider geographic space, DAZN has been very successful in acquiring rights for all regional split audiences, for DAZN each new market means more rights and more revenues

4.4 OTT Players:

- there will be a big gap between revenue and (increasing) rights costs => excl. operating costs, advertising will play a role they have a large addressable audience but it is hard to reach



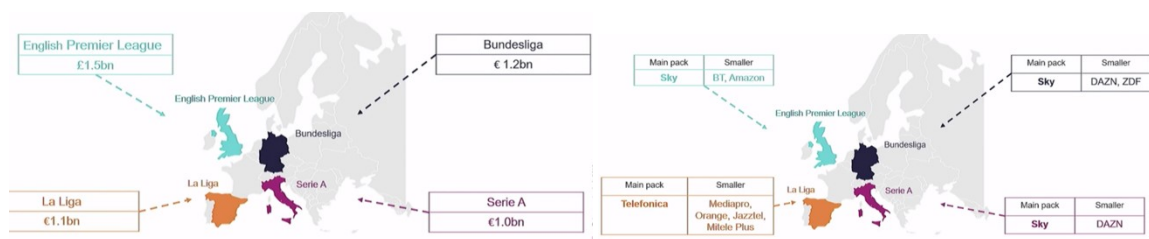
4.5. Difference between traditional broadcasting vs. D2C:



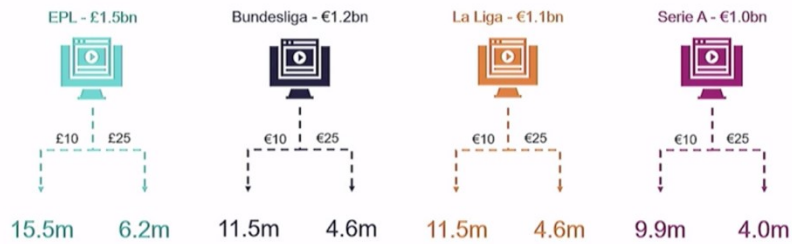
Today's D2C's (many launch own OTT services, small and well-known players): Out of Market (not in own domestic market), 2nd tier rights/niche sports, Highlights + Clips, Complementary to broadcasting

What about 1st tier rights?

Costs to be covered in the domestic market if they launch D2C platforms:

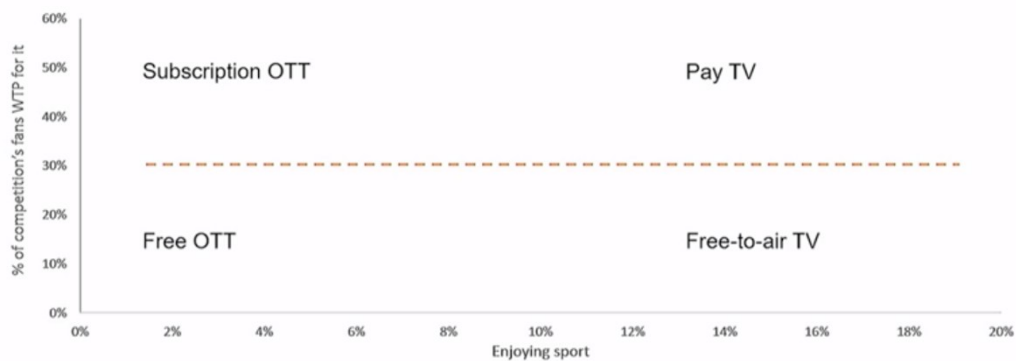


TV rights to be covered if leagues go full OTT => very huge audience and a high risk with the market dynamics



4.6 Opportunity:

- Top sports enjoyed vs. % of competitions' fans willing to pay for it in the UK



Suitable model: out of market strategy

- With a higher WTP = suitable for a subscription service
- Low WTP = Free-to-air
- if sport is very popular => more suitable for mass broadcasting
- if it is more a niche => OTT
- Although Sports OTT audience is a small one, it is young, has disposable income and could be instrumental in the growth of future fanbases
- Currently: the economics of pure OTT players have a large discrepancy between revenue generated and costs – even higher with operating costs => meaning that auxiliary funding models will be key
- For Tier 1 sports, it is too risky in their domestic markets at present. With current market dynamics, D2C services are suited for out of market rights and 2nd tier sports

Podcast (P5): Sports Maniac Podcast – OTT and D2C – 27.11.19 (59:22)

Participants: Gerhard Borchers (CEO of Airtango) & Daniel Sprügel

5.1 How did the media market change over time? 2nd: sports content was in the hand of private channels, 3rd: digitalization, streaming, new players like Netflix emerged. But Gerhard does not foresee the death of TV in sports, can be successful if implemented and strategically

planned. If you look at the young generation, you can see a huge change (from TV to OTT and streaming). Live content is the future, but with tendency to short content formats as young generation is not willing to spend 1,5h to watch a match -> see NBA where matches are shown just for the last quarter. Sports disciplines have to rethink how to broadcast sports .

5.2 Which opportunities have smaller leagues for livestreaming in the future?

Strong relationship between local fans and teams is a driving force to offer OTT livestreams also for smaller leagues as they want to see ALL matches LIVE. Now, this is possible to watch it from any device from anywhere => this is reason why livestreams are spread throughout different leagues. They can make use of existing platforms and embed their matches there.

5.3 What kind of impact does 5G have on your OTT offerings? If 5G will be available throughout Germany, this will boost OTT and the quality of livestreams even more (10Mbit upload often not available but needed for a good stream). As a provider you need a technical partner, which supports in providing good quality Internet (See Telekom)

5.4 Who should own/create the OTT platforms? Buy vs. Pay? Club vs. League, From fans view: league should organize it, because fan wants to see home and away match. As a league it is hard and expensive to develop your own platform. According to PWC, own platforms often are not lucrative. As a league, you should find a platform that executes the OTT services for you.

5.5 What is your main strategy at Airtango? Started off with media rights in 2nd basketball league (broadcast of 260 matches). We built the platform ourselves to understand the processes and challenges, however this needs a lot of money to achieve the technological improvements. Then, we the changed to Sportradar (white label OTT platform) with the ability to focus now on finding new partners and a big technological step that offers new monetarization and growth models for Airtango. From starting phase, Airtango is now in the growth face. Our new bundle will be launched next year: consists of cable providers such as Sport Digital, Esports1, RunFighting, MotorVision (NASCAR Races) => offers more than 3500 hours of livestreaming, is a sole sports package that will be priced at 6,49€. Pay Per view will be offered for single matches (e.g. Ajax Amsterdam against Paris Saint Germain). USPs of Airtango: strong cooperation between Airtango and the league in terms of building up the platform and implementing it (offering training, support center) all options of monetarization (free stream with ads, pay model, a mixed model depending on the match), style of platform that is customized according to league or club. Airtango invests in streams and the rights to increase offering on the platform. Clubs/leagues invest in equipment, moderation

5.6 How do you include Social Media onto your platform? Embedded player allows league to put stream on own homepage. We do not offer any Facebook livestream.

5.7 What do you suggest to get users? Fanbase of local clubs is huge (e.g. Unicorns inside the stadium = 2000/ online = 7000). For every fan in stadium you have a unique user online => scaling opportunity

5.8 User engagement: We offer a scoreboard for match insights. We offer statistics on demand: user can click on a button of the livestream and see the current statistics and quotas on demand (unique offering). App offers highlight clips that can be shared on Social Media.