Challenges and Opportunities in the Business Model of Formula 1

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Abstract: This paper provides an overview of the business model of Formula 1 (F1), a premier motorsport racing competition. The main sources of revenue for F1 include TV broadcasting rights, race hosting fees, sponsorship and naming rights, and merchandise sales. In analyzing F1's business model, this paper examines the various revenue streams and the challenges they face. F1 is facing challenges in the area of TV broadcasting rights due to the rise of streaming services and the changing media landscape. Additionally, scheduling conflicts due to the limited time available to hold races are creating tensions between stakeholders. The paper also looks at the impact of sponsorship on F1, including the extension of sponsorship beyond traditional marketing tactics by brands like Rolex and IWC. However, some sponsorship deals have encountered issues, such as Marlboro's association with tobacco and Alfa Romeo's partnership with Stake violating certain countries' laws. It also draws upon a combination of literature review and personal experience to identify key issues and propose potential solutions. By analyzing existing research and drawing upon observations, the paper aims to provide a comprehensive understanding of the business model of Formula 1 and the challenges and opportunities it faces in the current market. Finally, the paper concludes with recommendations for addressing these issues, including exploring alternative revenue streams, implementing more flexible scheduling, and ensuring that sponsor partnerships align with F1's values and do not violate local laws.

Keywords: F1, business mode, motorsport racing competition, budge cap

1. Introduction

Formula One (F1) has always been a sport that balances competitiveness and commercialization. However, in recent years, the sport has faced a dilemma between maintaining its competitive spirit and becoming more commercially successful. The budget cap was intended to level the playing field, making F1 more competitive and exciting for fans. However, it has not achieved its intended goal. The larger teams have found ways to circumvent the rules, while smaller teams lack the financial resources to fully utilize their budget caps. This has resulted in the continuation of the same old domination by the big teams, such as Mercedes, Red Bull, and Ferrari. Moreover, the technical regulations have further restricted the designers' creativity, and they can only make limited changes to their cars. The problem is not limited to just the budget cap and technical regulations. Traditional teams like Ferrari, McLaren, and Williams are struggling to compete with their newer counterparts.

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These teams have a rich history in F1, but their last championship wins were decades ago. As a result, they are not bringing any significant commercial value to the sport and are only surviving on the special bonuses provided by the FIA to balance their revenue.

F1 is at a crossroads, and a balance must be found between competitiveness and commercialization. The sport needs to address the issues of the budget cap and technical regulations, allowing all teams to compete on a level playing field. Additionally, the sport needs to find ways to promote and incentivize traditional teams to succeed, bringing greater brand value to the sport. It is time for F1 to find a way to preserve the competitive spirit of the sport while also achieving greater commercial success. F1 has always had to balance competitiveness and commercialization, but recent developments have made this balancing act more challenging. F1 must find a way to address these issues and create a sport that is both commercially successful and true to its competitive roots. This paper utilizes a literature review to argue that the business model of Formula 1 lacks diversity and that many of the regulatory restrictions inhibit stable income for both teams and the FIA. In order to achieve sustainable development of the sport, new revenue streams must be developed and the entertainment value of the sport must be continuously improved.

2. Introduction of Formula One

Formula One is a highly competitive and prestigious racing sport that has captivated audiences worldwide. F1 features the fastest and most technologically advanced cars, driven by some of the best drivers in the world. The sport has a rich history, dating back to the early 1900s, and has evolved over the years to become a global phenomenon.

According to a recent article by The Guardian, F1 has become one of the most popular and lucrative sports in the world, with an estimated 1.92 billion viewers in 2019 alone. The article highlights the significant technological advancements made in the sport, including aerodynamics, hybrid engines, and digital systems, which have made F1 one of the most innovative and cutting-edge sports in the world. The article also notes the importance of sustainability in the sport, with F1 committing to becoming carbon neutral by 2030 and implementing a range of measures to reduce its environmental impact.

2.1. Income Stream

TV broadcasting rights and hosting fees are two primary sources of revenue for Formula One. Broadcasting companies pay a substantial fee for the rights to air races, according to a report, the global media rights revenue for F1 was approximately 630 million U.S. dollars in 2020 [1]. Hosting fees are paid by countries to F1 to stage races, with amounts varying based on location and popularity. For example, the Azerbaijan Grand Prix paid F1 \$60 million to host the race [2]. These revenue streams are significant for F1, providing a means to make the sport accessible to fans worldwide while generating revenue to support the growth and development of the sport.

Sponsorships and naming rights are also significant sources of revenue for F1. F1 attracts a range of high-profile sponsors, including Rolex, Heineken, and DHL. In 2019, F1 signed a sponsorship deal with Saudi Aramco worth an estimated \$200 million. Additionally, some races are named after the sponsors, such as the Heineken Dutch Grand Prix. Sponsorships and naming rights provide significant revenue for F1 and help to increase the visibility of the sport.

Finally, merchandise sales are another source of revenue for F1. F1 sells a range of merchandise, including clothing, accessories, and collectibles. Fans of the sport can purchase these items online or at the races. Merchandise sales help to increase revenue for F1 and provide fans with a way to support their favorite drivers and teams.

F1 generates revenue from various sources, including TV broadcasting rights, hosting fees, sponsorships and naming rights, and merchandise sales. These sources of revenue help to ensure that the sport is accessible to fans around the world and that it can continue to thrive in the years to come.

To embrace digital technology, F1 has also focused on expanding its reach into new markets around the world. This includes hosting races in countries like Bahrain, Vietnam, and Saudi Arabia, as well as partnering with local businesses and sponsors to promote the sport in these regions. By doing so, F1 has been able to tap into the growing global appetite for motorsport and position itself as a truly international brand.

F1's success can also be attributed to its ability to foster strong partnerships and relationships with key stakeholders in the industry. This includes teams, drivers, sponsors, and broadcasters, all of whom play a critical role in shaping the direction and success of the sport. Through effective communication, collaboration, and negotiation, F1 has been able to build a strong and interconnected ecosystem that supports its growth and ensures its long-term sustainability.

One of the advantages of F1's business model is its global reach. F1 races are held in countries all around the world, which helps to increase the sport's popularity and generate revenue from a wide range of sources. According to a report, F1 generated \$2.02 billion in revenue in 2019, with \$1.1 billion coming from hosting fees [3]. Additionally, F1's global TV audience is estimated to be around 471 million viewers [4]. The sport's global reach allows F1 to generate significant revenue and reach a large audience.

Another advantage of F1's business model is the sport's ability to attract high-profile sponsors. F1 attracts a range of sponsors from various industries, including Rolex, Heineken, and DHL. According to a report by SportsPro, F1's sponsorship revenue was estimated to be \$950 million in 2019 [5]. High-profile sponsorships provide F1 with a significant source of revenue and help to increase the sport's visibility.

However, there are also some disadvantages to F1's business model. One of the main criticisms of F1 is the high cost of hosting races. According to a report by Autosport, some races, such as the Azerbaijan Grand Prix, can cost up to \$60 million to host. These high costs can be a significant burden for host countries and may discourage some locations from hosting races.

Another criticism of F1's business model is the revenue distribution system. According to a report by ESPN, F1's revenue distribution system is heavily weighted towards the top teams, which receive a larger share of the revenue [6]. This system can make it challenging for smaller teams to compete and may reduce the competitiveness of the sport.

3. Television Broadcast

According to a report by PwC, television broadcasting rights are the most significant revenue stream for F1, accounting for around 40% of the sport's revenue. In recent years, F1 has signed deals with various broadcasters worldwide, including Sky Sports in the UK, ESPN in the US, and Fox Sports in Australia.

The revenue generated from television broadcasting rights allows F1 to invest in the sport's development and promote the sport to a global audience. F1's television coverage has also played a significant role in increasing the sport's popularity. The coverage allows fans worldwide to follow the races and engage with the sport.

However, the use of television broadcasting rights has also generated controversy. In 2018, F1 announced plans to launch its own streaming service, which would allow fans to watch races live. This move was criticized by some broadcasters, who argued that it would reduce their revenue and threaten their business model. Additionally, some fans have criticized the high cost of television broadcasting rights, which can make it challenging for fans to access the coverage.

F1 will need to continue to balance the benefits and challenges of television broadcasting rights to maintain the sport's popularity and revenue.

3.1. New changes by Liberty Media Corporation

One of the key factors behind the growth and success of F1 is its ability to constantly innovate and evolve, adapting to changing market conditions and fan expectations.

F1 has continued to increase its value and grow its business is by investing in digital technology and social media. In recent years, F1 has launched a range of digital initiatives, including a mobile app, online streaming platform, and social media channels that allow fans to engage with the sport and its drivers on a deeper level. The emergence of free media groups, such as Netflix, mobile platforms, and ESPN, has brought significant changes to the media industry. These groups have challenged traditional business models and introduced new reforms, disrupting the media landscape.

Netflix, for example, has revolutionized the way people consume entertainment by offering an online streaming service. The company has disrupted traditional television networks by providing viewers with the option to watch shows and movies anytime, anywhere, and on any device. In recent years, Netflix has invested heavily in producing original content, which has helped the company attract and retain subscribers.

Mobile platforms, such as social media apps, have also played a significant role in transforming the media industry. These platforms allow users to create and share content with a global audience, making it easier for individuals to become content creators. Social media has also provided advertisers with new ways to reach their target audiences, allowing them to create personalized and targeted ads.

ESPN, a sports media company, has also embraced digital technology to transform its business model. The company has launched its streaming service, ESPN+, which offers viewers access to live sports events and original content.

3.2. Sponsorship

Sponsorship has become an integral part of modern sports, including Formula One. F1's top 10 teams generated a combined \$991 million in revenue in 2021, with approximately 39% coming from sponsorship deals [7]. Sponsorship allows companies to reach a global audience through branding, advertising, and other promotional activities. In return, companies pay large sums of money to F1 teams and organizers, in some cases reaching tens of millions of dollars per year.

Sponsorship deals can take many forms, including team or event naming rights, placement of logos on cars, uniforms, or equipment, and sponsorship of individual drivers or races. Companies such as Petronas, Rolex, and Shell are among the most recognizable sponsors in F1, with many years of involvement in the sport.

However, sponsorship in F1 is not without its challenges. As the sport becomes more competitive, the cost of sponsorship continues to rise, making it difficult for smaller companies to get involved. In addition, there is a risk that sponsorship can be seen as too commercial or distracting from the purity of the sport.

Despite the inherent challenges, sponsorship remains a critical component of the Formula One business model. Sponsors keep adapting strategies in response to changing circumstances and emerging challenges.

Rolex and IWC. One example of this trend is the relationship between F1 and luxury watch brands such as Rolex and IWC. Watch brands have historically been drawn to F1 for its association with precision, innovation, and speed. However, in recent years, there has been a shift towards more integrated partnerships, where watch brands not only sponsor individual teams but also provide timing and scoring services for the sport as a whole.

Another trend in F1 sponsorship is the rise of technology companies such as Dell, HP, and SAP. As F1 becomes increasingly data-driven, technology companies are well-positioned to provide innovative solutions and services that can help teams gain a competitive advantage. For example, Dell provides real-time data analytics to the Mercedes-AMG Petronas F1 Team, allowing them to make strategic decisions during races [8]. However, as with any sponsorship deal, there are potential downsides. Some argue that certain types of sponsorship, such as those from tobacco companies, are not appropriate for a sport that values health and fitness. In addition, there is a risk that sponsorship can become too prominent, overshadowing the sport itself.

4. Analysis of Business Model Issue

One of the main issues with the F1 business model is the sport's over-reliance on television rights, event hosting fees, sponsors, and naming rights. F1's revenue is primarily generated through four sources: race hosting fees, broadcasting rights, sponsorships, and merchandise sales. While these revenue streams have been successful in the past, the lack of diversification has left the sport vulnerable to economic and regulatory changes.

Another issue with the F1 business model is the sport's high costs. According to research, the cost of running an F1 team can reach upwards of \$500 million per year [9]. This has led to a concentration of power among the wealthiest teams and has made it difficult for smaller teams to compete.

Furthermore, the F1 business model has been criticized for its lack of sustainability and environmental responsibility. The sport's heavy reliance on fossil fuels and carbon-emitting vehicles has been a source of concern, particularly in light of the global climate crisis.

To address these issues, F1 has implemented a number of changes to its business model in recent years. For example, the sport has introduced cost caps to limit the amount of money teams can spend on their cars, and has made efforts to increase its sustainability by launching the "F1 Green Initiative."

However, there is still much work to be done to address the underlying issues with the F1 business model. As noted in an article by the BBC, "F1 is in the midst of a long-term process of change aimed at making the sport more sustainable, equitable and competitive" ("The real reason F1 is changing its business model"). Whether these changes will be enough to ensure the long-term viability of the sport remains to be seen.

4.1. Budge Cap Fails to Make the Grand Prix More Attractive

The introduction of the budget cap in Formula One was aimed at addressing the issue of high spending by teams with limited returns on investment. However, it remains unclear whether the budget cap has been effective in achieving this goal.

According to a report by Forbes, the top F1 teams spent over \$1 billion collectively in 2019. This has resulted in a financial imbalance, with top teams having a significant advantage over smaller teams. The introduction of the budget cap, which was implemented for the first time in 2021, aimed to address this issue. However, some experts argue that the budget cap may not be effective in leveling the playing field as intended.

One possible solution to the problem of high spending by top teams is to enforce stricter regulations on the development of technology and aerodynamics. This would limit the amount of money that can be spent on research and development, thereby reducing the financial advantage of top teams. Additionally, this could encourage innovation and creativity within teams as they would need to find more efficient ways of developing their cars within the given limits.

Another potential solution is to redistribute revenue from the sport's commercial rights more evenly among the teams. This would ensure that smaller teams receive a larger share of the revenue and can compete on a more equal footing with top teams. The current revenue distribution model has

been criticized for favoring larger teams, which receive a higher percentage of the revenue due to their historical success and larger fan base.

The introduction of the budget cap was a step in the right direction toward solving the issue of high spending in F1. However, it remains to be seen whether the budget cap will be effective in achieving its intended goals. Stricter regulations on technology development and revenue redistribution could be potential solutions to address the issue of high spending and increase competitiveness among teams. However on the other hand, In contrast to the 2021 season, the 2022 season was deemed as notably unexciting. Despite receiving a traffic boost from the previous year, ratings are expected to experience a significant decline in 2023, leading to a decrease in advertising exposure and ticket sales revenue. Without a budget cap that can effectively bridge the gap between teams, inject more excitement into the game, and attract more viewers, the revenue generated from ticket sales and broadcast fees is likely to plummet.

4.2. Sustainable Development

F1 has a massive global audience, making it an ideal platform to raise awareness about sustainable development. The FIA has already taken steps to promote sustainable development through its involvement in Formula E, which is an all-electric racing championship. However, there is still more that can be done to publicize the message and work with companies in related fields to develop new solutions.

By promoting sustainable development, F1 can reinforce the bond between the Grand Prix and its audience. Many people are concerned about the impact of motorsport on the environment, and by demonstrating a commitment to sustainability, F1 can show that it takes these concerns seriously. This can help to build trust and loyalty among fans, who will be more likely to support the sport if they believe that it is doing its part to protect the planet.

Moreover, the collaboration between F1 and companies in related fields can lead to the development of new, sustainable technologies that could be used in other industries [10]. This can provide a stable income stream for F1 by creating new revenue streams through partnerships and licensing agreements.

In addition, F1 can also generate positive media coverage and attract new sponsors by promoting its commitment to sustainability. Many companies are now looking to align themselves with sustainable initiatives, and by showcasing its environmental efforts, F1 can attract new partners and sponsors who share its values.

In conclusion, promoting sustainable development in F1 can reinforce the bond between the Grand Prix and its audience, provide a stable income stream through partnerships and licensing agreements, and attract new sponsors and partners who share its values. By working together with companies in related fields, F1 can continue to lead the way in sustainable motorsport and make a positive impact on the world.

5. Conclusion

The paper outlines the business model of Formula One (F1), the premier motorsport competition. F1's main sources of income include television rights, event hosting fees, sponsorship and naming rights. The lack of diversity in income methods has seriously affected the income stability of F1. Both the FIA and the teams may face potential losses. Even if the introduction of the budget cap does not solve the above problems so far, furthermore, it creates new challenges.

The business model of Formula 1 faces significant challenges that require immediate attention. F1 must find a way to strike a balance between competitiveness and commercialization to secure its future as a premier motorsport racing competition. One possible solution is to revisit the budget cap

and implement stricter enforcement measures to prevent larger teams from circumventing the rules. Additionally, exploring alternative revenue streams, such as expanding F1's digital presence and investing in e-sports, can help diversify the sport's revenue streams and reduce its reliance on traditional sources. The promotion of sustainable development within the context of F1 has the potential to create a stable revenue stream via partnerships and licensing agreements. Additionally, it can attract new sponsors and partners who align with the sport's values. By collaborating with companies in related fields, F1 can maintain its position as a pioneer in sustainable motorsport, while simultaneously contributing positively to society. Ultimately, F1 must take bold and decisive action to address the key issues facing its business model if it is to remain relevant and competitive in the years to come.

This paper highlights the urgent need for F1 to address the limitations of its current income sources and explore new revenue streams to ensure its long-term financial stability. However, it is important to note that this research has certain limitations, such as the focus on a specific time period and the limitations of available data. Future research could further explore the effectiveness of different strategies for diversifying F1's revenue streams and the impact of sustainable development on the sport's financial stability. Despite these limitations, this study provides valuable insights into the challenges and opportunities facing the business model of Formula 1 and the potential solutions that can help secure its future as a premier motorsport competition.

By conducting an analysis of the performance gap between teams, viewership ratings, and income in the 2023 season of Formula 1, it may be possible to further verify the effectiveness of the budget cap and identify potential areas for improvement. This would enable the sport to meet better the challenges it faces and make any necessary adjustments to ensure its long-term financial stability. Such an analysis could provide valuable insights into the impact of the budget cap on the sport's competitiveness and commercialization, and inform future decision-making regarding the management of the sport.

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