STRATEGY AND PERFORMANCE OF AUDIOVISUAL STREAMING PLATFORMS

Rodrigo Afonso de Moraes 1  Fábio de Oliveira Paula 2  Jorge Ferreira da Silva 3

Abstract

Purpose: This work aims to analyze and classify the competitive strategies of 37 streaming platforms and identify which strategic groups perform better globally.

Design/methodology/approach: This study is based on the structure-conduct-performance paradigm and uses Porter's typology to reach its goal. It classified the 37 platforms into their respective strategic groups based on eight strategic variables using k-means cluster analysis. Then, group performances were compared using ANOVA to test the mean differences of two performance variables.

Originality/relevance: The audiovisual industry is experiencing a radical change in content consumption, distribution, and production. Streaming technology, which delivers content over the internet without downloads, increased flexibility and sparked a wave of adoption of audiovisual streaming platforms that destabilized other sectors, such as home video. Consequently, this phenomenon left a gap in studies about the strategy and performance of the industry, which this paper intends to fill.

Main findings: As a result, 14% of the platforms studied were allocated to the Differentiation strategic group, 30% to Cost Leadership, 19% to Differentiation Focus, 8% to Cost Focus, and 30% were considered Stuck-In-The-Middle. We identified that the strategic groups present significant differences in performance, validating the applicability of Porter's typology.

Theoretical contributions: The study found that broad-spectrum strategies such as Cost Leadership and Differentiation promote better performance than focus strategies at this industry stage. Surprisingly, Stuck-In-The-Middle companies also perform well, similar to companies with broad-spectrum strategies.

Keywords: Audiovisual Streaming; Audiovisual Industry; Innovative Industry; Disruptive Industry; Strategic Groups; Competitive Strategies; Performance.
RESUMO

Objetivo: Este artigo analisa e classifica as estratégias de 37 plataformas de streaming, identificando quais grupos estratégicos mostram melhor desempenho global.

Concepção/metodologia/abordagem: Este estudo se baseia no paradigma estrutura-conduta-desempenho, e utiliza a tipologia de Porter para alcançar seu objetivo. Classificamos as 37 plataformas em seus respectivos grupos estratégicos, com base em oito variáveis estratégicas, utilizando a análise de cluster K-means. Em seguida, os desempenhos dos grupos foram comparados utilizando ANOVA, para testar as diferenças de médias de duas variáveis de desempenho.

Originalidade/relevância: A indústria audiovisual está passando por uma mudança radical no consumo, distribuição e produção de conteúdo. A tecnologia de streaming, que fornece conteúdo pela Internet sem a necessidade de download, aumentou a flexibilidade e provocou uma onda de adoção de várias plataformas de streaming audiovisual, desestabilizando outros setores, como o de home video. Consequentemente, esse fenômeno abriu uma lacuna nos estudos sobre estratégia e desempenho do setor, que este artigo visa preencher.

Principais resultados: 14% das plataformas estudadas enquadram-se no grupo estratégico de Diferenciação, 30% em Liderança em Custo, 19% em Foco em Diferenciação, 8% em Foco em Custo, e 30% foram consideradas Stuck-in-the-Middle. Os grupos estratégicos apresentaram diferenças significativas de desempenho, assim, a aplicação da tipologia de Porter.

Contribuição Teórica: O estudo mostra que estratégias de amplo espectro, como Liderança em Custo e Diferenciação, obtiveram melhor desempenho do que estratégias de foco neste setor. Surpreendentemente, as empresas Stuck-in-the-Middle também tiveram bom desempenho, semelhante ao das empresas com estratégias de amplo escopo.

Palavras-chave: Streaming audiovisual; Setor audiovisual; Indústria inovadora; Indústria disruptiva; Grupos estratégicos; Estratégias competitivas; Desempenho.

PALABRAS CLAVE: Streaming audiovisual; Industria audiovisual; Industria innovadora; Industria disruptiva; Grupos Estratégicos; Estrategias Competitivas; Desempenho.

RESUMO

Propósito: Este trabajo tiene como objetivo analizar y clasificar las estrategias competitivas de 37 plataformas de streaming e identificar qué grupos estratégicos se desempeñan mejor a nivel global.

Diseño/metodología/enfoque: Este estudio se basa en el paradigma estructura-conducta-desempeño y utiliza la tipología de Porter para lograr su objetivo. Clasificó las 37 plataformas en sus respectivos grupos estratégicos en función de ocho variables estratégicas utilizando un análisis de conglomerados de k-medias. Luego, se compararon los desempeños grupales utilizando ANOVA para probar las diferencias medias de dos variables de desempeño.

Originalidad/relevancia: La industria audiovisual está experimentando un cambio radical en el consumo, distribución y producción de contenidos. La tecnología de streaming, que ofrece contenidos a través de Internet sin descargas, aumentó la flexibilidad y provocó una ola de adopción de plataformas de streaming audiovisual que desestabilizó otros sectores, como el de video doméstico. En consecuencia, este fenómeno dejó un vacío en los estudios sobre la estrategia y el desempeño de la industria, que este artículo pretende llenar.

Principales hallazgos: Como resultado, el 14% de las plataformas estudiaadas se asignaron al grupo estratégico de Diferenciación, el 30% al Liderazgo en Costos, el 19% al Enfoque en Diferenciación, el 8% al Enfoque en Costos y el 30% se consideraron ‘Stuck-in-the-Middle’. Identificamos que los grupos estratégicos presentan diferencias significativas en su desempeño, validando la aplicabilidad de la tipología de Porter.

Contribuciones teóricas: El estudio encontró que las estrategias de amplio espectro como el liderazgo en costos y la diferenciación promueven un mejor desempeño que las estrategias de enfoque en esta etapa de la industria. Sorprendentemente, las empresas ‘Stuck-in-the-middle’ también obtienen buenos resultados, al igual que las empresas con estrategias de amplio espectro.

Palabras clave: Streaming Audiovisual; Industria Audiovisual; Industria Innovadora; Industria disruptiva; Grupos Estratégicos; Estrategias Competitivas; Desempeño.
1 INTRODUCTION

The audiovisual industry is being disrupted in its business model with the advent of streaming, which started commercially in 1992 with the launch of Starworks by Starlight Networks (Tobagi & Pang, 1993). This technological disruption became commercially viable with the emergence of digital technologies from Industry 4.0 (Anufrienko, 2019). Audiovisual streaming is growing at an accelerated pace, while other means of audiovisual distribution are losing popularity, such as cinema, home video, and pay TV (Holzhauer, 2020). In recent years, many new and incumbent audiovisual companies started their online video distribution platforms, which became known as the streaming war (Shaw, 2020). At a conference held in the United States, American platform executives mentioned the existence of more than 300 platforms in 2019 (Bloom, 2019).

The accelerated recent growth of the number of available platforms is observed. The consumption of audiovisual content by this new means of distribution increased exponentially with the quarantines provoked by the COVID-19 pandemic (Marketwatch, 2021). A study of Conviva, a streaming market monitoring platform, indicated a 20% growth in the audience for these services only in March 2020 (Fiore, 2020) and a 63% growth in 2020 compared to 2019 (Trevizani, 2020). Globoplay, a Brazilian streaming platform, had a 145% growth in its subscriber base in the first six months of 2020 compared with the same period in 2019, driven by the pandemic (Veloso & Tondo, 2020).

The increasing importance of streaming distribution is not limited to users, hours consumed, and new platforms. The content available on the internet is also currently recognized as having good quality. In 2019, Netflix was awarded at the Cannes Festival with two of its productions (Netflix, 2019), and the number of Oscar nominations has accelerated (Amer, 2021). All the above facts support the optimistic projections about the growth of the streaming market. According to Cision, the streaming market will reach a value of 149.34 billion dollars in 2026, compared to only 38.56 billion in 2018, an increase of 287% (Cision, 2020).

Considering the increasing relevance and specificities of this business model, many studies are being conducted to understand how it is managed, its strategies, and how they relate to better performance (e.g., Bender, Gal-Or, & Geylani, 2021; Daiji & Egert, 2018, Gómez & Quevedo, 2018; Noh, 2021; Zanella et al., 2022; Zhou et al., 2023).

The streaming technology rapidly reduced entry barriers to the distribution of audiovisual content, making this business highly competitive. New entrants and incumbents with content (from partners or their own), resources, and technological capabilities to launch a
streaming platform are conquering markets from traditional incumbents, disrupting the sector with a completely new business model. Consequently, the strategic analysis made for the old business model must probably not apply to the new one as an emergent sector based on technologies of Industry 4.0. Strategies in audiovisual streaming are being tested in a learning-by-doing process (Arrow, 1971) while traditional players are forced to evolve and adapt their strategies (Daiji & Egert, 2018). Besides, as the business model is disruptive and still emergent, initial strategies that succeeded may not work as the landscape evolves (Zhou et al., 2023). To illustrate this argument, recent literature identified that marketing strategies differ between streaming platforms and traditional distribution channels, with a higher focus from the formers on digital marketing (Gómez & Quevedo, 2018).

However, copying new entrants' marketing strategies is not enough to recover a successful market position. Consequently, studies investigated which strategies are more effective for traditional audiovisual content firms. Understanding how the incumbents’ strengths and weaknesses adapt to specific strategies in the context is necessary. According to Zanella et al. (2021), with the emergence of streaming platforms, content providers with broader experience may proliferate through diverse niches, achieving better performance than those that are more focused. Bender et al. (2021), in their turn, advocate that incumbent content providers that are used to sell content online are relying on differentiation or differentiation focus strategies to operate in streaming services, charging higher prices. Nevertheless, studies on traditional players’ reactions are not the only ones being conducted. New competitors are also struggling. Netflix succeeded initially by generating value and increasing the number of users not providing ad-supported subscriptions (Zhou et al., 2023). On the other hand, this same policy is related to a recent reduction in subscribers as other platforms adopt a different approach (ibid.).

Despite the cited studies, there is a lack of literature on the strategy and performance of audiovisual streaming platforms. According to the contingency paradigm of strategic management (Hambrick, 1983; Venkatraman, 1989), performance results from the fit between the environment, the firm's characteristics, and strategies (Carneiro et al., 2011). Therefore, as this study's primary objective, it is crucial to map the more effective strategies for the firms adopting this business model to achieve better performance. To achieve this goal, we rely on the strategic group theory (Hunt, 1972; Porter, 1980) to identify the different global strategies adopted by audiovisual streaming firms using Porter's generic strategies framework (Porter, 1980) and understand how these strategies impact their performance. Many previous studies used this strategic framework to analyze with success the strategy and performance of many
traditional (e.g., Kotha & Vadlamani, 1995; Köseoglu et al., 2013; Peixoto et al., 2021) and a few internet-based industries (Al-Abdallah et al., 2021; Kim et al., 2004).

The study validated the strategic group theory and Porter's generic strategies framework for the audiovisual streaming sector and concluded that broad-spectrum strategies such as cost leadership and differentiation lead to better performance than focus strategy at this industry stage. Surprisingly, stuck-in-the-middle firms performed as well as firms adopting broad-spectrum strategies. This is in line with the results of Kim et al. (2004), who found that integrated strategies combining elements of cost leadership and differentiation are effective for e-business firms.

The observed scarceness of studies about strategic groups on internet-based industries and the absence, to the best of our knowledge, of industries that emerged with the support of digital technologies of Industry 4.0 adds another contribution to this work. This study's findings also present evidence to support the validity of the strategic group theory and Porter's generic strategies framework for such types of industries.

2 LITERATURE REVIEW

2.1 Strategic Groups

Strategic groups are used to analyze the strategic behavior of the firms in an industry and their relationship to performance. The concept of a generic strategic group, created by Hunt (1972), resides in the idea that it is possible to define a sufficiently broad strategic typology applicable to any organization from any industry and at any maturity level (Herbert & Deresky, 1987). Firms from the same strategic group in a segment adopt similar strategies and tend to achieve similar performances (Porter, 1980). Barney and Hoskinsson (1990) challenged the strategic groups' theory by contesting its basic premise that strategic groups exist and decisively influence the firms' performance. They argue that the relationship between the industry structure and performance based on Industrial Organization economics (Porter 1980, 1985) is dubious. Against this argument, empirical studies (e.g., Hawawini, Subramanian, & Verdin, 2003; McGahan & Porter, 1997; Rumelt, 1991; Schmalensee, 1985) demonstrated that the industry effect is relevant to firm performance. For example, Hawawini et al. (2003) found that between 6.5% and 11.4% of the variance of firm performance is caused by the industry effect. Another criticism was that the methods to test the strategic and performance differences among the groups based on cluster analysis were not powerful enough (Barney & Hoskinsson, 1990).
However, these empirical tests were conducted based on a solid theory of mobility barriers (Caves & Porter, 1977). Such theory states that mobility barriers are built by participants of strategic groups, making it difficult for new firms or incumbents from other strategic groups to adopt a similar strategy, creating a homogeneity of conditions among the group's participants that explains the resembling performance. Moreover, despite the limitations of methods based on cluster analysis to make statistical inferences, influential authors such as Ramanujam and Venkatraman (1984) validated research streams based on strategic groups with empirical analyses conducted with such methods.

Several authors developed generic strategic typologies to classify firms from any industry into generic strategic groups (e.g., Abell, 1980; Miles & Snow, 1978; Mintzberg, 1980; Porter, 1980). The most consecrated and applied strategic typology is probably Porter's (1980). Several studies used it for many sectors as diverse as manufacturing (Kotha & Vadlamani, 1995; Nandakumar et al., 2011), education (Peixoto et al., 2021), internet-based ventures (Al-Abdallah et al., 2021), petrochemical (Moraes & Zilber, 2004), hospitality (Köseoglu et al., 2013), business services (O'Farrell et al., 1993), the airline industry (Greckhamer & Gur, 2021), e-business (Kim et al., 2004), and the informal sector (Mungai & Ogot, 2017).

2.2 Porter's Typology

Porter's typology (1980) comprises three generic strategies: cost leadership, differentiation, and focus (cost focus and differentiation focus). According to the author, firms that adopt only one of these strategies perform better than those seeking a hybrid strategy or failing to adopt the chosen one, becoming "stuck in the middle."

The cost leadership strategy is achieved when the company makes its total cost lower than its competitors (Barney, 2014). The lower cost allows an above-average performance as it acts as a defense mechanism against the rivalry of its competitors, particularly concerning price wars. These firms also have more margin to negotiate with suppliers and clients, having more breath to continue in the industry than their competitors (Carneiro et al., 1997).

The differentiation strategy, in turn, presupposes that the company offers a product considered unique by its customers. That is, endowed with attributes that competing products hardly reach. Differentiation also serves as a defense mechanism for the firm but differs from cost leadership. Differentiation promotes loyalty and less price sensitivity. It increases the offer's perceived value for customers (Barney, 2014), reducing their bargaining power and insulating the company from rivalry with its competitors.
Finally, the focus strategy relies on the firm's ability to serve a specific customer target better than serving multiple market segments or the whole market. The target must be narrow enough for the firm to serve it more effectively and can be served through a low-cost or differentiation strategy (Carneiro et al., 1997).

Porter’s typology is not free from criticism. Many understand that the differentiation strategy, for instance, should be broken down into a more precise classification, given that differentiation can be achieved by a wide range of distinct competitive strategies, which require particular structure and skills for their implementation. In this sense, Kim and Lim (1988) argued that the differentiation strategy should be subdivided into product differentiation (specific attributes, quality) and marketing differentiation (advertising, service level). Miller (1992), in turn, proposed three types of differentiation: quality, image, and innovation. In their turn, Moon et al. (2014) extended the model to eight generic strategies by identifying four types of cost leadership and differentiation strategies: broad, customer-based, product-based, and narrow. Greckhamer and Gur (2021) also proposed an expansion to consider pure generic strategies (broad or focused cost-leadership or differentiation), hybrid strategies (broad or focused cost-leadership and differentiation), and stuck-in-the-middle. They concluded that firm and industrial-level contingencies might influence the competitive advantage or disadvantage of specific pure or hybrid strategies.

Another criticism concerns the concept of 'stuck-in-the-middle.' Some authors state that some firms simultaneously successfully pursue cost leadership and differentiation strategies with performance gains (Dess & Davis, 1984; Karnani, 1984; Miller & Dess, 1993; White, 1986). An example is IKEA (Hattangadi, 2018). The furniture retailer pursues cost leadership by seeking low-cost parts suppliers and leaving the furniture assembly to its customers, reducing delivery costs for consumers and suppliers. Despite this, it also approaches a differentiation strategy by innovating on how furniture is purchased. Their stores are unique buildings designed for customers to circulate throughout the facility, with stylishly decorated rooms, offering customers many choices and decor suggestions. At a similar pace, Pretorius (2008) proposes that firms in turnaround situations have gains in relying on complementary strategies. Kim et al. (2004) compared firms with online and offline operations and ones only operating online. They concluded that firms combining elements from cost leadership and differentiation strategies outperform the others.


2.3 Audiovisual Streaming Sector

Media streaming is an emerging sector that is changing entertainment as we know it. As a technological process, it is the continuous multimedia delivery of audiovisual, sound, or textual content to the end-user (Larson, 2007). It brings more flexibility to the user (Kaltum et al., 2016) by allowing access to content without downloading all the files required before use. Streaming is a technological innovation and cultural practice that co-configures the audience and the industry (Burroughs, 2015). Netflix assumed the position of leader in this industry. The firm started by renting home video (DVDs) by mail and, in 2007, pioneered the streaming service. In 2010, it initiated its internationalization process, and in 2012, it started to produce content (Au-Yong-Oliveira et al., 2020).

Given the massive success and the popularization of Netflix, competitors started migrating to streaming, including big incumbents from other audiovisual markets. Disney, for instance, recently launched its Disney+ service, which had almost 74 million subscribers just one year after its debut (Barnes, 2020). Even large companies from other sectors are venturing into streaming, such as the retailer Amazon, which offers its streaming service, Prime Video, in conjunction with its free delivery service, Amazon Prime. In Brazil, the most prominent example is Globoplay, a video-on-demand platform for the traditional open TV channel Globo. The accelerated growth is not limited to the number of platforms but the market as a whole. According to a recent report (Grand View Research, 2020), the global streaming market was worth 42.6 billion dollars in 2019 and is projected to grow at an annual rate of 20.4% from 2020 to 2027. Innovations in line with Industry 4.0, like blockchain and artificial intelligence that improve image quality and changes in content production, are expected to catalyze growth.

Several authors (e.g., Christensen, Raynor, & McDonald, 2013; Richardson, 2011) consider audiovisual distribution through the internet as a disruptive innovation that brought down incumbents on the home video model, such as Blockbuster, in a short time. From the beginning of Netflix in 2007 to the bankruptcy of Blockbuster in 2010, it was only three years. The paradigm shift was profound in the distribution of content and its production and consumption. New forms of consumption, such as reruns and series marathons, became a pattern (Matrix, 2014). As for content production, streaming platforms can obtain massive amounts of data about their customers and their consumption patterns, enabling recommendation algorithms based on big data and artificial intelligence techniques and directing content production (Carr, 2013). For instance, Netflix used the information its subscribers collected to build the House of Cards series (Hallinan & Striphas, 2016).
As for business models, there are currently four broad categories of monetization of the displayed content. They are Advertisement Video On Demand (AVOD), Subscription Video On Demand (SVOD), Transactional Video On Demand (TVOD), and Virtual Multichannel Video Programming Distributor (vMVPD) (Lopez, 2019). SVOD is the most popular among currently existing platforms and is adopted by larger ones like Netflix and Disney+. In this model, the subscriber pays a monthly subscription that gives him unlimited access to the entire collection. TVOD is the one that most resembles traditional video stores. The customer transacts for content, either purchase and sale or rental. In both models, there is no download of content. The third, AVOD, is the model that monetizes content through ads without charging the customer. Finally, vMVPD is the model that resembles the current Pay TV, where the customer, through a monthly subscription, has access to linear channels over the internet. The following section describes the strategic and performance variables used in this study, which are appropriate for the emergent and cutting-edge technological audiovisual streaming sector.

2.4 Strategic Variables (clustering variables)

Strategic variables were chosen based on the literature review and interviews with sector specialists, considering information availability. The selected strategic variables (see their list in Table 2) represent publicly available information about the streaming firms' relevant choices, attributes, and characteristics. After selecting the variables, the authors interviewed four experts in the audiovisual market, two practitioners, and two academics to validate them.

2.4.1 Price

Price is a strategic variable in several strategic group studies (e.g., Kotha & Vadlamani, 1995; Peixoto et al., 2021). It is an indication of the strategy a firm pursues. For instance, price leadership is a strategy when a firm has low operation costs and cheap prices (Lawton, 1999). Besides, firms seeking cost leadership usually compete on price (Stahl & Grigsby, 1997). In turn, some firms with a differentiation strategy have higher prices to increase profits, counting on the lower price elasticity of the demand (Sharp & Dawes, 2001) or as a tactic to position their products as more sophisticated (Wood & Pearson, 2006). The price is the basic monthly subscription fee in dollars for simplicity. However, many platforms have several offers, such as annual and semiannual plans, that vary in image quality, number of simultaneous accesses, and presence or absence of advertising.
2.4.2 Tasting period

Most streaming firms provide a tasting period in the first subscription when customers can access the content for free. More minor streaming services, which do not have large marketing budgets to reach new users, and large ones that aim to expand their services internationally to countries without full brand recognition, commonly resort to the tasting period (Kagan, 2020). Some relevant players, such as Disney+ and Netflix, no longer adopt the tasting period, increasing this variable's importance in distinguishing the different platforms' strategies. We measure this variable as a dummy that is 1 (one) if the firm offers a tasting period and 0 (zero) if it does not.

2.4.3 Geography

Streaming platforms vary widely in their geographic scope of action. They can act locally, regionally, or globally. The choice of this strategic variable is supported by previous studies (e.g., Hitt et al., 2016) as it indicates the firm's choices on geographic expansion, which is also related to its positioning (Mintzberg, 1987). We measured this variable by collecting the number of countries in which each platform provides its services.

2.4.4 Sector Diversification

Several streaming services also compete in other industries. The most emblematic case is Amazon's Prime Video, which offers its customers several services, including audiovisual, such as music streaming, free online retail delivery, cloud storage, and priority access to download virtual book releases. Other platforms have large Pay-TV studios or programmers, not limited to audiovisual streaming, such as Globoplay by Globo, which also has an Open-TV station, Pay-TV channels, Newspaper, and radio station. This strategy is consistent with a diversification strategy (Hoskisson & Hitt, 1990; Wan & Hoskisson, 2003). On the other hand, some companies restrict themselves to audiovisual streaming, offering only this service to their customers, such as Netflix. This strategic decision dilutes risk, contributing to the success of the streaming services (Oladineji & Udosen, 2019). The variable was measured as a dummy that is 1 (one) if the firm is diversified and 0 (zero) if it is not.
2.4.5 Offer breadth

This variable is related to the type of content that the platform makes available to the subscriber. It can be niche when focused on specific content, such as Crunchyroll, a service specialized in anime, or broad, when it presents all types of content in the collection, from documentaries to children's animations. This strategic variable is instrumental for adherence to Porter's framework, as it is relevant in pursuing focus strategies (Porter, 1985). It was measured as a dummy 0 (zero) if the platform content is for a niche and 1 (one) if the content is of a broad scope.

2.4.6 Brand

An essential strategic variable is brand, which is especially linked to Differentiation (Mintzberg, 1988; Porter, 1980). It is very relevant in the case of streaming services (Santos & Schlesinger, 2021). The variable is measured as 1 (one) if the general public recognizes the platform's brand or a traditional brand is behind the service and 0 (zero) otherwise. An emblematic case of a prominent brand is Disney+. The variable correlates to firm performance and is a proxy for marketing expenses (Hsu et al., 2013).

2.4.7 Business Model Diversification

Streaming has four broad business models: SVOD, TVOD, AVOD, and vMVPD, as described previously. The choice of business model is crucial for the performance of a business (Haggège et al., 2017; Zott & Amit, 2007), and a wider variety of business models can relate to an intention to reach a broader customer base, especially consistent with broader-scope strategies. This strategic variable was measured by the number of business models the platform offers, from one (1) to four (4).

2.4.8 Subscriber base

This variable measures the number of subscribers during data collection (the platform's active and paying customers). It gives an idea of the firm's structure since the higher the number of subscribers, the more robust the operations, the technology (to support the high number of simultaneous accesses), and the marketing. The absolute number of subscribers also indicates
the importance of the network effects, that is, how much of that platform's value derives from the number of users it retains (Stobierski, 2020). In other words, the more users, the greater the chance of having recommendations among groups of friends, which contributes even more to the service's leverage.

2.5 Performance Variables

Selecting performance variables is a challenge similar to strategic variables, as many of the most commonly adopted in the literature, especially accounting-financial variables (Barney, 2014), are not publicly disclosed. As performance is a multidimensional construct, we tried to identify measures representing distinct dimensions. Venkatramam and Ramanujam (1986) proposed a layered performance model with three domains: i) financial performance – the internal layer where the accounting-financial variables are, ii) operational performance – the second layer, enclosing the previous one and other process and activity indicators such as product and service quality and market-share, and iii) organizational effectiveness – encompassing the other two and adding measures such as stakeholders’ satisfaction. Considering the limitations, we proposed two performance variables representing the two first layers: subscriber base growth as a proxy of organizational performance and estimated monthly revenue as a proxy of financial performance. We could not find reliable customer or stakeholder satisfaction data representing the third layer. These variables had the same validation process as the strategic ones.

2.5.1 Subscriber Base Growth

Growth measures are essential (Mauboussin, 2012; Santos & Brito, 2012), especially in an emergent industry such as audiovisual streaming (Porter, 1980). It demonstrates a firm's ability to increase its size (Whatten, 1987). It is a measure of success as growth increases the firm's revenue and cash generation capacity. Besides, it brings economies of scale and market power (Santos & Brito, 2012), which are sources of competitive advantage (Barney, 2014). Therefore, we chose to represent the operational performance domain with the variable subscriber base growth, which is the total number of subscriptions that the service accumulates (at the time of the research) divided by the time in years since the platform was launched.
2.5.2. Estimated Monthly Revenue

The firm's revenue is presented as a performance measure in many previous articles that studied strategic groups (e.g., Al-Abdallah et al., 2021; Carneiro et al., 2011). Here, we chose the estimated monthly revenue as the basic subscription price times the subscribers' base. The actual monthly revenue was not used as it is only disclosed by public companies such as Netflix and Disney+, which is the minority of our sample.

3 METHOD

3.1 Sample and Data Collection

The research universe is the global audiovisual streaming market, with its firms operating globally and locally. To estimate this universe, we relied on the work of Cook (2021), which listed more than 200 audiovisual streaming companies available in 2021, although the list is non-exhaustive.

We excluded companies operating only in AVOD and TVOD from this universe. Therefore, the sample consists only of firms that work with SVOD and vMVPD models, although some have AVOD and TVOD available to their customers in parallel. This choice was made because the performance measures refer to the subscribers' base (growth and estimated revenues calculated as subscriber base times price). AVOD and TVOD platforms do not rely on subscription models, and their revenues mainly come from advertising and content rental/acquisition. So, subscription-based performance measures do not apply to them. The final sample was non-probabilistic and comprised 37 companies. The list of companies, with their country of origin, number of subscribers at the moment of data collection, and launching date, is in Table 1. This list comprises relevant firms in the market that have their data available, whether in balance sheets, specialized periodicals, or market intelligence websites. The data in this study, such as the number of subscribers, were collected from specialized audiovisual journals, financial statements, and renowned market research providers that estimate the chosen performance variables. Data for price, tasting period, and the number of countries where the service is available was collected directly from the companies’ websites. Annex I presents the links to the data sources. The list of strategic (clustering variables) and performance variables is in Table 2.
### Table 1

**Platforms' list and basic information**

<table>
<thead>
<tr>
<th>Platform Name</th>
<th>Country</th>
<th>Subscribers base</th>
<th>Launching date</th>
<th>Data collection date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acorn TV</td>
<td>USA</td>
<td>1,000,000</td>
<td>2011-07-01</td>
<td>2020-02-27</td>
</tr>
<tr>
<td>Alt Balaji</td>
<td>India</td>
<td>1,700,000</td>
<td>2017-04-16</td>
<td>2020-04-27</td>
</tr>
<tr>
<td>Apple TV+</td>
<td>USA</td>
<td>33,600,000</td>
<td>2019-11-01</td>
<td>2020-01-24</td>
</tr>
<tr>
<td>BET+</td>
<td>USA</td>
<td>1,000,000</td>
<td>2019-09-19</td>
<td>2020-08-15</td>
</tr>
<tr>
<td>Blim</td>
<td>Mexico</td>
<td>7,000,000</td>
<td>2016-02-22</td>
<td>2020-02-19</td>
</tr>
<tr>
<td>BritBox</td>
<td>England</td>
<td>1,500,000</td>
<td>2017-03-07</td>
<td>2020-03-04</td>
</tr>
<tr>
<td>Catchplay</td>
<td>Taiwan</td>
<td>1,000,000</td>
<td>2017-01-01</td>
<td>2020-09-30</td>
</tr>
<tr>
<td>CBS All Access</td>
<td>USA</td>
<td>4,000,000</td>
<td>2014-10-28</td>
<td>2020-02-28</td>
</tr>
<tr>
<td>Curiosity Stream</td>
<td>USA</td>
<td>3,000,000</td>
<td>2006-05-14</td>
<td>2020-11-18</td>
</tr>
<tr>
<td>DAZN</td>
<td>England</td>
<td>8,000,000</td>
<td>2016-08-01</td>
<td>2020-01-06</td>
</tr>
<tr>
<td>Disney+</td>
<td>USA</td>
<td>73,700,000</td>
<td>2019-11-12</td>
<td>2020-11-12</td>
</tr>
<tr>
<td>Eros Now</td>
<td>India</td>
<td>29,300,000</td>
<td>2012-01-01</td>
<td>2019-11-25</td>
</tr>
<tr>
<td>ESPN+</td>
<td>USA</td>
<td>10,300,000</td>
<td>2018-04-12</td>
<td>2020-06-27</td>
</tr>
<tr>
<td>Globoplay</td>
<td>Brazil</td>
<td>2,500,000</td>
<td>2015-12-01</td>
<td>2020-11-18</td>
</tr>
<tr>
<td>HBO Now</td>
<td>USA</td>
<td>8,000,000</td>
<td>2015-04-07</td>
<td>2019-02-01</td>
</tr>
<tr>
<td>HBO Max</td>
<td>USA</td>
<td>4,100,000</td>
<td>2020-05-27</td>
<td>2020-07-23</td>
</tr>
<tr>
<td>Hoichoi</td>
<td>India</td>
<td>13,000,000</td>
<td>2017-09-20</td>
<td>2020-09-21</td>
</tr>
<tr>
<td>Hotstar</td>
<td>India</td>
<td>8,000,000</td>
<td>2015-05-01</td>
<td>2020-05-01</td>
</tr>
<tr>
<td>Hulu (Live TV + SVOD)</td>
<td>USA</td>
<td>4,100,000</td>
<td>2017-05-03</td>
<td>2020-11-12</td>
</tr>
<tr>
<td>Hulu (SVOD Only)</td>
<td>USA</td>
<td>32,500,000</td>
<td>2010-11-17</td>
<td>2020-11-12</td>
</tr>
<tr>
<td>iFlix</td>
<td>Malaysia</td>
<td>17,000,000</td>
<td>2017-11-01</td>
<td>2020-03-10</td>
</tr>
<tr>
<td>iQiyi</td>
<td>China</td>
<td>100,000,000</td>
<td>2010-04-22</td>
<td>2019-12-01</td>
</tr>
<tr>
<td>Looke</td>
<td>Brazil</td>
<td>180,000</td>
<td>2015-04-28</td>
<td>2018-02-16</td>
</tr>
<tr>
<td>Mediaset Infinity</td>
<td>Italy</td>
<td>400,000</td>
<td>2013-12-01</td>
<td>2019-05-01</td>
</tr>
<tr>
<td>Monomax</td>
<td>Thailand</td>
<td>380,000</td>
<td>2016-02-01</td>
<td>2020-07-01</td>
</tr>
<tr>
<td>Mubi</td>
<td>USA</td>
<td>9,000,000</td>
<td>2007-02-14</td>
<td>2019-11-03</td>
</tr>
<tr>
<td>Netflix</td>
<td>USA</td>
<td>203,663,000</td>
<td>2011-09-18</td>
<td>2020-12-31</td>
</tr>
<tr>
<td>Now TV</td>
<td>England</td>
<td>1,600,000</td>
<td>2012-07-17</td>
<td>2020-05-01</td>
</tr>
<tr>
<td>Philo</td>
<td>England</td>
<td>750,000</td>
<td>2017-11-14</td>
<td>2020-11-18</td>
</tr>
<tr>
<td>Prime Video</td>
<td>England</td>
<td>150,000,000</td>
<td>2006-09-07</td>
<td>2020-10-14</td>
</tr>
<tr>
<td>Starz Play</td>
<td>USA</td>
<td>8,600,000</td>
<td>2016-04-05</td>
<td>2020-04-20</td>
</tr>
<tr>
<td>Tencent Video</td>
<td>China</td>
<td>112,000,000</td>
<td>2011-04-01</td>
<td>2020-06-26</td>
</tr>
<tr>
<td>Videoland</td>
<td>Netherlands</td>
<td>750,000</td>
<td>2010-01-01</td>
<td>2020-11-18</td>
</tr>
<tr>
<td>Youtube Premium</td>
<td>USA</td>
<td>20,000,000</td>
<td>2015-10-21</td>
<td>2020-02-04</td>
</tr>
<tr>
<td>Zee 5</td>
<td>India</td>
<td>56,300,000</td>
<td>2018-02-14</td>
<td>2019-12-01</td>
</tr>
<tr>
<td>Youtube TV</td>
<td>USA</td>
<td>3,000,000</td>
<td>2017-02-28</td>
<td>2020-10-30</td>
</tr>
</tbody>
</table>
Table 2
Strategic (clustering) and performance variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Proxies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic (clustering) variables</strong></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>The price of the basic plan offered in US on the data collection date</td>
</tr>
<tr>
<td>Offer breadth</td>
<td>0 if the platform content is for a niche; 1 if the content is of a broad scope</td>
</tr>
<tr>
<td>Sector diversification</td>
<td>1(one) if the platform is associated with other sectors; 0(zero) if not</td>
</tr>
<tr>
<td>Business model diversification</td>
<td>Number of business models with which the platform works, from 1(one) to 4(four) (they can be SVOD, TVOD, AVOD, and yMVPD)</td>
</tr>
<tr>
<td>Brand</td>
<td>1(one) if the platform has a recognized brand behind it (Disney+, for instance); 0(zero) if not</td>
</tr>
<tr>
<td>Geography</td>
<td>Number of countries the platform provides services</td>
</tr>
<tr>
<td>Tasting period</td>
<td>1(one) if the platform offers a trial/tasting period; 0(zero) if not</td>
</tr>
<tr>
<td>Subscriber base (ln)</td>
<td>In of the number of subscribers</td>
</tr>
<tr>
<td><strong>Performance Variables</strong></td>
<td></td>
</tr>
<tr>
<td>Estimated monthly revenues</td>
<td>Subscriber base multiplied by price</td>
</tr>
<tr>
<td>Subscriber base growth (ln)</td>
<td>Subscriber base divided by the age of the platform in years (to estimate the annual growth of the platform in the number of subscribers)</td>
</tr>
</tbody>
</table>

3.2 Statistical analysis

This article's primary goal was to identify the different global strategies adopted by audiovisual streaming firms using Porter's generic strategies framework (Porter, 1980) in one of the four strategic groups (cost leadership, differentiation, cost focus, and differentiation focus) or the residual strategy 'stuck-in-the-middle.' This framework was chosen among many others (e.g., Abell, 1980; Greckhamer & Gur, 2021; Miles & Snow, 1978; Mintzberg, 1980; Moon et al., 2014) as it is consecrated in the literature and used in most empirical articles on strategic groups (e.g., Al-Abdallah, Frazer, & Albarq, 2021; Kim et al., 2004; Kotha & Vadlamani, 1995; Köseoglu et al., 2013; Peixoto et al., 2021) and by its parsimony. To conduct this classification, we relied on K-Means cluster analysis (Hair et al., 2003). This method was used with the same goal in many previous articles and was validated by influential authors such as Ramanujam and Venkatraman (1984). The statistical difference between clusters was evaluated by MANOVA (Hair et al., 2003). Performance variables were compared between groups using ANOVA to identify the groups with the best and worst performances (Hair et al., 2003). All the steps of the analysis are detailed below:
1) Selection of the strategic (clustering) and performance variables — this step was made by a literature review as described in the previous section;

2) Reduction of strategic space – this step consists of conducting an exploratory factor analysis – EFA by principal component analysis (Hair et al., 2003) in the eight strategic variables (normalized by the Z transformation) to reduce the total number of variables without losing explanatory power. The number of factors was identified by checking how many have an eigenvalue above one. After a varimax rotation, factors were calculated by the summated scales of the variables with a weight greater than or equal to 0.7. The variables excluded by the model were used in the analysis as strategic variables formed uniquely by them;

3) Classification and grouping of companies into strategic groups according to Porter's typology (four strategic groups plus the residual group 'stuck-in-the-middle') - a K-means cluster analysis was conducted at this stage. This technique forms the groups based on the Euclidean distance of each case in the sample and the centroids that are theoretically consistent with the groups (Hair et al., 2003). For that, we built a theoretical matrix of the groups' centroids (see Table 5) following the logic in which a factor that should have a higher prevalence in a specific strategy should score in the upper quartile (Q3, in the higher 25% portion of the cases) in that group. The one inconsistent with a strategy should score in the lower quartile (Q1, in the lower 25% portion of the cases). If the factor is indifferent to a strategy, it should be in the median (Q2).

4) After identifying the groups, the actual centroids formed by the real cases classified in each group are tested with MANOVA (Hair et al., 2003) to check if the groups are statistically different. Besides, the non-parametric Wilcoxon Signed Rank compared each group's theoretical and actual centroids to check if they were statistically equal (ibid.).

5) Comparison of the groups' performances – lastly, we verified the existence of significant differences between the performance averages of each group obtained in the cluster analysis. Analysis of variance (ANOVA) checked for the two performance variables if they were statistically different, at least for one of the five groups (Hair et al., 2003). If it happened, Tamahane's ad-hoc analysis checked the performance differences between the groups two-by-two (ibid.).
4 RESULTS

Table 3 shows the descriptive statistics of the sample. The age in months of the platforms ranges from 1 (HBO Max) to 174 (Crunchyroll), with an average of 64 months. For the strategic variables, the price ranges from U$1.70 (Alt Balaji) to $64.99 (Youtube TV), with an average of about U$11.00. The tasting period goes from zero or no trial (four firms do not offer any, representing 10.8% of the sample) to 60 days (iQiyi), and the average is around two weeks. Concerning geography, the number of countries varies from one (thirteen firms, or 35.2% of the sample) to 200, with an average of around 55 countries where the firm operates. In the variable sector diversification, 78% of the firms belong to groups with other businesses, while 22% are not part of a diversified group. Regarding the offer breadth, 84% have an amplified offer, while 16% of the firms offer niche content. Regarding business model diversification, the range goes from one to three business models for a firm (22 or 59.5% have only one business model), with an average of 1.49. Regarding brand, the statistics show that 68% of the firms have an important/famous brand behind them, while 32% do not. Lastly, the subscriber base ranges from less than 180 thousand (Looke) to more than 203 million (Netflix), with an average of around 25.5 million subscribers. Analyzing the performance variables, subscriber base growth ranges from about 5.4 thousand (Looke) to more than 16 million (Apple TV+), with an average of about one million monthly subscribers. In its turn, estimated monthly revenue ranges from about $597K (Looke) to $1.83 billion (Netflix), with an average of about $47.3MM.
Table 3

Descriptive statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Avg.</th>
<th>SD.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in months)</td>
<td>64</td>
<td>45</td>
<td>1</td>
<td>174</td>
</tr>
<tr>
<td><strong>Strategic (clustering) variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>10.98</td>
<td>13.22</td>
<td>1.66</td>
<td>64.99</td>
</tr>
<tr>
<td>Offer breadth</td>
<td>0.84</td>
<td>0.37</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sector diversification</td>
<td>0.78</td>
<td>0.42</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Business model diversification</td>
<td>1.47</td>
<td>0.65</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Brand</td>
<td>0.68</td>
<td>0.48</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Geography</td>
<td>54.62</td>
<td>78.37</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Tasting period</td>
<td>14.08</td>
<td>13.08</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>Subscriber base (K)</td>
<td>25,511</td>
<td>45,857</td>
<td>180</td>
<td>203,663</td>
</tr>
<tr>
<td><strong>Performance Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated monthly revenues ($ K)</td>
<td>183,896</td>
<td>366,297</td>
<td>571</td>
<td>1,830,930</td>
</tr>
<tr>
<td>Subscriber base growth (K)</td>
<td>1,036</td>
<td>2,941</td>
<td>5.4</td>
<td>16,192</td>
</tr>
</tbody>
</table>

The next step of the analysis was reducing strategic space by submitting the Z-scored eight strategic variables to an EFA by principal component analysis. The KMO of 0.729 was above 0.5, as expected, and Bartlett's Test of Sphericity was significant, justifying the use of the technique (Hair et al., 2013). The eigenvalue analysis (eigenvalue > 1) suggested only one factor that represented 48.9% of the variance of the variables. It comprised four variables: sector diversification, offer breadth, brand, and geography, with an inverted sign (see Table 4). The other four variables formed each an additional factor. The factors were named: i) Diversified Model (variable business model diversification), ii) Mass market (variable subscriber base), iii) Tasting Offer (variable tasting period), iv) Low Price (variable price); and v) Segmented Diversification (variables sector diversification, offer breadth, brand, and negative geography).

Table 4

EFA results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer breadth</td>
<td>0.778</td>
</tr>
<tr>
<td>Sector diversification</td>
<td>0.819</td>
</tr>
<tr>
<td>Brand</td>
<td>0.699</td>
</tr>
<tr>
<td>Geography</td>
<td>-0.740</td>
</tr>
</tbody>
</table>
After performing the EFA, the resulting factors were grouped into strategic groups based on Porter's generic strategies framework (Porter, 1980). We run a K-Means cluster analysis to group the firms into five strategic groups according to the framework: cost leadership, differentiation, cost focus, differentiation focus, and stuck-in-the-middle. We built the theoretical matrix of the groups' centroids with the factors as dimensions (see Table 5). Following, we explain the choices of the centroids by factor:

Factor 1, Diversified Model, is Q1 for the theoretical matrix's Differentiation, Differentiation Focus, and Cost Focus strategies. These strategies are not consistent with different simultaneous business models. Regarding diversification and focus, the platform will focus primarily on a single model. On the other hand, those firms that pursue a Cost Leadership strategy are willing to use more than one model to reduce the monthly fee, for example, as is the case of those that, in addition to SVOD, also include AVOD to reduce the value of the subscription. So, the factor is Q3 for this strategy.

Factor 2, Mass Market, is Q1 for both Focus strategies. Platforms that pursue these strategies expect fewer subscribers because they focus on a particular market segment. On the other hand, the Cost Leadership Strategy is Q3, as platforms that pursue this strategy seek to scale and acquire as many subscribers as possible. Finally, for the Differentiation Strategy, the subscriber base's size was considered irrelevant and, therefore, is Q2.

Factor 3, Tasting Offer, is Q3 for the Cost Leadership and Cost Focus strategies, as platforms classified in these groups provide a more extended period of free content consumption. As for the Differentiation Focus and Differentiation strategies, the tasting period was considered irrelevant, being this factor classified as Q2. Factor 4, Low Price, is Q1 for Differentiation and Differentiation Focus strategies and Q3 for Cost Leadership and Cost Focus strategies.

Finally, Factor 5, Segmented Diversification, is Q1 for Differentiation and Focus strategies. The more you are concerned about specializing your service or attacking a particular market segment, the lesser the interest in diversifying the firm's operating sector. On the other hand, the importance of having a solid brand to achieve the necessary scale to achieve Cost Leadership justifies a Q2 for this strategy. The geography variable in this factor also reinforces the first quartile for the Focus variables since local or regional market segmentation is being relinquished by expanding the area of activity. Consistent with the theory, the Stuck-In-The Middle group receives Q2 for all factors.
Table 5

*Theoretical centroids' matrix*

<table>
<thead>
<tr>
<th></th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation</td>
<td>Q1</td>
<td>Q2</td>
<td>Q2</td>
<td>Q1</td>
<td>Q1</td>
</tr>
<tr>
<td>Cost Leadership</td>
<td>Q3</td>
<td>Q3</td>
<td>Q3</td>
<td>Q3</td>
<td>Q2</td>
</tr>
<tr>
<td>Differentiation Focus</td>
<td>Q1</td>
<td>Q1</td>
<td>Q2</td>
<td>Q1</td>
<td>Q1</td>
</tr>
<tr>
<td>Cost Focus</td>
<td>Q1</td>
<td>Q1</td>
<td>Q3</td>
<td>Q3</td>
<td>Q1</td>
</tr>
<tr>
<td>Stuck-in-the-Middle</td>
<td>Q2</td>
<td>Q2</td>
<td>Q2</td>
<td>Q2</td>
<td>Q2</td>
</tr>
</tbody>
</table>

According to the K-means cluster analysis, the initial (based on the theoretical matrix) and the final (based on the average of the factor for the cases classified in each cluster) are in Table 6. MANOVA comparing the five clusters' final centroids indicated that they are statistically different with $p < 0.05$ (Hair *et al.*, 2013). The non-parametric test Wilcoxon signed-rank supported all the final centroids are statistically similar to the initial centroids with $p < 0.05$ (Hair *et al.*, 2003). Figure 1 presents the classification of the platforms in each cluster.

Table 6

*Initial and final centroids matrices (K-means cluster analysis)*

<table>
<thead>
<tr>
<th></th>
<th>Initial Centroids' Matrix</th>
<th>Final Centroids' Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F1</td>
<td>F2</td>
</tr>
<tr>
<td>Differentiation</td>
<td>-0.75</td>
<td>0.13</td>
</tr>
<tr>
<td>Cost Leadership</td>
<td>0.79</td>
<td>0.75</td>
</tr>
<tr>
<td>Differentiation Focus</td>
<td>-0.75</td>
<td>-0.78</td>
</tr>
<tr>
<td>Cost Focus</td>
<td>-0.75</td>
<td>-0.78</td>
</tr>
<tr>
<td>Stuck-in-the-Middle</td>
<td>-0.75</td>
<td>0.13</td>
</tr>
</tbody>
</table>
The last step of the analysis was the comparison of the groups' performances (considering the variables estimated monthly revenues and subscriber base growth) to understand if there are significant differences between the performance averages of each strategic group using ANOVA. The test's significance for both variables was 0.000 (lower than p < 0.05), indicating the rejection of the null hypothesis that states that the variables' averages are equal for all groups. In other words, at least one group has a different average for both performance variables. Following this, we conducted Tamahane's ad-hoc analysis to order the groups' performances and understand which strategies were more appropriate. Figure 2 shows the groups' averages decreasing from left to right, with the bar above the groups' names indicating that they have averages not significantly different for that variable at p < 0.05.
5 DISCUSSION

The results evidence the application of strategic group theory and Porter's typology in the audiovisual streaming industry, consistent with the theoretical basis (Caves & Porter, 1977; Hunt, 1972; Porter, 1980) and empirical articles that applied the theory in different industries. The first part of the results showed that Porter's typology applied to this article's case, as the cluster analysis and MANOVA could differentiate firms in the four strategic groups (cost leadership, differentiation, cost focus, and differentiation focus) and the 'stuck-in-the-middle' group (Porter, 1980). The ANOVA identified performance differences among the groups. These results are consistent with previous studies in varied sectors such as manufacturing (Nandakumar et al., 2011), education (Peixoto et al., 2021), internet-based ventures (Al-Abdallah et al., 2021), petrochemical (Moraes & Zilber, 2004), hospitality (Köseoglu et al., 2013), business services (O'Farrell et al., 1993), the airline industry (Greckhamer & Gur, 2021), e-business (Kim et al., 2004), and the informal sector (Mungai & Ogot, 2017).

The analysis of the allocation of the firms studied in the groups showed consistent results. The Differentiation group had a good fit with the characteristics of its firms if we analyze its characteristics one by one. Crunchyroll (specialized in animes), Curiosity Stream (which has only documentaries in its collection), DAZN (only sports content), Mubi (with...
selected independent content), and Hoichoi (with Bengali content) have characteristic features that differentiate their services. As they mainly operate globally or in highly populated regions and their content, although differentiated, meets the demand of various customer segments, it is justified that they are part of this group and not of Differentiation Focus.

As for the cost leadership group, the companies' allocation also makes sense. For instance, platforms such as Netflix (with a relatively low price of the basic subscription and the search for global economies of scale), Amazon Prime Video (marked by its low price), Globoplay (which has the AVOD model in addition to the SVOD and vMVPD models), iFlix (which seeks scale with low prices in addition to using AVOD in combination with subscription), and Hulu (which it reduces the cost of the SVOD offer with advertising) fit well in this group.

The formation of the Focus groups was also consistent. In the Differentiation Focus group are positioned firms such as Acorn TV (focused on content from Great Britain), Videoland (available only in Dutch), and Catchplay (with Thai content in its collection). Those have been offered only for limited segments (specifically related to the spoken language) without losing their pursuit for differentiation. On the other hand, Mediaset Infinity (characterized by its content in Italian), BritBox (with English content in its collection), and Monomax (with Thai content), besides focusing on specific segments, seek to have low prices, being coherently positioned into the cost focus group.

Finally, the stuck-in-the-middle group receives most of the platforms in the study (30%), mainly because of the low level of maturity in this industry. As the industry is new and emergent, it is still unclear which strategy will win the competitive race. Therefore, most companies adopt hybrid strategies, with elements from cost leadership and differentiation simultaneously. If we analyze the firms individually, we perceive consistency in this finding. Apple TV+, for example, despite offering a one-year free subscription to Apple hardware buyers, which brings it closer to a Cost Leadership strategy, has superior quality own productions, which is a characteristic of a Differentiation strategy. Similarly, Disney+ offers large amounts of children's content from the Disney universe, which is a characteristic of the Differentiation Focus group (by their focus on the children's segment) and includes National Geographic in its collection of documentaries, seen by a more adult audience, or content from the Star Wars and Marvel universes, directed to a broader audience.

Concerning performance, the broad-scope strategies (cost leadership and differentiation) and the stuck-in-the-middle group demonstrated superiority over the focus groups. It is possibly due to the low level of maturity of the industry. Technological platforms
such as streaming benefit widely from scale as the cost to maintain one more customer is practically zero (considering investments necessary to guarantee security and performance with thousands or millions of users simultaneously). Therefore, the competitive advantage of the broad-scope strategies is clear and consistent with some previous studies such as Al-Abdallah et al. (2021), Köseoglu et al. (2013), Nandakumar, et al. (2011), O'Farrell et al. (1993). The good results of the stuck-in-the-middle group can also be explained. Some authors criticizing Porter's Typology consider combining cost leadership and differentiation elements an effective strategy (e.g., Hill, 1988; Kim, 2005; Pelham, 1999) and not a residual strategy as the 'stuck-in-the-middle' concept states (Porter, 1980).

This called hybrid strategy (Kim et al., 2004; Köseoglu et al., 2013; Moraes & Zilber, 2004) also showed promising results in e-business (Kim et al., 2004), which are the ones most similar to the ones of this article's sector in our literature review. Firms that adopted strategic elements of both cost leadership and differentiation may have benefited, given the sector's recent history and the widespread growth of platform options. They keep both strategic options open to increase growth while testing which strategy will be more effective when the market matures. This conclusion is valid where the performance variables chosen are estimated monthly revenues and subscriber base growth based on the number of subscribers. They do not favor focus strategies, which, by definition, attack a smaller market segment. Therefore, they tend to have fewer customers and lower revenue levels, but can result in good margins. It does not mean they are worse strategies if we look at other performance metrics, such as profitability or customer retention.

6 CONCLUSIONS

Given the rapid growth and popularization of audiovisual streaming platforms observed in the last ten years, this research proposed analyzing this market in the light of Porter's typology (Porter, 1980) to map the most effective strategies for firms adopting this business model to achieve better performance. It achieved this goal by identifying its firm's strategic group by cluster analysis and MANOVA according to strategic variables appropriate to the sector and understanding the groups that present better performance using ANOVA to identify differences in the performance variables estimated monthly revenues and subscriber base growth. It could be identified that Porter's typology applies to this sector. Adopting a broad-spectrum strategy (cost leadership or differentiation) or a hybrid strategy (represented by the stuck-in-the-middle group) is more advantageous than choosing focus strategies. These results contribute to the
theory, validating the strategic group theory and Porter's generic strategies framework for the audiovisual streaming sector. Doing this amplifies the spectrum of industries for which this theory was supported, including a sector that emerged with the support of digital technologies of Industry 4.0. The study also contributes to practice as it helps managers choose the most effective strategies in such an emergent industry.

This paper has some limitations. First, the strategic and performance variables are not flawless. Their choice was based on their availability. A suggestion to solve this problem is to make an instrument for collecting information directly from the companies through a survey. Another limitation is that a list of all platforms does not exist, and the list used by the researchers is not a probabilistic sample. Finally, the method presents the correlations between strategies and performance but does not test their causality. Deeper investigations of specific cases (case studies) are necessary to investigate the causes of these phenomena better. Other suggestions for future studies include increasing the sample and collecting data on other strategic variables, such as available devices, image quality, service quality, and other performance variables, such as ROI, LTV, and Churn. Finally, it would be interesting to test other strategic frameworks, such as Mintzberg (1988) and Miles and Snow (1978), and apply the method in other streaming sectors, such as audio, photographic, and textual.

7 DECLARATION OF INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

8 DATA AVAILABILITY STATEMENT

Please contact the authors to access the data used in the article.

9 ACKNOWLEDGMENTS

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REFERENCES


1 ANNEX I

2 Data sources

Subscriber Base data source by platform:

- Apple TV+: https://www.thestreet.com/investing/apple-tv-plus-34-million-subscribers-

- Apple TV+ has 33.6 million content on Amazon Prime Video.
- CBS All Access: https://www.statista.com/statistics/1047393/cbs-all-access-subscribersus/#:~:text=ViacomCBS%3A%20number%20of%20subscribers%20in%20the%20U.S.%20202015%2D2020&text=As%20of%20February%202021%20estimates,million%20reported%20in%20August%202021.
- Curiosity Stream: https://www.fiercevideo.com/video/curiositystream-claims-more-than-13m-paid-subscribers
- Eros Now: https://erosplc.com/
- Hotstar: https://en.wikipedia.org/wiki/Hotstar
- HBO Now: https://www.statista.com/statistics/539290/hbo-now-subscribers/#:~:text=Number%20of%20HBO%20Now%20subscribers%202020%2D2019&text=As%20of%20February%202021%20HBO%20Now%20had%20around%20eight%20million%20subscribers.


Acorn TV: https://www.fiercevideo.com/video/amc-says-acorn-tv-svod-may-have-lowest-churn-rate-market

BET+: https://www.androidauthority.com/what-is-bet-plus-1003890/amp/

Catchplay:

MediaSet Infinity: https://technology.informa.com/613604/mediaset-to-shut-down-pay-dtt-service-at-the-end-of-may


dmp#:~:text=myTV%20SUPER%20turns%20two%20this,by%20about%2010%20per%20week.


Crunchyroll:

Philo:

- Netflix: https://ir.netflix.net/financials/quarterly-earnings/default.aspx
- BritBox: https://www.broadbandtvnews.com/2020/10/06/britbox-us-president-steps-down-at-1-5m-subscribers/

Platforms’ homepages:

- Netflix: https://www.netflix.com/browse
- Prime Video: https://www.primevideo.com/
- Tencent Video: https://v.qq.com/
- iQiyi: https://www.iq.com/
- Disney+: https://www.disneyplus.com/home
- Zee 5: https://www.zee5.com/global
- Apple TV+: https://www.apple.com/apple-tv-plus/
- Hulu: https://www.hulu.com/welcome
- Eros Now: https://erosnow.com/
- Youtube Premium: https://www.youtube.com/premium
- iFlix: https://www.iflix.com/
- Curiosity Stream: https://curiositystream.com/
- Hoichoi TV: https://www.hoichoi.tv/viewplans
- ESPN+: https://plus.espn.com/buy-now
- Mubi: https://mubi.com/
- Staz Play: https://www.starz.com/br/pt/
- DAZN: https://www.dazn.com/
- Hotstar: https://www.hotstar.com/in
- HBO Now: https://www.play.hbonow.com
- Blim: http://www.blim.com/
- HBO Max: https://www.hbomax.com/
- CBS All Access: https://www.paramountplus.com/br/
- Crunchyroll: https://www.crunchyroll.com/pt-br
- Youtube TV: https://tv.youtube.com/welcome/
- Globoplay: https://globoplay.globo.com/
- Alt Balaji: https://www.altbalaji.com/
- Now TV: https://www.nowtv.com/
- BritBox: https://www.britbox.com/
- Acorn TV: https://acorn.tv/
- Catchplay: https://corporate.catchplay.com/?lan=en
- BET+: https://www.bet.com/shows/betplus/bet-plus.html
- Philo: https://www.philo.com/
- Videoland: https://www.videoland.com/nl/
- Mediaset Infinity: https://www.infinitytv.it/
- Monomax: https://www.monomax.me/
- Looke: https://www.looke.com.br/home