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ANALYZING THE FACTORS TRIGGERING SUBSCRIBER CHURN FOR STREAMING SERVICES IN THE UNITED ARAB EMIRATES

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SBS-WP-2025-3

Date

ISSN (Print): xxxx-xxxx

ISSN: (Online): xxxx-xxxx

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ANALYZING THE FACTORS TRIGGERING SUBSCRIBER CHURN FOR STREAMING SERVICES IN THE UNITED ARAB EMIRATES

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Abstract

In recent years, the advent of streaming services has brought about a significant transformation in how consumers obtain digital content. Presently, MyBaut explores different options for people living in the United Arab Emirates (UAE) to watch the latest streaming of movies, shows, and TV series. The streaming platforms central to the consolidation phenomenon experienced a decline in performance. Thus the research objectives are as i) to analyze the factors (customer experience (CE), availability of exclusive content (AOEC), availability of diverse content (ADC), personal factors (PF), technical factors (TF)) influencing churn management (CHM) in streaming services in the UAE. The findings from this study will benefit telecommunication companies, decision-makers, and broadcasters in the UAE by aiding them in understanding the consumer paradigms and the determinants of the adoption and perpetual use of streaming services. As well as serving as a foundation for further research on streaming services offered in the region, this study adds to the narrative of innovation and technology adoption in the Middle East.

Keywords: Subscriber Churn, Streaming Services, United Arab Emirates

Introduction

The emergence of streaming platforms like Netflix and Spotify has resulted in altered access by Americans to digital content. Rather than owning content in the form of hard copies, users now subscribe to unlimited content or use platforms that make the content available for free

with advertisement. Their contribution to the industry and increased purchase of these companies' stocks are prominent. Reports suggest that revenue and user subscriptions rose significantly, with Netflix obtaining over 93 million users in 2016 and Spotify attaining more than 50 million paid users (Lotz et al., 2023; Sultan & El Sayed, 2023).

Growth of Streaming Services in the MENA Region

In the MENA region, the form of entertainment that was primarily used for decades was free-to-air satellite TV (Bartleby Research, 2022). While early pay-TV options like ART, Orbit, and Showtime first struggled to penetrate the region due to high prices, beIN Sports came to the region in 2012. They greatly enhanced the availability of premium content (Meehan, 2020). From the mid-2010s, there was a significant improvement in the global and regional streaming services offered because of the expansion of the internet infrastructure (Sun, 2022). Unfortunately, Telly, Istikana, and ICflix, the first entrants in these regions, had to close because of too many financial constraints and competition.

The industry started to pick up pace after the entrance of Netflix and Amazon Prime into the MENA region because of the heightened consumer awareness and their adoption (Kapucu, 2021). Nonetheless, a primary problem arose---the acceleration of the subscriber churn rate. This issue worsened with the increased competition brought by the entry of Disney+ in 2022 when lowering churn and increasing retention became the focus (Jia, 2022).

Grasping Subscriber Churn

As previously stated, subscriber churn is the voluntary cessation of a subscription service, or in simpler terms, churn is the rate at which customers discontinue using a service. It is a relevant issue for the sustainability of a business. Regarding profitability and retention, churn is the measure that directly impacts those metrics, and profitability and retention are intrinsically linked. It is important to point out a strong relationship between retention and profitability, which makes it crucial for organizations to reduce churn and increase engagement (Abualkishik et al., 2023). Problems such as the high churn rate within online streaming services are due to the lack of brand loyalty, low barriers to switching services, and the nature of the consumers' behavior (Adeniji, 2020).

Khattak et al. (2023) report that the streaming industry suffered an unprecedented drop in subscribers through 2023, averaging a loss of 5.8% every month. Discovery+ and HBO Max had respective churn rates of 6.1% and 7%, while Paramount+ and Showtime suffered more attrition of 6.9% and 8.2%. Even with reported doubts about its content, Netflix retained slightly over 3% of subscribers, evidencing the effectiveness of retained strategies.

To stay in the game, streaming services must focus on retention and lowering churn through personalization of content, pricing, and user interaction. Using analytics, providers can increase retention while catering to changing shoppers' wants in a saturated marketplace.

This research seeks to aid streaming services in pinpointing elements that lead to customer discontent, resulting in attrition. Systematic evaluation of subscriber churn post-use of the service allows providers to form strategies to improve retention. Understanding churn is important for every subscription-based business, especially the streaming industry, which operates month-to-month and worries about churns at a pace that requires swift action. This is even more difficult in the MENA region, a fast-paced and aggressive market that changes consumer tastes swiftly.

Regarding MENA countries, the UAE is perhaps the most competitive and varied in subscription services. Residents in the UAE seem to have a good understanding of global trends and exercise considerable thought in budgeting for their entertainment, usually taking subscriptions to only platforms with market-relevant offerings.

The multicultural residents in the UAE have unique ways of consuming content. While most people enjoy Hollywood football and family content in English, other content consumption differs from one segment to another (The National News, 2022). Some services available in UAE have a zoomed-in strategy, serving a particular ethnic group or sports fans, like the UFC Arabia app, which serves only UFC fans. On the other hand, some services strive to gain popularity by providing multi-purpose content to as many people as possible to maximize and protect their subscribers.

Literature Review

Streaming services have profoundly affected the music, video, and gaming industries. Khalil and Zayani (2022) look at the consequences of digital streaming and how it affects content dissemination and user engagement in the Middle East and other regions. Lobato (2017) discusses the role of streaming in the context of infrastructure and compares it to television broadcasting. Dao et al. (2022) analyze the phenomenon of live video streaming on social networking sites and its astonishing proliferation speed.

The transformation of industries digitally is important, as Venkatesh et al. (2017) pointed out the shortcomings of Communication Service Providers (CSPs) when it comes to meeting a more digitally advanced world. Simon (2021) also studies the troubling state streaming platforms that find themselves in Nigeria because of socio-economic issues and access to the internet. According to Singh and Aggarwal (2019) and Weinberger & Bouhnik (2020), users have become the new creators and distributors because of the power digital media confers upon them to produce, remix, and publish content.

A new phenomenon gaining traction is the growth of mobile payments and social commerce. Purohit (2020) analyzes the evolution of digital payments in India, while Li et al. (2020) study live-streaming commerce, incorporating participatory and observational learning into consumer activities. Habbal (2022) claims that big data analytics is a driving force for streaming services, while Gilbert (2019) and Coleman (2018) critique and praise Netflix's impacts on the proliferation of digital content as well as its dependency on the legacy of television.

The adoption of streaming services has several explanations from different perspectives. Kamal et al. (2020) use the Technology Acceptance Model (TAM) to explain the adoption of online streaming, while Camilleri and Falzon (2020) combine it with the Uses and Gratifications Theory (UGT), which is a justification that accounts for users' content choices. Venkatesh et al. (2016) build on this with the Unified Theory of Acceptance and Use of Technology (UTAUT) and focus on reasons for using streaming services.

In gaming, Cabeza-Ramírez et al. (2021) explain the emergence of live-streamed gaming as an alternative channel for social interaction, while Parc and Kim (2020) describe the other side from creators towards the economic repercussions of music streaming on their art.

At this time, Herbert et al. (2019) and Park and Nahrstedt (2019) focus on new forms of streaming, such as the use of adaptive streaming for different multimedia content.

Considering the literature, streaming services appear to be changing and improving rapidly due to digital transformation, customers, and technology. At the same time, they are faced with numerous regulatory, infrastructural, and economic issues.

Internet-based platforms have redefined almost every industry and sector, including television, business processes, and healthcare. Doyle (2016) analyzes the impact of digitization on television, noting distribution and consumption traces. Kutnjak et al. (2019) and Pihir et al. (2019) address digital transformation and its impact on enhancing businesses' operational efficiency, cost reduction, and application of modern technologies. Warner and Wager (2019) look at AI, IoT, and other digital sensing features as strategic decision-making tools that can make organizations flexible and enhance responsiveness.

Yang et al. (2020) differentiate the two types of software and exchange platforms that facilitate digital transactions. Ren et al. (2021) pointed out the universal adoption of internet strategies in competition. In contrast, Xu et al. (2019) pointed out the disruptive effect of the 5th generation of mobile networks on data and voice communication transmission. Helmond et al. (2019) regard the Facebook platform as an example and show how it functions, which indicates the constant change in digital infrastructure.

The Internet of Things (IoT) is one of the most transformational frontiers. Jia et al. (2019) and Jo et al. (2020) examine how smart cities monitor the environment in smart cities through IoT, especially managing air quality. Shahidul Islam et al. (2019) and Zeghari et al. (2022) point out the application of IoT in healthcare and its immediate benefits in remote patient monitoring and services. Sungheetha and Sharma (2020) elaborate on how IoT-enabled smart infrastructure contributes to enhanced urban development over time.

Last, IoT application in work processes is especially underlined by companies in Savaglio et al. (2020), where the focus is on businesses need to engage in digital transformation to stay relevant and competitive. The review shows that businesses and industries are

experiencing changes in the provision of services and the use of technology, including platforms on the Internet, digital transformation, and IoT.

Behavior in the Adoption of New Technology

Consumer behavior studies focus on individual activities, including searching, purchasing, using, evaluating, and disposing of a product or service. It analyzes how consumers spend, or instead invest, their resources such as time, effort, and money (Kotler et al., 2005). Technology has altered many aspects of life, including marketing, which has changed segmentation, targeting, positioning, and customer loyalty. Marketers can gather consumer information through digital instruments such as computers and mobile devices, allowing for refining targeting and improving product positioning (Schiffman & Wisenbilt, 2015).

Schiffman and Wisenbilt (2015) stress the cultural, social, personal, and psychological variables they refer to as key factors that affect consumers' purchase intentions. While social and cultural variables are external and out of the control of an individual, personal and psychological variables are internal and aid in shaping their perception and motivation. Motivational and strategic planning factors influence intention, which Eagly and Chaiken (1993) and Ajzen (2002) call pre-decision cognitive plans to acquire a product or service physically. While intentions may suggest expenditure of effort, they do not always ensure behavioral follow-through. This analysis seeks to comprehend the motivations and external factors, such as the service providers and government entities, that affect the consumer adoption of streaming services. Some relevant literature for this analysis includes adopting technology theories (Patel & Connolly, 2007), which summarize the most important determinants of adoption behavior.

Theoretical Underpinning

Theory of Reasoned Action (TRA)

The Theory of Reasoned Action, or TRA, is one of the many theories that seek to explain human behavior action. This particular theory was established by Fishbein and Ajzen in 1975. TRA claims that a person's behavior is influenced significantly by their behavioral intentions. Two critical factors influence those intentions: The person's attitude toward the behavior and subjective norms. Attitude is the decisional evaluation of the act by the person. At the same

time, subjective norms are the social expectations by important members of society, such as relatives, colleagues, and friends, regarding the action in question. TRA believes that people behave rationally and make intentions after assessing available options in the information. TRA is popular in modern practice within marketing and healthcare. TRA is, however, associated with some challenges. There are many ignored motives, actions that are usually taken without thinking, and circumstantial factors that constrain a person, act contrary to their wishes, and do not permit them to operate intelligently. In particular, TRA assumes that people have the fundamental freedom to act however they choose, which is not always true. Given these limitations, the current study excludes TRA as it focuses on individual intentions where the behavior is voluntary and free from external influences.

Theory of Planned Behavior (TPB)

As commonly referred to, TPB was put forth by Ajzen (2002) and blends the Reasoned Action Theory with an additional element, which is perceived behavioral control. Per the original rationale, TPB entails three factors that affect an individual's behavioral intention: perception of the behavior as favorable or unfavorable (attitude), social media influence (subjective norms), and behavioral control. Perceived behavioral control concerns beliefs about attendance capability or the availability of some resources, skills, or barriers that can facilitate or impede the behavior's performance (Haryoto, 2015). TPB helps explain actions that require a conscious and deliberate decision-making process, such as adopting new technologies. If an individual adopts a streaming service, it could be presumed that they would have the requisite supporting technology, such as a smartphone or high-speed internet. While TPB has particular strengths, it is also fraught with weaknesses. Again, as with TRA, TPB assumes rational processes guide behavior and disregards the role of emotion, self-driving habits, and other non-conscious phenomena. Also, perceived behavioral control is subjective, and its measurement depends on people and situations, thus diminishing the model's prediction power (Hasan et al., 2021).

Although TPB is useful for explaining behavior within a controlled decisional context, it may need to be integrated with other models to account for irrational behavior. This study is based on the Theory of Planned Behavior (TPB), the leading theory underpinning this research. The theory accounts for the impacts of attitudes, subjective norms, and perceived behavioral control on intentions and behaviors. This makes it particularly useful for understanding

subscriber churn in streaming services. In this case, TPB explains the role of customer experience, content, and technical factors on user behavior toward continuing or terminating subscriptions.

Churn Management

Churn management refers to a company's strategies to decrease or eliminate the loss of customers by utilizing personalized marketing, predictive analytics, and proactive retention activities. Rafique et al. (2020) describes the necessity of these approaches within subscription-based businesses and considers predictive analytics and customer engagement activities as the primary means of churn risk assessment and prevention. Nonetheless, Vilhomaa's analysis would improve by examining the various forms of churn, ethical dilemmas of data appropriation, and churn's broader political and sociological parameters, such as macroeconomic changes.

On the other hand, Pollack et al. (2020) handle the problem of churn management within the telecommunications industry by suggesting the integration of clustering and classification to predict customer's future actions and formulate retention plans. Their findings highlight the importance of churn predictive models in determining customers who are likely to stop using the service; however, it would further benefit from discussing the biases stemming from predictive algorithms and the data model's disregard of the human aspects, such as customer's emotions and trust towards the company. The research could also deepen its results if more attention were given to customer engagement.

Pejić Bach et al. (2021) investigated churn management in the telecommunications industry and highlighted important churn drivers such as customer segments, billing, contracts, and tenure. Their findings suggest that customer tenure with the firm is a key driver of churn, which adds to the existing literature on churn in telecommunications.

Parnami and Jain (2021) discusses churn management in telecoms, where customer churn is associated with subscription non-renewal. In mature markets, it is more economical to keep existing customers than to seek new ones, as customer loss can cost revenue and incur significant marketing expenditures. Adeniyi also underlines the need to control retention rates, which, if neglected, can limit business growth.

Rathore (2023) focus on customer churn in the retail sector, particularly the grocery sector. They characterize regular customers as the lifeblood of the business because customer churn within this sector can dramatically disrupt business operations. Helping customers entails providing good services, highly dependent on customer retention.

The authors Domingos et al. (2021) investigate churn management in the banking industry, specifically using machine learning tools to predict churn. They indicate that achieving the proper settings to manage churn within the given parameters is critical, especially when customers are unhappy with the services offered.

However, Khan et al. (2019) point out that the focus on loyalty retention in telecommunication companies is increasingly vital in the current market, where competition is growing at an alarming pace. They proposed using churn prediction models combined with data mining to forecast customer retention and churn, which is essential for healthy competition within the industry.

When analyzing the e-commerce domain, Xiahou and Harada (2022) focus on the ever-rising need of these businesses to confront employee churn and examine circumstances revolving around customer shopping behavior and other overarching marketing tactics. Their research indicates that anticipating customer attrition enables businesses to formulate effective strategies and counterstrategies.

Driving Factors for Churn in Online Streaming Services

Customer Experience

The customer's experience is paramount when ensuring the retention of subscribers for any streaming service. It includes every touchpoint a user engages with a platform, such as navigation, customer support, content inquiry, and service usability. Martins (2017) and Saputro et al. (2021) have noted that customers' positive experience translates to loyalty and decreased churn rates. These include ease of interface use, intuitive personalization, fast customer service, and low buffering rates. For instance, user-friendly platforms encouraging easy access to content often increase user satisfaction, lowering the chances of users discontinuing their subscriptions. Conversely, platforms with slow interaction speeds, deficient

customer support, or complicated content inquiry systems tend to have high churn rates. Careful design of an intuitive, customer-friendly platform and adequate customer support can significantly raise user satisfaction and retention rates.

Availability of Exclusive Content

The presence of exclusive content is another dimension that immensely fosters customer churn. Original documentaries, films, and other one-of-a-kind series attract new subscribers and compel existing users to retain their subscriptions. In this regard, Kübler et al. (2021) and Ahuja (2021) noted that exclusivity increases the valuation of a particular service and makes it more appealing to consumers. With the proper marketing and value proposition, a business can increase the renewal of subscriptions. This can be achieved through everything from exclusive film premieres to original series that inspire a cult-like following. As such, there is a constant need to generate and obtain content that resonates with the audience to retain them and reduce the churn rate. Streaming platforms that do not meet the competitive standards of content supply will lose customers to more diversified and appealing competitors.

Availability of Diverse Content

The variety in content provided by a streaming platform affects its churn rates. Lüders et al. (2021) and Yaqoob et al. (2020) described the ability of platforms that cover a wide array of content in different genres, languages, and formats to retain audiences more successfully. Because of the wide range of content available nowadays, users expect many viewing options, including international movies, specialized documentaries, television series, and children's programs. Meeting these varied demands ensures viewer engagement and, subsequently, subscriptions, which is greatly aided by the content diversity of such platforms. For instance, a streaming service with documents in various languages and multiple genres would cater to wider audiences and reduce churn rates. Moreover, users are encouraged to maintain their subscriptions due to regular updates in the content library consisting of new and old classics, which keeps the platform engaging and fresh.

Service Cost

As the streaming market becomes saturated, service cost becomes a primary driver for churn. Kweon and Kweon (2021) examined how strategically setting a price impacts a customer's decision-making process regarding subscription retention or cancellation. Cancellation rates

are higher when the perceived value does not exceed the subscription fee. On the other hand, loyal users can be created by offering low prices, discounts, or easy payment schemes. Finding a balance between content quality, quantity, and service cost. Platforms that offer high fees due to a lack of content diversity or exclusivity often have churned customers. Moreover, users need to find cheaper competitors when a service provider uses covert charges or undesired increasing costs of services, as this leads to unwillingness and discontent. Marketing decisions must be made while considering competition and the value offered to customers after spending.

Desirable Features

The previously said comfortable features that enhance streaming services help lessen churn rate. Examples are friendly interfaces, personalized recommendations, high-end streaming services like 4K and HD resolution, and offline viewing or multi-device streaming. LaMorte (2018) claim that value-added features increase the satisfaction of customers, which helps reduce churn. A user who feels that more than just essential content is fresh from the platform is likelier to keep subscribing. For example, a platform can enhance the experience by helping users discover new content through elaborate recommendations based on user behavior and preferences. Also, ad-free viewing, easy device synchronization, and downloadable content enable users to appreciate more value from the service, hence helping reduce churn.

Customer Service

Practical customer assistance directly contributes to the levels of churn experienced in the business. Becker et al. (2020) and TM et al. (2021) noted that service customers' proactive attention concerning service-prompting questions and even serving them helps keep them loyal. Users who experience deficient customer service become exasperated and tend to cancel their subscriptions. Advanced customer support services, which are offered via the telephone, email, live chat, and social networks, are important for solving users' problems and preventing discontentment. Also, loyal users can be created by taking initiatives such as conducting follow-up surveys, providing self-help troubleshooting assistance, and personal contact. Users who receive positive service experience repeatedly tend to stick with the service despite occasional problems with the system.

To cap it all, customer experience, content exclusivity, content variety, service price, quality attributes, and customer service critically influence customer retention or churn. These

streaming platforms striving to enhance these aspects should expect a higher loyal customer base that translates to more excellent customer retention, thus achieving sustainable streaming service success in a competition-driven environment.

Effects of Churn on Streaming Services

Jain (2021) undertook a study on predicting the churn behavior of customers and its impact on services they were associated with. The study found that managing churn behavior is important because it affects companies' profitability. It was also determined that retaining customers was more practical and less expensive than getting new customers, especially in competitive industries. One of the gaps that Jain tried to fill was predicting churn behavior to maximize retention. The research examined and compared the churn rates across various industries and analyzed the impact of customer attrition on organizational profits. In conclusion, it was remarked that customer churn dramatically contributes to the lowering of profits in many industries, which places great emphasis on effective churn management.

Park and Ahn (2022) studied the phenomenon of churn in organizations with particular attention to customer churn in online streaming services. They found that customers showing churn behavior could not be viewed as a single entity because their churn behavior was strikingly different. Park and Ahn stressed the complexity of differentiating various forms of churn as a management problem that needed to be solved. They also analyzed the financial side of customer relationship management through forecasted churn and its associated costs. Their findings suggested that knowing the different types of churn behavior was crucial in mitigating its adverse effects on customer retention and service delivery.

Jain et al. (2021) also incorporated the elucidation of churn behavior in their analysis as a central feature within their study of the telecommunication industry. They highlighted the burden of churn management and the necessity for proactive, predictive models to enable companies to allocate resources better. The study proposed that customer service is an aspect that should be prioritized to formulate effective strategies aimed at reducing churn and fostering customer loyalty over time.

Ferreira et al. (2019) analyzed the role of behavioral networks in customer churn. They found that customer churn may extend its influence to other users in a given network, further

spreading the tendency for churn. They also analyzed the impacts of other factors, such as service quality feedback and its role in information churn behavior and customer retention. The study pointed out that churn could not only be considered an individual decision but has broader social and network context influences, especially applicable to streaming platforms.

Flick (2018) moved the focus of churn analysis to e-commerce and streaming services. It was observed that customer churn is a historical issue that businesses have had to deal with over long periods. The research highlighted the need to identify and manage churn more effectively, particularly in live streaming and cross-border streaming services. Li et al. noted the need to formulate specific strategies to address churn, especially in international markets and the highly competitive environment of the streaming industry.

Pinheiro and Cavique (2022) analyzed the profoundly high churn rates in online streaming services, considering customer preferences and the impact of word-of-mouth. They highlighted how retaining customers who frequently change platforms in a competitive market is a significant problem for streaming services. Their study claimed that businesses ought to focus on retention strategies to curb churn by focusing on keeping subscribers instead of constantly chasing new customers.

Osman and Ghaffari (2021) noted the increasing role of digitalization in customer retention. Companies face increasing problems retaining long-term clients due to rapid technological evolution and new streaming platforms. The study claimed that digitalization had also increased operating efficiency as an automated service delivery model with lower labor costs was introduced. However, issues emerged regarding the standard of provided services. The authors emphasized that the problem of customer retention in streaming services is becoming more complicated due to the constant growth of other competing services.

Customer Retention for Streaming Services

In their study, Ascarza et al. (2018) analyzed strategies to retain customers in the context of online streaming services. Their findings noted that appropriate segmentation of customers based on their engagement behaviors and deploying proactive and reactive retention strategies were important in mitigating churn. Their research covered the need for retention interventions on the hypothesis of customer exit, known as churn. It highlighted the possibility of retention

if the necessary actions are taken at an appropriate time. Ascarza's study pointed out the predictive power of customer service behavior and its predictive power to churn outcomes for informed managerial decision-making.

De Sousa (2021) studied the main factors affecting customer retention for streaming services, emphasizing the economic dimension, like subscriptions and supplementary purchases or services. De Sousa found that these factors determine customer satisfaction, which retains customers. De Sousa presented new evidence on customer engagement while emphasizing service quality and customer loyalty as the principal stimulants of continued engagement with a particular service. The study results suggest that a competitive price and streaming services must be offered to promote customer satisfaction and retention.

Singh and Agrawal (2019) elaborated on the importance of customer retention for the growth of music streaming services and the relevant competition that requires the provision of differing services. They pointed out that platforms must constantly respond to customer needs by providing various services and features, promoting retention. Singh and Agrawal stated that some platforms could improve customer retention by providing personalized recommendations, varied content, and other value-added services.

Jain et al. (2020) transferred their previously developed machine learning techniques for predicting customer churn in banking and IT services to streaming services. With these predictive models, companies could forecast churn based on identifiable characteristics and behavior patterns. The study underlined the need to implement machine learning techniques to predict customer churn better and improve the streaming business's retention strategies.

Kong and Rahman (2022) argued that businesses must retain customers to remain competitive. To achieve growth, companies focused on servicing customers efficiently and offering them personalized services, which were vital for retention. The streaming field should focus on engaging users through reliable service and building retention relations, as this is bound to reduce churn.

Khatib et al. (2019) examined the issues streaming services encountered regarding customer retention practices. Their findings established a link between customer retention in

streaming platforms and their services and whether the customer's needs were met. The study suggested that businesses must dig deeper into their service-providing capabilities and initiate action plans that result in positive user experience. Streaming platforms ought to maintain quality and respond to customer concerns to retain their subscribers in the long run.

In conclusion, streaming services are increasingly concerned with customer churn and retention. When combined with predictive analytics, personalized retention strategies driven by excellent service significantly lower churn. Service offerings will need to continuously evolve to be competitive, especially with the increasing competition in the streaming market, while also being mindful of subscriber attrition.

Streaming Services in the UAE

In the last few years, streaming services in the UAE have rapidly increased due to the demand of a multicultural population. UAE nationals, expats, and foreign tourists are serviced by various platforms that cater to each group's interests and tastes. Disney Plus is one of the most used services in the UAE since it started operating in June 2022, bringing famous Disney brands into the area. Star Wars, Pixar, National Geographic, and Marvel are now available in the UAE (Bloom, 2021). Moreover, Bloom (2021) mentions that Netflix remains one of the more dominant services as it continues to be the go-to platform for most viewers in the UAE.

OSN, a prominent paid television provider since 2012, was among the first to launch an OTT platform in the region with OSN Streaming, where subscribers can access a wide range of TV shows, sports, and movies. Game of Thrones, Suits, and Normal People are popular titles (The National News, 2020). Another competitor in the UAE, StarzPlay Arabia, has gained popularity by offering exclusive rights to premiere shows and showing more than 10,000 hours of movies and series, mainly in Arabic with subtitles. The appeal is further enhanced by their partnership with Warner Bros and access to DC comics content (The National News, 2020).

MBC Shahid, an Arabic content platform, continues to expand its catalog with Fox and Disney's popular shows like Top Gear and The Voice Arabia, which, in turn, helps them grow in Western markets (The National News, 2020). Such growth indicates the shift in the streaming industry in UAE, with multiple services launched to fulfill local and global demand.

The popularity of these services in the UAE demonstrates the need to localize the content, form appropriate partnerships, and tailor services to maintain a competitive edge in the region.

Conclusions

Several factors help mitigate consumer churn and affect the adoption of streaming services in the UAE. Bouraqia et al. (2020) notes that the motivation for usage is regionally driven, which is important for both the adoption and retention of streaming services. The mobility, diversity, and innovation of the available content are pertinent factors that ensure customer engagement with the steaming services. Since the UAE has a significant expatriate population, the content must meet various preferences while ensuring an effortless user experience.

Burroughs (2019) has also pointed out that users are particularly impressed by an application's reliability and ease of use. Users trust well-known international brands and are more likely to utilize established services. This is especially true in the UAE, where regulatory permission is needed before integrating streaming services like Netflix and Amazon. Cabeza-Ramírez et al. (2021) and Carter (2020) have stated that any new service in the UAE is subject to the government's approval, which guarantees a minimum level of adherence to local laws and regulations. These rules are mandatory, as disregarding them could result in penalties, thus making regulatory approval a critical determinant in adopting new services.

The study details other important factors, such as mobility, diversity of content, and quality relative to price, which correspond to Çevik (2019) findings. Due to its strong economy and diverse population, streaming services in the UAE are expected to provide content that is not only diverse but also readily available at all times. The demand, coupled with ensuring services are tailored to local tastes, drives the success of Disney Plus and Netflix.

Additionally, the study aims to evaluate the possible effects of customer experience, security, privacy, and technical factors as determinants for the usage of streaming services in the UAE. The research intends to validate that these elements affect churn management, thus providing streaming service operators in the region with helpful guidance. This research is one of the first to examine churn management in the streaming services context in the UAE, which contributes to the body of knowledge for future research and serves as a starting point for other

countries in the Middle East and telecommunications industries seeking to enhance or develop streaming services.

As the evaluation of these elements will be done through hypotheses and data collection, the study aims to produce evidence to help streaming service operators modify their strategies and operations in the region. This guarantees that the UAE will be able to provide new streaming services within the local culture and regulations framework and will be the first step for other countries in the region. Based on the above gap, the researcher proposed the following conceptual diagram.

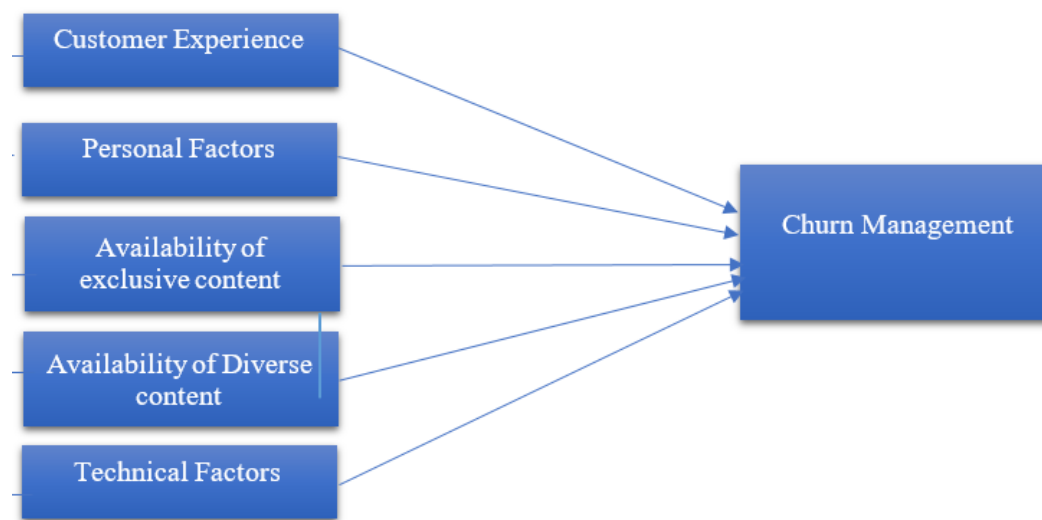


Figure 1. Conceptual Framework of the study.

Source: Developed by the Author, 2023

This research was intended to examine the motivations accompanying the use of streaming services and the reasons for customer churn. The researcher worked at a streaming company in the UAE, where he/ she had to consider the effects streaming services have on the company's operations and how the business model of these companies might be altered to take advantage of increasing user adoption and retention strategies. The study results offered a greater understanding of what drives users to purchase streaming subscriptions and the consequences for telecom companies, strategy formulators, and government authorities in the UAE.

These factors revolve around the variety of content available, accessibility, and cost efficiency, all of which are important to both the service providers and users. As noted by Chen (2019), the gravity of demand for streaming services platforms presents a dilemma, and streaming companies can be part of the solution where they partner with telecoms to improve service delivery. The anticipated willingness of the consumers to pay for services needed (Christian, 2019) implies that streaming companies while facing stiff competition, are not in a position to change prices; they need to provide quality and customized content that users are looking for.

Additionally, with more than 90% of the UAE population owning smartphones, streaming services have become more accessible and affordable. This allows streaming companies to increase their content catalog while lowering prices and increasing the user base.

The collaborative nature of the streaming service industry, with telecom companies providing internet services and streaming companies supplying content, is increasing in significance. Users gain access to several content and choices that are not attached to any demographic categories. The results also show that sharing and viewing videos on the platform was the most popular use, with people willing to pay higher mobile bills to stream these videos.

Moreover, the study backed the diffusion of innovations theory, further reinforcing its applicability in the context of streaming service adoption. This also contributes to existing literature by explaining why users adopt streaming applications within the UAE region. Considering the developed IT environment and the booming prospects of the UAE in the streaming industry, the results will assist in branding the region as a desirable market for streaming service providers who are extending their services.

The findings from this study will benefit telecommunication companies, decision-makers, and broadcasters in the UAE by aiding them in understanding the consumer paradigms and the determinants of the adoption and perpetual use of streaming services. As well as serving as a foundation for further research on streaming services offered in the region, this study adds to the narrative of innovation and technology adoption in the Middle East.

References

- Abualkishik, A. Z., Almajed, R., & Thompson, W. (2023). Intelligent Model for Customer Churn Prediction using Deep Learning Optimization
- Adeniji, O. (2020). *Business to consumers (B2C): the effect of machine learning application in telecom customer churn management* (Doctoral dissertation, Dublin Business School).
- Ahuja, V. (2021). Transforming the Media and Entertainment Industry: Cases From the Social Media Marketing World. *Journal of Cases on Information Technology (JCIT)*, 23(4), 1-17.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 665–683.
- Ascarza, E., Neslin, S. A., Netzer, O., Anderson, Z., Fader, P. S., Gupta, S., ... & Schrift, R. (2018). In pursuit of enhanced customer retention management: Review, key issues, and future directions. *Customer Needs and Solutions*, 5(1), 65-81.
- Becker, J. U., Spann, M., & Barrot, C. (2020). Impact of proactive post-sales service and cross-selling activities on customer churn and service calls. *Journal of Service Research*, 23(1), 53-69.
- Bloom, D. (2021, April 19). *Streaming-Video Subscriber Churn Up 85% As Audiences Seek Next Hot Show*. Forbes. <https://www.forbes.com/sites/dbloom/2021/04/19/streaming-video-subscriber-churn-up-75-percent-as-audiences-seek-next-hot-show/?sh=7ce5ff242c3d>
- Bouraqia, K., Sabir, E., Sadik, M., & Ladid, L. (2020). Quality of experience for streaming services: measurements, challenges, and insights. *IEEE Access*, 8, 13341-13361.
- Burroughs, B. (2019). House of Netflix: Streaming media and digital lore. *Popular Communication*, 17(1), 1-17.
- Cabeza-Ramírez, L. J., Fuentes-García, F. J., & Muñoz-Fernandez, G. A. (2021). Exploring the emerging domain of research on video game live streaming in a web of science: State of the art, changes, and trends. *International Journal of Environmental Research and Public Health*, 18(6), 2917.

- Cabeza-Ramírez, L. J., Fuentes-García, F. J., & Muñoz-Fernandez, G. A. (2021). Exploring the emerging domain of research on video game live streaming in a web of science: State of the art, changes, and trends—*International Journal of Environmental Research and Public Health*, 18(6), 2917.
- Camilleri, M. A., & Falzon, L. (2020). Understanding motivations for online streaming services: integrating the technology acceptance model (TAM) and the uses and gratifications theory (UGT). *Spanish Journal of Marketing-ESIC*.
- Carter, C. (2020). How streaming services changed the way we listen to and pay for music.
- Çevik, S. B. (2019). Turkish historical television series: public broadcasting of neo-Ottoman illusions. *Southeast European and Black Sea Studies*, 19(2), 227-242.
- Chen, Y. N. K. (2019). Competitions between OTT TV platforms and traditional television in Taiwan: A Niche analysis. *Telecommunications Policy*, 43(9), 101793.
- Christian, A. J. (2019). Expanding production value: The culture and scale of television and new media. *Critical Studies in Television*, 14(2), 255-267.
- Coleman, R. (2018). Theorizing the present: digital media, pre-emergence and infra-structures of feeling. *Cultural Studies*, 32(4), 600-622.
- Dao, N. N., Tran, A. T., Tu, N. H., Thanh, T. T., Bao, V. N. Q., & Cho, S. (2022). A contemporary survey on live video streaming from a computation-driven perspective. *ACM Computing Surveys*, 54(10s), 1-38.
- De Sousa, F. T. (2021). The Determinants of Customer Satisfaction and Customer Retention in subscription-based streaming services in Ireland (Doctoral dissertation, Dublin Business School).
- Domingos, E., Ojeme, B., & Daramola, O. (2021). Experimental analysis of hyperparameters for deep learning-based churn prediction in the banking sector. *Computation*, 9(3), 34.
- Doyle, G. (2016). Digitization and changing windowing strategies in the television industry: Negotiating new windows on the world. *Television & new media*, 17(7), 629-645.
- Eagly, A., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich.

- Ferreira, P., Telang, R., & De Matos, M. G. (2019). Effect of friends' churn on consumer behavior in mobile networks. *Journal of Management Information Systems*, 36(2), 355-390.
- Flick, U. (2018). Triangulation in data collection. *The SAGE handbook of qualitative data collection*, 527-544.
- Gilbert, A. (2019). Push, pull, rerun: Television reruns and streaming media. *Television & New Media*, 20(7), 686-701.
- Habbal, F. (2022). Analytics for Smart Keys application and User interface of streaming data. *Emirati Journal of Business, Economics and Social Studies*.
- Haryoto, K. S. (2015). The use of modified theory of acceptance and use of technology 2 to predict prospective users' intention in adopting TV Streaming.
- Hasan, N., Rana, R. U., Chowdhury, S., Dola, A. J., & Rony, M. K. K. (2021). Ethical considerations in research. *Journal of Nursing Research, Patient Safety and Practise (JNRPS)* 2799-1210, 1(01), 1-4.
- Herbert, D., Lotz, A. D., & Marshall, L. (2019). Approaching media industries comparatively: A case study of streaming. *International journal of cultural studies*, 22(3), 349-366.
- Jain, H., Khunteta, A., & Srivastava, S. (2021). Telecom churn prediction and used techniques, datasets and performance measures: a review. *Telecommunication Systems*, 76(4), 613-630.
- Jain, H., Yadav, G., & Manoov, R. (2021). Churn prediction and retention in banking, telecom and IT sectors using machine learning techniques. In *Advances in Machine Learning and Computational Intelligence* (pp. 137-156). Springer, Singapore.
- Jia, M., Komeily, A., Wang, Y., & Srinivasan, R. S. (2019). Adopting Internet of Things for the development of smart buildings: A review of enabling technologies and applications. *Automation in Construction*, 101, 111-126.
- Jia, Y. (2022, January). The Streaming Service Under Pandemic with the Example of Performance of Disney+. In *2021 International Conference on Social Development and Media Communication (SDMC 2021)* (pp. 815-818). Atlantis Press.
- Jo, J., Jo, B., Kim, J., Kim, S., & Han, W. (2020). Development of an IoT-based indoor air quality monitoring platform. *Journal of Sensors*, 2020, 1-14.

- Kamal, S. A., Shafiq, M., & Kakria, P. (2020). Investigating acceptance of telemedicine services through an extended technology acceptance model (TAM). *Technology in Society*, 60, 101212.
- Kapucu, H. (2021). Business Leaders' Perception of Digital Transformation in Emerging Economies: On Leader and Technology Interplay. *International Journal of Advanced Corporate Learning*, 14(1).
- Khalil, J. F., & Zayani, M. (2022). Digitality and Music Streaming in the Middle East: Anghami and the Burgeoning Startup Culture. *International Journal of Communication*, 16, 19.
- Khan, Y., Shafiq, S., Naeem, A., Ahmed, S., Safwan, N., & Hussain, S. (2019). Customers churn prediction using artificial neural networks (ANN) in telecom industry. *International Journal of Advanced Computer Science and Applications*, 10(9).
- Khatib, S. M., Seong, L. C., Chin, W. S., & Tze, H. K. (2019). Factors of E-service Quality among Malaysian Millennial Streaming Service Users. *International Journal of Economics & Management*, 13(1).
 Thenationalnews, (2020). Your complete guide to online video streaming in the UAE. [Online]. Available through<
<https://www.thenationalnews.com/arts-culture/television/prices-to-top-picks-your-guide-to-online-video-streaming-in-the-uae-1.705440>>. [Accessed on 3rd march, 2023]
- Khattak, A., Mehak, Z., Ahmad, H., Asghar, M. U., Asghar, M. Z., & Khan, A. (2023). Customer churn prediction using composite deep learning technique. *Scientific Reports*, 13(1), 17294.
- Kong, C. W., & Rahman, M. A. (2022). Price as a determinant to Customer Satisfaction and Customer Retention in Malaysia Commercial Banks. *Journal of Positive School Psychology*, 6(3), 267-276.
- Kotler, Wong, Saunders, & Armstrong. (2005). *Principles of marketing* (4th ed.). London: Pearson Education.
- Kübler, R., Seifert, R., & Kandziora, M. (2021). Content valuation strategies for digital subscription platforms. *Journal of cultural economics*, 45(2), 295-326.
- Kutnjak, A., Pihiri, I., & Furjan, M. T. (2019, May). Digital transformation case studies across industries—literature review. In *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO)* (pp. 1293-1298). IEEE.

- Kweon, H. J., & Kweon, S. H. (2021). Pricing Strategy within the US Streaming Services Market: A Focus on Netflix's Price Plans. *International Journal of Contents*, 17(2), 1-8.
- LaMorte, W. W. (2018). Diffusion of innovation theory. Retrieved 2019, from <http://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories4.html>
- Li, Q., Zhou, Z., & Xia, K. (2022, December). The Promoting Effect of E-commerce Live Streaming on Import Cross-Border E-commerce. In *2022 International Conference on Economics, Smart Finance and Contemporary Trade (ESFCT 2022)* (pp. 1366-1373). Atlantis Press.
- Lobato, R. (2017). Streaming services and the changing global geography of television. In *Handbook on Geographies of Technology* (pp. 178-192). Edward Elgar Publishing.
- Lotz, A. D., & Eklund, O. (2023). Beyond Netflix: Ownership and content strategies among non-US-based video streaming services. *International Journal of Cultural Studies*, 13678779231196314.
- Lüders, M., Sundet, V. S., & Colbjørnsen, T. (2021). Towards streaming as a dominant mode of media use?. *Nordicom Review*, 42(1), 35-57.
- Martins, H. (2017). Predicting user churn on streaming services using recurrent neural networks.
- Media And Entertainment In The 90's - 664 Words | Bartleby.* (2022). Bartleby Research. Retrieved July 5, 2022, from <https://www.bartleby.com/essay/Media-And-Entertainment-In-The-90s-FCHRAQERV>
- Meehan, E. R. (2020). Watching television: A political economic approach. *A Companion to Television*, 345-360.
- Osman, Y., & Ghaffari, B. (2021). Customer churn prediction using machine learning: A study in the B2B subscription based service context.
- Parc, J., & Kim, S. D. (2020). The digital transformation of the Korean music industry and the global emergence of K-pop. *Sustainability*, 12(18), 7790.
- Park, W., & Ahn, H. (2022). Not All Churn Customers Are the Same: Investigating the Effect of Customer Churn Heterogeneity on Customer Value in the Financial Sector. *Sustainability*, 14(19), 12328.

- Parnami, S., & Jain, T. (2021). A Study on Increase in the Usage of OTT Streaming Services. *International Journal of Research in Engineering, Science and Management*, 4(8), 142-145.
- Patel, H., & Connolly, R. (2007). Factors influencing technology adoption: A review. *Information Management in the Networked Economy: Issues & Solutions*, 416–435.
- Pejić Bach, M., Pivar, J., & Jaković, B. (2021). Churn Management in Telecommunications: Hybrid Approach Using Cluster Analysis and Decision Trees. *Journal of Risk and Financial Management*, 14(11), 544.
- Pihir, I., Tomičić-Pupek, K., & Tomičić Furjan, M. (2019). Digital transformation playground- literature review and framework of concepts. *Journal of Information and Organizational Sciences*, 43(1), 33-48.
- Pinheiro, P., & Cavique, L. (2022). Telco customer churn analysis: measuring the effect of different contracts. In *Information Systems and Technologies: WorldCIST 2022, Volume 2* (pp. 112-121). Cham: Springer International Publishing.
- Pollack, C. C., Kim, J., Emond, J. A., Brand, J., Gilbert-Diamond, D., & Masterson, T. D. (2020). Prevalence and strategies of energy drink, soda, processed snack, candy and restaurant product marketing on the online streaming platform Twitch. *Public Health Nutrition*, 23(15), 2793-2803.
- Purohit, H. (2020). Emergence and growth of mobile money in modern India: A study on the effect of mobile money.
- Rafique, H., Almagrabi, A. O., Shamim, A., Anwar, F., & Bashir, A. K. (2020). Investigating the acceptance of mobile library applications with an extended technology acceptance model (TAM). *Computers & Education*, 145, 103732.
- Rathore, B. (2023). Digital Transformation 4.0: Integration of Artificial Intelligence & Metaverse in Marketing. *Eduzone: International Peer Reviewed/Refereed Multidisciplinary Journal*, 12(1), 42-48.
- Ren, S., Hao, Y., Xu, L., Wu, H., & Ba, N. (2021). Digitalization and energy: How does internet development affect China's energy consumption?. *Energy Economics*, 98, 105220.
- Saputro, B., Ma'mun, S., Budi, I., Santoso, A. B., & Putra, P. K. (2021, March). Customer churn factors detection in Indonesian postpaid telecommunication services as a supporting medium for preventing waste of IT components. In *IOP Conference*

Series: Earth and Environmental Science (Vol. 700, No. 1, p. 012015). IOP Publishing.

Savaglio, C., Ganzha, M., Paprzycki, M., Bădică, C., Ivanović, M., & Fortino, G. (2020). Agent-based Internet of Things: State-of-the-art and research challenges. *Future Generation Computer Systems*, 102, 1038-1053.

Schiffman, L. & Wisenbilt, J. (2015). *Consumer behavior*. (11th ed.) London: Pearson.

Shahidul Islam, M., Islam, M. T., Almutairi, A. F., Beng, G. K., Misran, N., & Amin, N. (2019). Monitoring of the human body signal through the Internet of Things (IoT) based LoRa wireless network system. *Applied Sciences*, 9(9), 1884.

Simon, G. I. (2021). Adapting to context: Creative strategies of video streaming services in Nigeria. *Convergence*, 27(6), 1770-1788.

Singh, P., & Agrawal, R. (2019). A game-theoretic approach to maximise payoff and customer retention for differentiated services in a heterogeneous network environment. *International Journal of Wireless and Mobile Computing*, 16(2), 146-159.

Sultan, M. T., & El Sayed, H. (2023). QoE-aware analysis and management of multimedia services in 5G and beyond heterogeneous networks. *IEEE Access*.

Sun, X. (2022). Consumer Intention and Usage Behavior of Live-Streaming Shopping: An Extension of the Unified Theory of Acceptance and Use of Technology. *The Journal of Behavioral Science*, 17(3), 106-124.

Sungheetha, A., & Sharma, R. (2020). Real time monitoring and fire detection using internet of things and cloud based drones. *Journal of Soft Computing Paradigm (JSCP)*, 2(03), 168-174.

TM, A., Singh, S., Khan, S. J., Ul Akram, M., & Chauhan, C. (2021). Just one more episode: exploring consumer motivations for adoption of streaming services. *Asia Pacific Journal of Information Systems*, 3(1), 17-42.

Venkatesh, R., Singhal, T. K., & Mathew, L. (2017). Emergence of digital services innovation as a path to business transformation: case of communication services providers in GCC region. *Int. J. Eng. Technol.*

- Warner, K. S., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long range planning*, 52(3), 326-349.
- Weinberger, M., & Bouhnik, D. (2020). Various information aspects following the emergence of music streaming applications. *Online Information Review*.
- Xiahou, X., & Harada, Y. (2022). B2C E-commerce customer churn prediction based on K-means and SVM. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(2), 458-475.
- Zeghari, R., Guerchouche, R., Tran-Duc, M., Bremond, F., Langel, K., Ramakers, I., ... & König, A. (2022). Feasibility study of an internet-based platform for tele-neuropsychological assessment of elderly in remote areas. *Diagnostics*, 12(4), 925.