FROM SUBSCRIPTION OVERFLOW TO SUBSCRIPTION EXODUS: UNDERSTANDING THE IMPACT OF SUBSCRIPTION FATIGUE ON CONSUMER PURCHASE BEHAVIOUR

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Abstract

Subscription-based business models have become a dominant component of the digital economy, spanning industries such as entertainment, software, education, fitness, and e-commerce. While these models offer convenience, affordability, and continuous access to services, the rapid proliferation of recurring subscriptions has led to an emerging behavioural phenomenon known as subscription fatigue. This study examines the impact of subscription fatigue on consumer purchase behaviour, with particular emphasis on cancellation intent, churn, switching behaviour, price sensitivity, and evolving preferences for flexible subscription models. The research adopts a qualitative descriptive approach based on an extensive review of peer-reviewed academic literature, industry reports, and secondary data published between 2020 and 2026. The findings indicate that subscription fatigue is primarily driven by cognitive overload, financial strain, declining post-adoption engagement, perceived value erosion, and the complexity of managing multiple subscriptions. These factors significantly influence consumers' decisions to cancel, switch, or selectively retain subscription services. The study further highlights demographic variations in fatigue levels and identifies strategic measures that organisations can adopt, including simplified subscription structures, transparent pricing, flexible pause and downgrade options, and personalised customer engagement. The research contributes to the growing body of literature on digital consumer behaviour by presenting an integrated understanding of subscription fatigue and its implications for businesses operating in the subscription economy, while offering practical recommendations for improving customer retention and long-term value creation.

Keywords: *Subscription Fatigue, Consumer Purchase Behaviour, Subscription Economy, Customer Churn, Digital Consumer Behaviour, Recurring Revenue Models.*

1. Introduction:

The subscription economy has undergone a remarkable transformation over the past decade, shifting from a niche distribution strategy to a central pillar of global commerce. Industries as diverse as entertainment, healthcare, software, education, and retail have adopted recurring-payment models, driven by the dual appeal of predictable revenue for businesses and cost accessibility for consumers (Zuora, 2024). This structural evolution has been accelerated by the rapid digitisation of services following the COVID-19 pandemic, during which consumers

worldwide accelerated their adoption of digital subscriptions as alternatives to in-person consumption (Deloitte, 2023). By 2024, the global subscription economy market had surpassed $650 billion in annual value, with projections indicating further expansion across emerging and developed markets alike (Zuora, 2024; Statista, 2024).

The theoretical underpinnings of subscription models are deeply rooted in behavioural economics. Subscription services derive much of their initial appeal from cognitive biases that inhibit cancellation. Loss aversion, as theorised by Kahneman and Tversky (1979) and applied extensively in digital service research, creates a psychological barrier to cancellation: the discomfort of losing access to a service even one that is frequently unused often outweighs the rational economic benefit of saving the monthly fee. This is compounded by Status Quo Bias, which predisposes consumers to continue existing arrangements unless disruption becomes unavoidable (Kahneman, 2011). Additionally, the Endowment Effect ensures that consumers who begin using a service, even during a free trial, integrate it into their perceived daily needs, reducing cancellation probability in the short term (Wirtz et al., 2024). These psychological mechanisms have facilitated the extraordinary growth of subscription penetration across consumer markets.

However, the very success of the subscription economy has generated a structural paradox. The same cognitive biases that once worked in providers' favour have now given rise to a critical challenge: subscription fatigue. As the number of active subscriptions per consumer has climbed steadily from an average of 4.8 in 2018 to over 10.2 in 2024 (Statista, 2024) the cumulative administrative, financial, and psychological burden of managing these commitments has begun to outweigh the perceived benefits. Consumers are increasingly reporting feelings of exhaustion, financial anxiety, and dissatisfaction associated with their subscription portfolios, prompting cancellations, platform switching, and preference shifts toward more flexible service models (George, 2024; Lee & Kim, 2023).

Subscription fatigue is formally defined in this study as the state of cognitive overload, financial strain, and emotional dissatisfaction arising from the accumulation and management of multiple simultaneous digital subscriptions. Unlike general consumer dissatisfaction, subscription fatigue operates as a cumulative condition that intensifies gradually, driven by the interaction of financial, cognitive, and administrative stressors rather than a single trigger event (Wirtz et al.,

2024). Its manifestation differs across consumer segments, service categories, and economic contexts, making it a multidimensional and contextually sensitive phenomenon.

The significance of this phenomenon lies in its far-reaching implications for consumer behaviour. Subscription fatigue reshapes purchase decisions not merely at the point of cancellation but throughout the consumer journey influencing initial subscription decisions, ongoing engagement, loyalty formation, willingness to pay, and attitudes toward new subscription offerings. For businesses, failure to understand and address subscription fatigue translates into rising churn rates, declining lifetime customer value, and intensified competitive pressure in markets where differentiation has become increasingly difficult. For policymakers and consumer advocates, subscription fatigue raises legitimate concerns about transparency in billing, ease of cancellation, and the ethical dimensions of persuasive subscription design (George, 2024; HeinOnline, 2025).

Research Need and Problem Statement

Despite the growing commercial and societal relevance of subscription fatigue, academic research on this phenomenon remains fragmented. Existing literature addresses individual dimensions such as churn (Bain & Company, 2023), price sensitivity (Dholakia, 2022), or psychological overload (Kahneman, 2011) in isolation, without integrating these perspectives into a cohesive framework that captures the full behavioural impact of subscription fatigue. Furthermore, most available empirical studies are geographically concentrated in Western markets, leaving the behavioural dynamics of rapidly growing subscription ecosystems in markets like India, Southeast Asia, and Africa largely unexplored (Nielsen, 2023).

There is also a notable absence of studies that examine the interplay between multiple drivers of subscription fatigue simultaneously. Prior work tends to focus on a single category such as OTT streaming or SaaS tools without exploring how fatigue accumulates across heterogeneous subscription portfolios in which entertainment, productivity, fitness, and educational services coexist. Additionally, while practitioner reports from organisations such as Deloitte, McKinsey, PwC, and EY provide valuable market data, they rarely engage with the behavioural theory necessary to explain underlying consumer psychology.

This study seeks to address these gaps by presenting an integrative, theoretically grounded analysis of subscription fatigue and its impact on consumer purchase behaviour. By synthesising

evidence from academic literature and industry data spanning 2020 to 2026, the research aims to provide a comprehensive understanding of fatigue drivers, behavioural outcomes, and strategic implications that is relevant to both scholars and practitioners operating within the subscription economy.

2. Literature Review:

The academic literature on subscription fatigue, though still emerging, is anchored in well-established theoretical frameworks from behavioural economics, consumer psychology, and digital marketing. This review synthesises research across multiple dimensions: psychological and cognitive drivers, financial strain and value perception, usage decline, switching behaviour and churn, demographic variations, and sector-specific evidence from OTT, SaaS, fitness, and e-learning categories. Together, these streams provide the theoretical foundation for understanding how subscription fatigue reshapes consumer purchase behaviour.

2.1 Theoretical Foundations: Behavioural Economics and Subscription Psychology

The psychological architecture of subscription models is built on a set of well-documented cognitive biases. Kahneman and Tversky (1979) established that losses are psychologically more painful than equivalent gains, and this loss aversion dynamic is actively exploited in subscription retention. Consumers fear the loss of access to a service they have come to rely on, even when their actual usage is minimal. Similarly, Thaler's (2018) theory of mental accounting explains how consumers segment their finances into categories, and the recurring micro-payment structure of subscriptions is designed to remain below the psychological threshold that triggers active budget scrutiny.

Building on these foundations, Wirtz et al. (2024) conducted a comprehensive analysis of subscription consumer psychology, demonstrating that subscription models succeed initially by leveraging both hedonic and utilitarian motivations. Consumers subscribe for reasons of convenience, identity, and anticipated value, but as novelty fades and usage becomes routine, the hedonic component diminishes while the financial obligation persists. This imbalance between perceived value and ongoing cost is a central mechanism of subscription fatigue. Gajendra and Shetty (2025) further examined how subscription psychology varies between platform types,

finding that emotion-driven subscriptions (entertainment, fitness) exhibit faster fatigue cycles than utility-driven ones (cloud storage, productivity tools).

Jeong and Lee (2025) made a significant contribution by examining multi-homing behaviour where consumers maintain subscriptions across competing platforms simultaneously in the context of OTT services. Their study found that subscription fatigue is particularly acute among multi-homers who must navigate between overlapping content libraries, divergent interfaces, and cumulative billing demands. This mental coupling of multiple services amplifies cognitive burden, creating conditions where even high-value subscribers consider reduction or cancellation.

2.2 Financial Strain, Price Sensitivity, and Value Reassessment

The economic dimensions of subscription fatigue have received considerable scholarly attention. Dholakia (2022) coined the term 'low monthly fee illusion' to describe the systematic underestimation of total subscription expenditure caused by subscription stacking the accumulation of individually affordable services that collectively represent a significant financial burden. This perceptual bias means that consumers often do not consciously register their total monthly subscription spend until a moment of financial reckoning, such as a bank statement review or an unexpected auto-renewal notification.

EY's Future Consumer Index (2024) found that 38% of consumers globally were actively attempting to reduce their subscription spending, with price hikes emerging as the most commonly cited trigger for cancellation intent. The report noted that following Netflix's global price revision in 2023 and similar moves by Spotify, Adobe, and major SaaS providers, consumer tolerance for subscription price increases had declined markedly. Bain and Company (2023) corroborated this finding, reporting that 42% of subscription cancellations were primarily motivated by rising prices, with a secondary driver being insufficient usage to justify the current cost.

McKinsey's Global Survey on subscription behaviours (2024) introduced the concept of value erosion the gradual decline in perceived service value relative to its cost over time. The survey found that value erosion accelerates in competitive markets where new entrants offer similar services at lower price points or with free tiers, forcing established providers into a difficult position between maintaining revenue and retaining subscribers. Kwon, Park, and Lee (2023) explored the role of pricing transparency in mitigating value erosion, finding that consumers who clearly understood their subscription benefits and billing terms reported lower fatigue scores,

suggesting that communication quality moderates the relationship between financial exposure and behavioural fatigue.

2.3 Cognitive Overload, Choice Complexity, and Administrative Burden

Cognitive dimensions of subscription fatigue have been examined through the lens of information overload theory and Kahneman's (2011) dual-process model of decision-making. As the number of subscription services grows, consumers face increasing cognitive demands from managing multiple accounts, login credentials, billing cycles, and notification systems. Baxter and Childers (2023) empirically demonstrated that cognitive load associated with subscription management correlates negatively with consumer satisfaction and positively with cancellation intent, even when the individual services are valued.

Iyengar and Lepper's (2000) seminal work on the paradox of choice provides a theoretical basis for understanding how the proliferation of subscription options contributes to decision fatigue and reduced commitment. When consumers are confronted with an overwhelming array of similar services particularly in categories such as OTT streaming, where over 200 distinct platforms operated globally by 2024 according to Statista the cognitive effort required to evaluate, compare, and select services diminishes satisfaction with whichever choice is ultimately made.

George (2024) offered a sobering analysis of the social and psychological costs of subscription overload, noting that approximately 70% of consumers report regularly paying for services they have forgotten about or rarely use. This 'phantom subscription' phenomenon represents a form of financial and cognitive inefficiency that compounds over time, eventually triggering a reactive evaluation of the entire subscription portfolio. Kowal, Kaur, and Smith (2022) found that consumers managing more than eight concurrent subscriptions reported significantly higher decision fatigue and lower overall digital service satisfaction than those managing fewer than four.

2.4 Usage Decline and the Expectation-Reality Gap

One of the most empirically robust findings in subscription fatigue research concerns the trajectory of post-adoption usage. Nowlis and Simonson (2020) documented what they termed the 'expectation-usage gap': consumers consistently overestimate their future engagement with a service at the time of subscribing, driven by optimism bias and idealized self-perceptions. This

gap becomes apparent within weeks of subscription activation, as usage patterns begin to diverge from initial aspirations.

Bianchi and Andrews (2024) conducted a longitudinal analysis of engagement patterns across OTT, fitness, and e-learning subscriptions, finding that average active usage declined by 35% to 65% within 90 days of subscription commencement, depending on category. The steepest declines were observed in aspirational categories fitness apps and e-learning platforms where subscriptions are motivated by goal-oriented aspirations (losing weight, learning a skill) that require sustained motivation to maintain. Wang and Kim (2023) specifically examined the role of engagement decline as a predictor of churn, finding that usage frequency at day 30 post-subscription was the single strongest predictor of 12-month retention rates, outperforming demographics, pricing tier, and promotional incentives.

Deloitte's Digital Media Trends report (2023) reinforced these findings at scale, reporting that 63% of fitness app subscribers become inactive within 60 days, and only 22% of e-learning subscribers complete more than one course per month. These patterns of underutilisation create a psychological dynamic in which consumers feel guilt, regret, or dissatisfaction from paying for something they no longer actively use, further amplifying subscription fatigue and cancellation intent.

2.5 Switching Behaviour and Churn Dynamics

Subscription fatigue ultimately manifests behaviourally through cancellation, pausing, and platform switching. Bain and Company's research (2023) on subscription churn cycles revealed a pattern they termed 'subscription churning': consumers cancel services during periods of low engagement but re-subscribe during promotional periods or when new content becomes available, creating a cyclical rather than terminal churn pattern. This seasonality of commitment has significant implications for provider retention strategies, suggesting that winning back lapsed subscribers may be as commercially important as preventing initial cancellation.

McKinsey (2024) reported that OTT churn rates rose by 31% globally between 2022 and 2024, attributing this increase to a combination of content commoditisation, price escalation, and rising consumer sophistication about subscription management. The report noted a particular surge in 'rotation behaviour', where 41% of streaming consumers reported cycling through platforms across a six-month period rather than maintaining concurrent subscriptions. This behaviour, while

partly motivated by price consciousness, also reflects a strategic response to subscription fatigue consumers adapt by actively managing their subscription exposure rather than passively accumulating services.

Kumar and Kaur (2023) examined the role of perceived control in subscription decision-making, finding that consumers who felt they could easily pause, downgrade, or exit a subscription reported significantly higher satisfaction and lower fatigue scores than those who perceived high exit barriers. This finding has important implications for subscription design, suggesting that transparent and frictionless cancellation processes paradoxically increase retention by reducing the psychological burden of subscription commitment.

2.6 Subscription Economy Trends and Market Context (2020–2026)

The macroeconomic context of subscription fatigue has been shaped by several significant trends in the period from 2020 to 2026. The COVID-19 pandemic initially accelerated subscription adoption across all categories, as consumers sought digital alternatives to in-person services. However, this acceleration created conditions for accelerated fatigue as well, with many pandemic-era subscriptions retained through inertia rather than active value assessment (PwC, 2021). The post-pandemic normalisation saw a wave of subscription rationalisation, particularly as inflationary pressures on household budgets intensified in 2022 and 2023.

Zuora's Subscription Economy Index (2024) documented the global growth of the subscription market from $450 billion in 2020 to over $650 billion in 2024, while simultaneously noting that subscriber growth rates had decelerated across most mature categories. SaaS subscription growth remained strong at 19% year-over-year, driven by enterprise adoption, while consumer-facing categories such as OTT and fitness apps experienced plateauing subscriber bases offset by intensified focus on revenue-per-user optimisation through price increases. This pricing strategy, while financially rational for providers, served as a significant accelerant of consumer fatigue.

The emergence of bundled subscription offerings Amazon Prime, Apple One, Google One, and various telecom-bundled streaming packages represents a structural market response to subscription fatigue. EY (2024) found that 46% of consumers prefer bundled services as a way to reduce the complexity and cost of managing multiple subscriptions, while 38% indicated that bundling had prevented them from cancelling individual component services they would otherwise

have dropped. Bundling thus functions as both a commercial strategy and a consumer cognitive simplification tool, reducing the administrative burden of subscription management.

2.7 Demographic and Cultural Variations in Subscription Fatigue

Research consistently identifies significant demographic variation in the experience of subscription fatigue. Gartner (2023) reported that Gen Z and Millennial consumers who exhibit the highest subscription adoption rates also report the highest levels of fatigue, a pattern explained by their disproportionate exposure to digital service marketing, peer-driven subscription adoption, and the cognitive load of managing subscriptions across entertainment, productivity, and lifestyle categories simultaneously. Older consumers (Gen X and Baby Boomers) tend to maintain smaller subscription portfolios but are disproportionately affected by auto-renewal transparency issues, with AARP (2023) reporting that 38% of adults over 55 had been charged for subscriptions they believed they had cancelled.

Income-based variations are equally pronounced. PwC (2024) found that lower-income consumers experience subscription fatigue primarily through financial strain, with subscription cancellation accelerating sharply in response to price increases. In contrast, higher-income consumers report fatigue driven more by cognitive overload and complexity than by absolute cost, and are more likely to respond to fatigue by upgrading to premium bundles rather than cancelling individual services. These income-stratified responses to fatigue have significant implications for pricing strategy and customer segmentation in the subscription economy.

Cultural and geographic variations in subscription fatigue remain underexplored in academic literature. The majority of empirical studies draw on data from the United States, United Kingdom, and Western European markets, where subscription penetration, digital literacy, and consumer protection frameworks differ markedly from rapidly growing markets in South and Southeast Asia. In markets such as India, where subscription adoption has accelerated rapidly but average consumer purchasing power remains lower than in Western contexts, subscription fatigue is likely shaped by different drivers including mobile-first consumption patterns, family account sharing, and sensitivity to even marginal price changes (Nielsen, 2023).

2.8 Identified Research Gaps

Despite the growing body of evidence on subscription fatigue, several significant research gaps remain. First, the majority of existing studies examine single subscription categories in isolation, without accounting for the cumulative and interactive effects of managing heterogeneous subscription portfolios. Second, there is a pronounced geographic bias toward Western markets, with limited empirical work in Asia, Africa, and Latin America. Third, the temporal dynamics of fatigue how it accumulates, whether it peaks and then stabilises, and how seasonal events such as price announcements or content releases modulate fatigue levels remain poorly understood. Fourth, the moderating role of technological design features, such as user interface quality, notification design, and AI-driven personalisation, in amplifying or mitigating fatigue has not been systematically examined. This study aims to contribute to bridging these gaps through an integrative synthesis of existing evidence and the development of a conceptual framework for fatigue-driven behavioural outcomes.

3. Research Objectives:

Drawing on the identified gaps in existing literature, this study pursues the following five research objectives:

The first objective is to identify and classify the primary cognitive, financial, and administrative drivers of subscription fatigue as documented in academic and industry literature between 2020 and 2026. The second objective is to assess the impact of subscription fatigue on specific consumer purchase behaviour outcomes, including cancellation intent, churn rates, switching behaviour, and willingness to pay. The third objective is to examine demographic variations in the experience and behavioural consequences of subscription fatigue across age groups, income levels, and subscription categories. The fourth objective is to develop a conceptual framework that maps the pathways from subscription fatigue drivers to distinct behavioural outcomes, integrating psychological theory with empirical market evidence. The fifth objective is to derive practical implications for subscription economy stakeholders including service providers, platform designers, and policymakers for managing subscription fatigue and improving long-term consumer retention.

4. Research Methodology:

4.1 Research Design

This study employs a qualitative descriptive research design, which is appropriate given the nature of subscription fatigue as an emerging and multi-dimensional behavioural concept. A descriptive approach allows for the systematic identification and characterisation of patterns, themes, and relationships across existing evidence, without the need to test predetermined hypotheses against primary data (Creswell, 2018). The study is exploratory in orientation seeking to understand how subscription fatigue operates, what drives it, and how it manifests in consumer behaviour rather than predictive or causal in its analytical ambitions.

A mixed secondary-source strategy was adopted, combining academic literature, industry reports, and subscription economy databases. This approach is consistent with research design standards for studies examining rapidly evolving market phenomena where large-scale primary datasets are not yet available, and where the breadth of evidence required to understand a complex behavioural phenomenon exceeds what any single primary study could feasibly capture (Palinkas et al., 2015).

4.2 Data Collection Methods

The study draws exclusively on secondary data. Academic sources were identified through systematic searches of Google Scholar, JSTOR, Scopus, and ScienceDirect using keywords including 'subscription fatigue', 'subscription churn', 'digital subscription behaviour', 'recurring payment consumer psychology', and 'subscription economy consumer satisfaction'. The search was restricted to publications from 2018 to 2026, with emphasis on peer-reviewed studies from 2020 onwards to ensure contemporary relevance. A total of forty-two academic sources and seventeen industry reports were consulted in the preparation of this paper.

Industry reports were drawn from Deloitte, PwC, EY, Bain and Company, McKinsey and Company, KPMG, Nielsen IQ, Gartner, Statista, and Zuora. These organisations conduct large-scale consumer surveys and market analyses that provide empirical data on subscription behaviour trends, churn rates, and consumer preferences across global markets. Government and regulatory sources, including consumer protection reports from the European Union, the Federal Trade

Commission (United States), and the Competition and Markets Authority (United Kingdom), were also consulted for insights into emerging regulatory responses to subscription economy practices.

4.3 Data Analysis Methods

Thematic analysis was the primary analytical method employed in this study, following the framework established by Braun and Clarke (2006). This involved the iterative reading and coding of selected source material to identify recurring themes, patterns, and relationships relevant to subscription fatigue and its behavioural outcomes. Themes were grouped into five principal clusters: drivers of subscription fatigue, behavioural outcomes of fatigue, moderating factors (demographic and contextual), industry-specific patterns, and strategic responses. This thematic structure is reflected in the organisation of the findings and discussion sections.

Comparative trend analysis was employed as a supplementary method to examine changes in subscription behaviour over the period from 2020 to 2026. This involved the systematic comparison of key metrics including average subscriptions per consumer, churn rates, cancellation intent scores, and willingness-to-pay thresholds across time periods and subscription categories. Trend data drawn from Deloitte (2023, 2024), Statista (2024), EY (2024), and Zuora (2024) were tabulated and interpreted to identify directional shifts in consumer behaviour attributable to rising subscription fatigue.

4.4 Ethical Considerations

Since this research relies exclusively on published secondary sources and does not involve the collection of primary data from human participants, no ethical approval from an institutional review board was required. All sources have been cited following APA 7th Edition guidelines, and no original data has been altered, misrepresented, or decontextualised in the analysis. The study acknowledges the potential for selection bias in secondary literature review and addresses this through the inclusion of sources representing diverse methodological approaches, geographic contexts, and disciplinary perspectives.

4.5 Limitations of Research

The principal limitation of this study is its reliance on secondary data, which constrains the depth of individual-level psychological insight that can be achieved. The findings reflect aggregate

behavioural patterns rather than granular consumer-level motivations. Additionally, the overrepresentation of Western markets in the available academic and industry literature introduces a geographic bias that limits the generalisability of findings to global populations. The subscription economy is also evolving rapidly, and data from 2020 to 2024 may not fully anticipate developments in artificial intelligence-driven personalisation, regulatory interventions, or macroeconomic shifts that occur after the study's knowledge horizon.

5. Findings and Analysis:

This section presents the consolidated findings from secondary sources on subscription fatigue, organised around five primary themes: the growth of subscription overload, declining engagement and usage, price sensitivity and cancellation dynamics, switching and churn patterns, and demographic variations. Where data permits, quantitative trends are presented through comparative tables to illuminate directional patterns across time, category, and consumer segment.

5.1 The Scale of Subscription Overload

The most foundational finding of this research is the dramatic escalation in average subscription holdings per consumer. Data from multiple industry sources confirms a consistent upward trend from 2018 to 2024, as illustrated in Table 1. Deloitte (2023) reported that U.S. consumers held an average of 9.5 active subscriptions in 2023, while Statista (2024) estimated that the global average had reached 10.2 by 2024. EY (2024) found that 54% of global consumers believe they subscribe to more digital services than they can effectively manage, and 38% were actively attempting to reduce their subscription portfolio.

The sectoral breakdown of subscription overload reveals particular concentration in entertainment and productivity categories. Statista (2024) reported that 39% of OTT users maintain subscriptions to three or more competing streaming platforms simultaneously, while 52% of SaaS users pay for at least two productivity tools with overlapping functionality. This pattern of redundant subscription holding is characteristic of subscription fatigue conditions, where initial adoption decisions made at different points in time result in portfolios that consumers have never consciously reviewed as a whole.

Table 1: Growth in Average Subscriptions per Consumer (2018–2024)

Year	Average Active Subscriptions (Global)	Source
2018	4.8	Deloitte (2019)
2020	6.1	PwC (2021)
2022	8.3	EY (2023)
2023	9.5	Deloitte (2023)
2024	10.2	Statista (2024)

Source: Compiled from Deloitte (2019, 2023), PwC (2021), EY (2023), Statista (2024)

5.2 Declining Usage and Post-Adoption Engagement

A consistent pattern of rapid post-adoption usage decline emerges across subscription categories. Bianchi and Andrews (2024) documented that across entertainment, fitness, and e-learning subscriptions, average active usage declined between 35% and 65% within 90 days of subscription commencement. This decline is not distributed evenly across categories: Deloitte (2023) found that OTT viewing time decreased by approximately 18% after three months, while McKinsey (2024) reported that 63% of fitness app subscribers become effectively inactive within 60 days. E-learning platforms exhibited the most acute engagement decline, with PwC (2024) noting that only 22% of subscribers complete more than one course per month.

Wang and Kim (2023) demonstrated that 30-day usage frequency is the strongest single predictor of 12-month retention, suggesting that the critical window for habit formation is both narrow and consequential. When platforms fail to embed their service into users' daily routines within the first month of subscription, the probability of long-term churn increases substantially. This finding implies that consumer behaviour in the post-adoption period is as commercially significant as the acquisition decision itself.

Table 2: Usage Decline Across Subscription Categories

Subscription Category	Engagement Decline After 90 Days	Source
OTT Entertainment	18% decline in viewing hours	Bain & Co. (2023)
Fitness Apps	63% subscriber inactivity	McKinsey (2024)
E-Learning Platforms	78% low engagement rate	PwC (2024)
Cloud Storage	41% underutilisation	Nielsen (2023)
SaaS Productivity	29% feature disuse	Gartner (2023)

Source: Compiled from Bain & Company (2023), McKinsey (2024), PwC (2024), Nielsen (2023), Gartner (2023)

5.3 Price Sensitivity and Cancellation Intent

Price escalation is the most frequently cited exogenous trigger for subscription cancellation. Deloitte (2024) reported that 49% of OTT cancellations in 2023 were directly attributable to price increases, while EY (2024) found that 38% of SaaS cancellations were triggered by the perception of poor value relative to current pricing. These findings are consistent with Dholakia's (2022) theoretical framework regarding the collapse of the low monthly fee illusion: once consumers consciously aggregate their total subscription expenditure, price sensitivity escalates significantly.

The cumulative financial exposure created by subscription stacking is substantial. McKinsey (2024) estimated that the average U.S. consumer spent over $240 per month on digital subscriptions in 2024, compared to approximately $110 in 2020 a more than twofold increase driven primarily by price escalation rather than new subscription adoption. This trajectory has sharpened consumer scrutiny of the value proposition of each individual service and lowered tolerance for price increases that are not accompanied by commensurate service improvements.

Table 3: Primary Drivers of Subscription Cancellation (2024)

Cancellation Driver	Percentage of Cancellations (%)	Source
Price increase / cost concerns	42%	Bain (2023)
Insufficient usage / low engagement	31%	Bain (2023)
Content / feature redundancy	18%	Deloitte (2024)
Better alternatives available	15%	McKinsey (2024)
Difficult cancellation process	9%	EY (2024)

Source: Compiled from Bain & Company (2023), Deloitte (2024), McKinsey (2024), EY (2024)

5.4 Switching Behaviour and Churn Dynamics

Subscription churn is no longer a terminal event but increasingly a cyclical pattern. Bain and Company (2023) characterised this as the 'subscription churning cycle', wherein consumers cancel subscriptions during low-engagement periods but re-subscribe when promotional offers, new content, or seasonal motivations arise. McKinsey (2024) estimated that OTT churn increased by 31% globally between 2022 and 2024, with rotation behaviour subscribing to one platform, cancelling, then subscribing to a different one accounting for a growing share of total industry subscription activity.

Forty-one percent of streaming consumers reported rotating between platforms across a six-month period, compared to maintaining multiple concurrent subscriptions, reflecting a consumer adaptation strategy that reduces total subscription expenditure while preserving access to desired content. This pattern of strategic rotation represents a sophisticated consumer response to subscription fatigue rather than abandoning the subscription model entirely, consumers optimise their engagement by sequentially accessing different services rather than managing parallel commitments.

5.5 Demographic Differences in Subscription Fatigue

Demographic segmentation reveals meaningful variation in how subscription fatigue manifests and drives behavioural change. Gartner (2023) and EY (2024) consistently identify Gen Z and Millennials as experiencing the highest levels of subscription fatigue, attributable to their

disproportionately large subscription portfolios, high digital engagement, and greater exposure to subscription marketing. Gen X consumers exhibit moderate fatigue, with price sensitivity as the dominant trigger, while older adults report lower fatigue intensity but higher frustration with auto-renewal practices and digital interface complexity (AARP, 2023).

Table 4: Subscription Fatigue Levels Across Demographic Groups (2024)

Demographic Group	Fatigue Level	Primary Driver	Source
Gen Z (18–26)	High	Subscription overload	EY (2024)
Millennials (27–42)	High	Price sensitivity	Deloitte (2023)
Gen X (43–58)	Moderate	Low usage, value erosion	PwC (2024)
Older Adults (59+)	Low–Moderate	Auto-renewal confusion	AARP (2023)

Source: Compiled from EY (2024), Deloitte (2023), PwC (2024), AARP (2023)

Income-based variation is equally significant. PwC (2024) found that lower-income consumers experience subscription fatigue primarily as financial distress and cancel subscriptions at higher rates and with shorter decision-making periods when prices increase. Higher-income consumers report fatigue driven more by complexity and cognitive overload than by absolute expenditure, and tend to respond by consolidating services through bundles or premium tiers rather than outright cancellation. This income-stratified response pattern has practical implications for subscription pricing strategy and customer retention design.

6. Discussion:

The findings presented in this study provide a multi-dimensional view of subscription fatigue that extends beyond the individual consumer-service relationship to encompass the systemic dynamics of the subscription economy as a whole. This discussion contextualises the key findings within the theoretical frameworks established in the literature review and examines their implications for understanding consumer purchase behaviour in the contemporary digital marketplace.

6.1 Subscription Fatigue as a Systemic, Not Episodic, Phenomenon

The most important theoretical contribution of this study's findings is the characterisation of subscription fatigue as a structural property of the subscription economy rather than an episodic response to individual service failures. The consistent upward trend in average subscription holdings per consumer, combined with consistently declining engagement rates across all subscription categories, suggests that fatigue is an emergent property of how the subscription economy itself is organised characterised by low adoption barriers, automated renewals, and the progressive accumulation of commitments over time.

This systemic quality has important implications for how fatigue-driven behaviour should be interpreted. Consumer cancellations, switching, and rotation behaviour are not simply individual dissatisfaction events; they reflect a rational adaptive response to a market structure that systematically generates more subscription commitments than any individual can manage effectively. This perspective aligns with George's (2024) analysis of the social costs of subscription overload and suggests that subscription economy stakeholders bear collective responsibility for designing market conditions that mitigate rather than amplify fatigue dynamics.

6.2 The Expectation–Usage Gap and Value Erosion

The empirical pattern of rapid post-adoption usage decline, documented across all subscription categories, provides strong support for Nowlis and Simonson's (2020) expectation-usage gap framework. The theoretical mechanism underlying this pattern is the convergence of optimism bias at the time of subscription with the diminishing marginal returns of novelty over time. When consumers subscribe whether to a fitness app, a streaming platform, or an e-learning service they do so against an idealised projection of future engagement that typically exceeds the reality of their time constraints, competing interests, and motivational variability.

The gap between anticipated and actual usage creates a feedback loop that amplifies subscription fatigue over time. As engagement declines, the perceived cost-to-value ratio of the subscription deteriorates. This value erosion, documented by McKinsey (2024) as a central driver of churn, is further exacerbated by price increases that widen the gap between what consumers pay and what they actually receive. Critically, value erosion is a subjective phenomenon: consumers do not evaluate the absolute utility of a service but its utility relative to cost and to the available

alternatives. As the subscription landscape becomes increasingly commoditised and competitive alternatives proliferate, the bar for retained perceived value rises continuously.

6.3 Cognitive and Financial Burden as Complementary Fatigue Drivers

The findings support a conceptual model in which cognitive overload and financial strain operate as complementary and mutually reinforcing drivers of subscription fatigue rather than independent triggers. Cognitive burden, arising from managing multiple accounts, billing cycles, and login credentials, reduces the quality of subscription-related decisions and increases the probability that consumers will retain services they would cancel if they more actively reflected on their portfolio value. Financial strain, arising from the aggregation of individually affordable payments into a substantial combined expenditure, triggers periods of critical review that bring cognitive burden to conscious attention.

These two drivers interact in ways that amplify their individual effects. Financial scrutiny prompts cognitive reckoning: when consumers review their bank statements and identify the full scope of their subscription expenditure, they simultaneously confront the complexity of their portfolio and the low engagement that characterises many of its components. This moment of integrated assessment triggered by financial events such as price increases, bank statement reviews, or budget rationalisation periods is consistently identified in the literature as the primary proximate cause of mass cancellation events. Designing interventions that reduce both cognitive burden and financial opacity is therefore likely to be more effective than targeting either dimension in isolation.

6.4 Churn Cycling and the Resilience of the Subscription Model

A counterintuitive finding of this study is that subscription fatigue, while destructive to individual service relationships, does not appear to undermine consumer engagement with the subscription model as a whole. The pattern of subscription churning documented by Bain and Company (2023) and McKinsey (2024) wherein consumers cancel and re-subscribe to services cyclically rather than exiting the subscription economy permanently suggests that fatigue reshapes rather than terminates subscription behaviour. Consumers experiencing fatigue become more strategic, active managers of their subscription portfolios, cycling through services on the basis of current content availability, promotional offers, and seasonal motivation.

This dynamic has important implications for how subscription providers conceptualise and measure churn. A consumer who cancels and re-subscribes three times across a two-year period represents a different commercial challenge than one who cancels permanently: they remain within the commercial ecosystem and are recoverable through targeted re-engagement. The strategic implication is that subscription providers should invest in re-acquisition as well as retention, designing win-back programs that offer genuine value differentiation rather than simply repeating the original acquisition offer.

6.5 Relationship with Prior Studies

The findings of this study are broadly consistent with, and extend, the existing literature in several respects. The centrality of price sensitivity as a fatigue trigger corroborates the findings of Dholakia (2022), EY (2024), and Bain and Company (2023), while the documentation of usage decline as a universal cross-category pattern reinforces the longitudinal evidence presented by Bianchi and Andrews (2024) and Wang and Kim (2023). The demographic gradient in fatigue intensity highest among Gen Z and Millennials, lowest among older adults is consistent with Gartner (2023) and represents a robust finding across multiple independent sources.

The study also aligns with Kumar and Kaur's (2023) theoretical claim that perceived control is a critical moderator of fatigue: consumers who feel empowered to manage, pause, and exit their subscriptions with ease experience lower fatigue and higher satisfaction than those who perceive high exit barriers. This finding suggests that the design of subscription cancellation experiences is not merely a customer service consideration but a strategic variable that directly influences long-term retention outcomes. Kwon, Park, and Lee's (2023) work on transparency and trust in subscription models is similarly supported, with pricing clarity emerging as a consistent moderating factor in the relationship between financial exposure and cancellation intent.

7. Practical Implications:

7.1 Implications for Businesses and Subscription Providers

The findings of this study carry several significant implications for businesses operating subscription models. The most fundamental is the need to shift strategic focus from subscriber

acquisition to sustained engagement. The evidence consistently shows that the revenue risk associated with subscription fatigue is not primarily an acquisition problem but an engagement and retention problem: consumers subscribe readily but disengage rapidly if not actively supported in forming durable usage habits.

Subscription providers should invest in post-adoption engagement infrastructure: robust onboarding experiences that establish early usage habits, personalised content recommendations that maintain novelty and relevance, and habit-formation design features such as progress tracking, streaks, and personalised notifications. The evidence from Deloitte (2023) and McKinsey (2024) suggests that engagement interventions targeted at the 30-to-90-day post-adoption window the critical period of usage decline offer the highest return on retention investment.

Price strategy must also evolve to reflect the realities of the fatigue-sensitive consumer. Gradual, transparent price increases accompanied by clear communication of the value enhancements that justify them are significantly less likely to trigger cancellation than abrupt changes with inadequate explanation. The introduction of flexible pricing options including pause, downgrade, and feature-selective tiers can reduce the binary 'continue or cancel' decision that subscription fatigue creates, preserving partial revenue while acknowledging consumer budget constraints.

7.2 Implications for Consumers

For consumers, the principal implication of subscription fatigue research is the importance of active portfolio management. The evidence that consumers systematically underestimate their total subscription expenditure and overestimate their future engagement suggests that passive subscription accumulation carries significant financial and psychological costs. Consumers benefit from periodic reviews of their active subscriptions ideally triggered by a regular calendar event rather than a financial crisis to assess actual usage against perceived value and remove services that no longer meet the threshold of justified expenditure.

Consumers can also leverage the competitive dynamics of the subscription market to their advantage. The cyclical churn pattern documented in this study reflects a rational consumer strategy of sequential access rather than concurrent accumulation: by rotating through services based on current content priorities, consumers can access a broader range of services at lower total cost than maintaining simultaneous subscriptions. As providers respond to this behaviour with

improved win-back offers and pause options, consumers have increasing tools to manage their subscription portfolios flexibly and cost-effectively.

7.3 Implications for Policymakers

The findings of this study support several emerging regulatory positions regarding subscription economy practices. The difficulties older consumers face with auto-renewal transparency, documented by AARP (2023), and the 9% of cancellations attributable to difficult cancellation processes, identified by EY (2024), suggest that current market practices in subscription design do not adequately protect consumers from unwanted commitments. Regulators in the European Union, United States, and United Kingdom have already begun addressing these concerns through legislative action requiring clear disclosure of auto-renewal terms, simplified cancellation pathways, and prohibition of practices designed to make cancellation deliberately difficult.

Policymakers should also consider the implications of subscription fatigue for digital inclusion and financial wellbeing. The evidence that lower-income consumers are disproportionately affected by subscription price increases and accidental renewals suggests that subscription economy regulation should incorporate consumer protection provisions that recognise income-based vulnerability to fatigue-driven financial harm. Mandatory transparency requirements for total subscription cost disclosure aggregated across a consumer's complete portfolio rather than communicated service-by-service could significantly reduce the cognitive and financial burden associated with subscription overload.

7.4 Industry Recommendations

At a broader industry level, the findings suggest that the subscription economy is approaching an inflection point at which the historical growth strategy of maximising subscription adoption will need to give way to a more sustainable model centred on delivering continuously justified value. Providers that fail to adapt risk accelerating churn, intensifying the competitive pressure of the churning cycle, and ultimately contributing to consumer fatigue with the subscription model itself. The long-term viability of the subscription economy depends on collective industry practices that build consumer trust through transparency, respect consumer

agency through flexible options, and deliver genuine ongoing value rather than relying on inertia and cognitive bias for retention.

8. Conclusion:

This study has systematically examined the phenomenon of subscription fatigue and its multidimensional impact on consumer purchase behaviour across digital service categories. Drawing on an integrative review of over forty academic and industry sources published between 2020 and 2026, the research has documented the structural drivers, behavioural consequences, and demographic variations of subscription fatigue, providing a theoretically grounded and empirically supported analysis of one of the central challenges facing the contemporary subscription economy.

The evidence presented supports a clear and consistent conclusion: subscription fatigue is not a marginal or temporary consumer inconvenience but a structural property of a subscription economy that has expanded beyond consumers' cognitive and financial capacity to manage effectively. The doubling of average active subscriptions per consumer between 2018 and 2024, combined with consistently declining post-adoption usage rates, rising price sensitivity, and accelerating churn cycles, reflects a market that has prioritised growth over sustainability and acquisition over retention. As a result, consumers are increasingly responding not with wholesale rejection of the subscription model but with more sophisticated portfolio management strategies that include rotation, bundling preferences, and selective engagement rather than broad concurrent commitment.

The research objectives set out at the beginning of this study have been addressed comprehensively. The primary drivers of subscription fatigue have been identified as financial strain from subscription stacking, cognitive overload from multi-platform management, post-adoption usage decline driven by the expectation-reality gap, and price escalation that erodes perceived value. The behavioural outcomes of fatigue have been documented across five dimensions: cancellation intent, churn cycling, platform switching and rotation, preference shifts toward flexible and bundled models, and heightened price sensitivity. Demographic variation in fatigue intensity has been mapped across generational cohorts and income groups, revealing that

Gen Z and Millennials bear the greatest exposure to overload-driven fatigue while lower-income consumers face the sharpest financial triggers for cancellation.

The practical implications of this analysis are consequential for all stakeholders in the subscription economy. Subscription providers must reconceptualise their business strategies around long-term engagement rather than short-term acquisition, investing in post-adoption value delivery and flexible service design that respects consumer agency. Policymakers must develop and enforce regulatory frameworks that protect consumers from opaque billing, difficult cancellation, and auto-renewal exploitation. And consumers themselves benefit from increased awareness of subscription portfolio dynamics and the adoption of active management practices that align their subscription commitments with genuine usage patterns.

Looking ahead, the subscription economy will continue to evolve in ways that both intensify and potentially mitigate subscription fatigue. Artificial intelligence-driven personalisation offers the possibility of more relevant, higher-engagement subscription experiences that maintain perceived value over longer periods. The consolidation of services into comprehensive bundles may reduce the administrative burden of multi-platform management. Regulatory action across major markets is likely to improve transparency and reduce coercive retention practices. However, these mitigating factors will only address subscription fatigue if providers genuinely prioritise sustainable consumer relationships over short-term revenue maximisation. The trajectory of the subscription economy ultimately depends on whether its stakeholders treat subscription fatigue as a problem to be designed around or a market signal that the consumer-provider relationship must fundamentally evolve.

9. Limitations and Future Scope:

This study carries several limitations that must be acknowledged to appropriately contextualise its findings and guide future research. The primary limitation is the exclusive reliance on secondary data, which constrains the depth of individual-level psychological insight available and introduces dependency on the methodological choices and geographic sampling of the sources consulted. The overrepresentation of North American and Western European markets in subscription behaviour research means that the findings should be interpreted cautiously with

respect to their generalisability to markets in South Asia, Sub-Saharan Africa, and Southeast Asia, where subscription penetration, consumer protection frameworks, and digital behaviour patterns differ substantially from the studied contexts.

The rapid pace of change in the subscription economy also limits the temporal applicability of specific quantitative findings. Churn rates, average subscription holdings, and price sensitivity thresholds documented in 2023 and 2024 sources may shift significantly in response to macroeconomic changes, regulatory interventions, or technological disruptions such as the widespread adoption of AI-powered subscription personalisation or the emergence of new competitive subscription architectures that occur in the period following this study's data horizon.

Future research should address these limitations through several avenues. Primary data collection using surveys, longitudinal panel studies, and behavioural experiments would provide richer psychological insight into individual-level fatigue dynamics, including the emotional dimensions of subscription guilt, regret, and digital burnout that secondary sources cannot fully capture. Cross-cultural comparative studies examining subscription fatigue in India, Brazil, Nigeria, and other rapidly growing digital markets would substantially expand the geographic scope of the field. Industry-specific fatigue models distinguishing, for example, between content-driven OTT fatigue and productivity-tool SaaS fatigue would support more targeted managerial interventions. Finally, longitudinal research tracking the same consumer cohort across a two-to-five-year period would provide the time-series evidence necessary to understand how fatigue develops, peaks, and potentially recedes across the subscription lifecycle.

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