



Digital Subscriptions: An Islamic Legal Perspective on Automatic Renewal of Applications Among Generation Z

Langganan Digital: Tinjauan Hukum Islam terhadap Perpanjangan Otomatis Aplikasi pada Generasi Z

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ABSTRACT

The rapid growth of digital subscription services has normalized auto-renewal mechanisms, particularly among Generation Z. However, this convenience often leads to passive consumption and unintentional financial deductions. This study aims to analyze the practice of autorenewal in digital subscriptions among Gen Z from both socio-technological and Islamic legal (*fiqh muamalah*) perspectives. Employing a quantitative descriptive approach, data were collected from 50 Gen Z respondents in Bandung through questionnaires. The findings reveal a high subscription rate (74%), yet a significant disconnect exists: 40% of users infrequently utilize the services they continue paying for, and 24% are unaware of active autorenewals. From a socio-technological view, platforms exploit user inertia, leading to a "subscribe-and-forget" culture. In Islamic law, specifically within the *'aqd al-ijarah* (service contract) framework, this practice raises critical issues regarding the absence of continuous *ridha* (mutual consent) and the presence of *gharar* (uncertainty). Paying for unutilized services directly violates the principle of *'adl* (fairness). Interestingly, while 46% perceive the system as functionally unfair, 62% still view it as legally permissible (*Halal/Mubah*). Academically, this research contributes to contemporary Islamic jurisprudence by conceptualizing "algorithmic *gharar*" and redefining *ridha* as a continuous, dynamic requirement in automated digital contracts. However, as an exploratory baseline, the generalizability of this study is limited by its small, localized urban sample of 50 respondents, necessitating broader national studies. The study concludes there is an urgent need for enhanced digital financial literacy and ethical, transparent subscription designs.

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ABSTRAK

Pertumbuhan pesat layanan berlangganan digital telah menormalisasi mekanisme perpanjangan otomatis (autorenewal), khususnya di kalangan generasi z. Namun, kemudahan ini sering mengarah pada konsumsi pasif dan pemotongan finansial yang tidak disengaja. Penelitian ini bertujuan untuk menganalisis praktik perpanjangan otomatis pada langganan digital di kalangan Gen Z, baik dari perspektif sosio-

teknologi maupun hukum Islam (*fiqh muamalah*). Dengan menggunakan pendekatan deskriptif kuantitatif, data dikumpulkan dari 50 responden Gen Z di Bandung melalui kuesioner. Temuan menunjukkan tingkat berlangganan yang tinggi (74%), namun terdapat ketimpangan yang signifikan: 40% pengguna jarang atau tidak pernah menggunakan layanan yang terus mereka bayar, dan 24% tidak menyadari adanya perpanjangan otomatis yang aktif. Berdasarkan sudut pandang sosio-teknologi, platform mengeksploitasi inersia pengguna, yang mengarah pada budaya "berlangganan-lalu-lupa" (*subscribe-and-forget*). Dalam hukum Islam, khususnya dalam kerangka 'aqd al-ijarah (akad jasa), praktik ini memunculkan isu-isu kritis terkait ketiadaan ridha (kerelaan bersama) yang berkelanjutan dan adanya gharar (ketidakpastian). Membayar untuk layanan yang tidak digunakan secara langsung melanggar prinsip 'adl (keadilan). Menariknya, meskipun 46% menganggap sistem ini secara fungsional tidak adil, 62% masih memandang sebagai sesuatu yang diperbolehkan secara hukum (Halal/Mubah). Secara akademik, penelitian ini berkontribusi pada fikih kontemporer dengan mengonseptualisasikan "gharar algoritmik" dan mendefinisikan ulang ridha sebagai persyaratan yang dinamis dan berkelanjutan dalam akad digital otomatis. Namun, sebagai kerangka dasar eksploratif, generalisasi studi ini dibatasi oleh jumlah sampel perkotaan yang kecil dan terlokalisasi, yaitu sebanyak 50 responden, sehingga memerlukan penelitian berskala nasional yang lebih luas. Pada akhirnya, studi ini menyimpulkan adanya kebutuhan mendesak untuk meningkatkan literasi keuangan digital serta merancang sistem langganan yang etis dan transparan.

Introduction

Over the past decade, the rapid advancement of digital technology has significantly transformed service consumption patterns within society, particularly among the younger demographic known as Generation Z (Gen Z). Born between 1997 and 2012, this cohort is widely recognized as "digital natives," exhibiting a high degree of adaptability to internet-based technologies and application-driven digital services (Prensky, 2001; Turner, 2015). A rapidly proliferating phenomenon within this context is the business model of subscription-based services, or digital subscriptions, which provides continuous access to specific services in exchange for recurring payments.

In Indonesia, the penetration of subscription-based digital services has experienced a substantial surge. Reports from We Are Social and DataReportal (2024) indicate that over 70% of internet users aged 16–24 in Indonesia utilize at least one digital subscription service, encompassing entertainment, productivity, and daily necessities. The most prevalent services adopted by Gen Z span various categories, including, but not limited to, film and series streaming platforms such as *Netflix* and *Viu*; digital music platforms such as *Spotify* and *YouTube Music*; digital content editing applications such as *Capcut* and *Canva*; digital healthcare applications such as *Halodoc* and *Alodokter*; and cloud-based storage services such as *iCloud* (Apple products) and *Google Drive*.

The modern digital landscape has undergone a fundamental shift from a "transactional" economy to a "subscription-based" economy. Scholarly discourse identifies this as the move from ownership to access-based consumption (Sundararajan, 2016). In this model, the consumer no longer purchases a permanent product but enters a recurring relationship with a service provider. Literature suggests that while this offers low entry costs and continuous updates, it creates a "lock-in" effect where the convenience of automated billing encourages user inertia. For Generation Z—digital natives who have come of age in a world of Netflix, Spotify, and SaaS (Software as a Service)—this recurring financial commitment is often viewed as a utility rather than a luxury, leading to a psychological normalization of constant, automated financial outflows (Chen et al., 2018).

Besides that, the subscription models for these services typically employ an auto-renewal mechanism, wherein payments are automatically deducted on a recurring basis (monthly or annually) without requiring subsequent explicit confirmation from the user. In practice, users provide initial consent

upon their first subscription, after which the system automatically executes billing through a credit card, debit card, or digital wallet, provided the service is not manually terminated by the user.

Nevertheless, emerging trends among Gen Z indicate a prevalent lack of user awareness regarding these auto-renewal mechanisms. Many users remain oblivious to their active subscription status, resulting in automatic balance deductions even when the service is no longer being utilized. While notifications concerning upcoming renewals are typically dispatched via email or in-app alerts, they are frequently overlooked or left unread by users. A study by Deloitte (2023) reveals that approximately 47% of subscription service users have forgotten to cancel subscriptions they no longer use, while a report by McKinsey (2018) indicates that over 30% of consumers find themselves paying for digital services they rarely or never utilize.

As digital subscriptions become ubiquitous, scholars have raised concerns regarding "digital sovereignty" – the ability of a user to maintain control over their own data and financial decisions. Current research often highlights the emergence of "dark patterns" in user interface design: deceptive UX strategies specifically engineered to make joining a subscription effortless while making cancellation intentionally difficult (Luguri & Strahilevitz, 2021). Within this framework, auto-renewal systems occupy a gray area. While designed for "seamlessness," they often result in information asymmetry, where the provider possesses more clarity regarding billing cycles than the consumer. This power imbalance challenges standard consumer protection theories, as the "opt-out" default settings exploit cognitive biases and human forgetfulness, effectively eroding the user's active autonomy over their digital assets (OECD, 2021).

This phenomenon raises significant questions from both social and ethical perspectives, particularly concerning awareness, consent, and fairness in digital transactions. Within the context of Islamic law, digital subscription practices can be categorized under *'aqd al-ijarah* (leasing or service contracts), which involves an exchange between the utility of a service and a specified compensation (*ujrah* or fee). The fundamental principles of this contract emphasize clarity (*bayān*), the mutual consent of both parties (*ridha*), and the avoidance of uncertainty (*gharar*) while upholding fairness (*'adl*) (Kamali, 2019; Ayub, 2017).

In the realm of Islamic jurisprudence (*Fiqh Muamalah*), the digital subscription model is traditionally analyzed through the lens of *'aqd al-ijarah* (service leasing). Classical scholarship emphasized that for a contract to be valid, there must be absolute clarity in the object of the contract (*ma'qud 'alayh*) and explicit, continuous consent (*ridha*) from both parties (Ayub, 2007). However, tension arises when applying these classical requirements to modern digital algorithms. While classical *Fiqh* addresses "silence" in specific contexts, the "automated silence" of a computer-generated renewal poses a unique challenge to the principle of *ridha*. Contemporary scholars debate whether an initial agreement to an "autorenewal" clause is sufficient to cover subsequent deductions or if the lack of active, conscious participation in each billing cycle introduces elements of *gharar* (uncertainty) and violates the transactional justice (*'adl*) required in Islamic commercial ethics (Kamali, 2019).

The problem arises when the auto-renewal mechanism operates without the active, renewed consent of the user during each extension period. This condition has the potential to introduce elements of *gharar*, particularly if users do not fully comprehend the renewal mechanism or remain unaware that the transaction is still ongoing. Furthermore, if users derive no benefit from a service for which they continue to pay, questions emerge regarding the fulfillment of the principle of fairness within the transaction.

Previous research has examined digital subscriptions through the lenses of consumer behavior and business strategy (Chen et al., 2018; Danaher et al., 2020). However, studies analyzing the auto-renewal phenomenon within the framework of Islamic law remain limited, particularly regarding Gen Z as the predominant user demographic. Therefore, this study is essential to bridge this literature gap by integrating socio-technological perspectives with *fiqh muamalah* (Islamic commercial jurisprudence).

Previous research has examined digital subscriptions through lenses of corporate consumer retention models (Chen et al., 2018; Danaher et al., 2020) and the deceptive manipulation of user interfaces via dark

patterns (Luguri & Strahilevitz, 2021). Concurrently, academic interest in Islamic finance has expanded significantly to evaluate the digital ecosystem; however, existing *fiqh* studies heavily prioritize formal Sharia-compliant fintech infrastructure, digital banking regulations, and electronic wallet operations (Alam et al., 2019; Rabbani et al., 2020). Consequently, a profound gap persists in how Islamic commercial jurisprudence evaluates automated utility-based recurring contracts. Academic literature has overlooked the ethical-legal operationalization of algorithmic micro-transactions that systematically bind consumers to continuous monthly outlays outside traditional banking paradigms.

This omission represents a distinct, three-layered literature gap that this study systematically addresses. Thematically, there is an absence of empirical inquiries directly analyzing the auto-renewal mechanism itself—rather than digital subscriptions in general—under the structural parameters of *fiqh muamalah*. Demographically, while Generation Z remains highly vulnerable to payment automation and experiences unique financial constraints, existing Islamic legal studies have completely neglected to target this cohort's specific behavioral patterns. Contextually, the unique architectural landscape of the Indonesian digital market, heavily dominated by interconnected "super-apps" such as Gojek, Tokopedia, and DANA, facilitates a hidden stream of daily micro-deductions. This continuous transaction flow deviates sharply from Western credit-card-centric models, creating a localized form of *gharar* (uncertainty) that has never been scrutinized academically.

This study offers novelty across three distinct dimensions. First, methodologically, it is the first to simultaneously integrate a socio-technological analysis of dark patterns with a *fiqh muamalah* (Islamic commercial jurisprudence) evaluation within a unified analytical framework. Specifically, this research constructs a novel relational model demonstrating how the technological mechanism of autorenewal diminishes user awareness, thereby driving passive consumption; this behavioral shift subsequently shapes the consumer's perception of fairness and dictates the final Islamic legal assessment. Second, contextually, it highlights the unique characteristics of the Indonesian digital ecosystem as a critical variable influencing the manifestation of *gharar* (uncertainty) in digital contracts. Third, it generates policy recommendations based on *Maqasid al-Shariah* that can be effectively operationalized by the OJK (Financial Services Authority) as regulators and Sharia fintech developers.

Based on the background, this study addresses several key research problems regarding the implementation of auto-renewal practices in digital subscription services among Generation Z. Specifically, it investigates the extent of this demographic's awareness and comprehension of automatic renewal mechanisms. Furthermore, the study critically questions how these contemporary practices align with Islamic legal principles, particularly concerning '*aqd al-ijarah* (leasing contracts), *gharar* (uncertainty), *ridha* (mutual consent), and fairness ('*adl*).

Correspondingly, the primary objectives of this research are designed to systematically address these inquiries. The study first aims to identify the specific usage patterns and auto-renewal practices currently prevalent among Generation Z. Following this, it seeks to analyze the users' level of awareness and perception regarding these automated systems. This research endeavors to critically evaluate these digital subscription models through the lens of Islamic law to comprehensively determine their compliance with the fundamental principles of *fiqh muamalah*.

The Subscription Economy and the Auto-Renewal Mechanism

The contemporary digital landscape is defined by a fundamental structural transition from a transactional economy—grounded in the permanent transfer of product ownership—to an access-based subscription economy (Sundararajan, 2016). Within this economic paradigm, businesses secure sustainable revenue streams by shifting from sporadic consumer transactions to continuous, long-term service relationships. This model is technically optimized through the auto-renewal mechanism, which automatically executes recurring billing cycles via user accounts or integrated e-wallets unless manually terminated.

While this continuous infrastructure is marketed under the guise of seamless user convenience, it systematically triggers a behavioral "lock-in effect." The lock-in effect operates on consumer inertia; by eliminating the micro-frictions of manual monthly payments, the platform increases switching costs, making termination psychologically and logistically more burdensome than passive continuation (Chen et al., 2018; Danaher et al., 2020).

To ensure platform retention, interface architectures frequently utilize "dark patterns" "deceptive user experience (UX) design choices deliberately engineered to obscure the path to cancellation while streamlining payment pipelines (Luguri & Strahilevitz, 2021). From a consumer behavior lens, these dark patterns systematically exploit "bounded rationality" and "information asymmetry." Because consumers operate under cognitive constraints and finite attention spans, they cannot continuously track multiple invisible billing cycles. Platforms intentionally leverage this information asymmetry by withholding prominent pre-debit notifications, capitalizing on human forgetfulness to drive continuous, involuntary financial outlays (OECD, 2021).

Generation Z: "Digital Natives" and the Realities of Passive Consumption

As the primary target of automated subscription services, Generation Z is universally defined as a cohort of "digital natives" who have come of age in an environment entirely mediated by hyper-connected internet architectures (Prensky, 2001; Turner, 2015). This demographic exhibits an unprecedented degree of technological fluidity, demonstrating intuitive mastery over multi-purpose mobile applications and integrated digital payment ecosystems. However, this absolute immersion beyond traditional technological limits has exposed Gen Z to distinct psychological and behavioral vulnerabilities, most notably "subscription fatigue." Subscription fatigue manifests as an overwhelming cognitive and financial burden resulting from managing a fragmented array of recurring monthly memberships, which dulls the user's proactive financial oversight.

Consequently, this fatigue drives a pattern of "passive consumption" that underpins the pervasive "subscribe-and-forget" culture observed among young consumers (Deloitte, 2023; McKinsey, 2018). Unlike previous generations who engaged in active, deliberate purchasing decisions, digital natives frequently authorize initial subscriptions to access immediate, short-term benefits—such as free trials or platform-exclusive content—and subsequently forget to manage the contract. Because automatic payment streams are deeply embedded within daily-use super-apps, the continuous economic drain remains invisible. This converts active digital engagement into a state of automated financial passivity, where young consumers routinely pay for dormant digital utilities they rarely or never utilize.

Aqd al-Ijarah in the Digital Context

Within the framework of Islamic commercial jurisprudence (*fiqh muamalah*), modern digital subscriptions are legally evaluated through the structural parameters of *'aqd al-ijarah* (leasing or service contracts). Classical jurisprudence defines *ijarah* as a contract over a known, permissible utility (*manfa'ah*) in exchange for a specified, lawful consideration or wage (*ujrah*) (Ayub, 2007). The valid operationalization of this contract relies on the strict fulfillment of foundational pillars (*rukun*), which include the contracting parties (*'aqidan*), the formulation of offer and acceptance (*sighat ijab qabul*), and the subject matter comprising the defined utility and its corresponding price.

To maintain Sharia compliance, an *ijarah* agreement must strictly satisfy the prerequisites of *ridha* (mutual, uncorrupted consent) and *bayan* (absolute clarity). The element of *bayan* requires the service provider to eliminate all forms of material ambiguity regarding the contract's duration, pricing, and operational scope to prevent economic deception (Kamali, 2000).

In Islamic jurisprudence, a clear distinction is maintained between *ijarah al-'ayn* (the leasing of tangible, physical assets like property or livestock) and *ijarah al-a'mal* (the hiring of services, labor, or intangible expertise). A digital application subscription explicitly falls under the categorization of *ijarah*

al-a'mal, as the consumer is not purchasing or renting a physical server or software infrastructure itself but is compensating the provider for the ongoing utility, access, and digital labor generated by the platform's proprietary systems. Therefore, the continuous validity of this digital service contract hinges entirely on whether the automated execution of the billing algorithm respects the jurisprudential boundaries of transparency and conscious, non-coerced consent throughout each subsequent renewal cycle.

Contemporary Islamic scholars and global jurisprudential councils (such as the International Islamic Fiqh Academy, or IIFA) view digital transactions as legally valid and permissible (*Halal/Mubah*), provided they adhere to the core principles of *fiqh muamalah*. While permitting technology, contemporary ulama heavily emphasize that a digital contract becomes invalid if it conceals information, hides automatic fees, or relies on deceptive user interfaces. If the software configuration purposefully obscures the continuous nature of a transaction, it shifts from a permissible contract into a prohibited exchange due to the introduction of *gharar* (avoidable risk/uncertainty). In the context of the Indonesian digital economy, Fatwa No. 117/DSN-MUI/II/2018 concerning Information Technology-Based Financing Services Based on Sharia Principles (*Layanan Pembiayaan Berbasis Teknologi Informasi Berdasarkan Prinsip Syariah*) is a crucial regulatory reference point.

While this fatwa specifically targets Sharia fintech, its general provisions (*Ahkam 'Ammah*) establish the official standard for how digital transactions must operate in Indonesia. When applying this fatwa to your study on digital auto-renewals, three key components must be highlighted: a) the fatwa strictly mandates that any digital transaction platform operating within Indonesia must avoid prohibited elements such as *maysir*, *gharar*, and *riba*; and b) the digital platform must provide clear, accessible, and transparent information regarding the terms of the contract, the specific financial obligations, and the mechanics of execution. This is the operationalization of *bayan* to prevent *gharar*, and c) The fatwa recognizes electronic signatures, click-wrap agreements ("I Agree" checkpoints), and automated electronic confirmations as valid forms of *ijab* and *qabul*. However, the agreement is only valid if there is true *ridha* (informed consent) behind the action.

Dimensions of *Gharar* and the Shariah Imperative for Transactional Justice

In *fiqh muamalah*, *gharar* (risk or uncertainty arising from systemic opacity) is classically divided into three structural dimensions: *gharar fi al-wujud* (uncertainty regarding the existence of the subject matter), *gharar fi al-miqdar* (uncertainty regarding the quantity or amount), and *gharar fi al-sifah* (uncertainty regarding the quality or specific attributes of the delivery). When applied to automated digital subscriptions, the mechanism heavily triggers *gharar fi al-wujud*. While the software itself physically exists on a server, the actual, realized utility (*manfa'ah*) becomes functionally non-existent to an oblivious consumer who has forgotten an active autorenewal. This mismatch, driven by dark patterns and hidden notification systems, yields an asymmetrical transaction where the consumer's financial outflow is absolute, but the counter-delivery of utility remains entirely uncertain.

Consequently, this operationalized *gharar* creates an economic imbalance that directly violates the Islamic mandate of *'adl* (transactional justice). In the context of *Maqasid al-Shariah* (the ultimate objectives of Islamic Law), ensuring justice in digital commerce is fundamentally rooted in two core principles: *Hifz al-Mal* (the preservation and protection of wealth) and *Dar' al-mafasid* (the systematic prevention of public harm). The current "subscribe-and-forget" loop facilitates an un-Shariah-compliant drain on consumer assets, directly contradicting *Hifz al-Mal* by allowing corporate platforms to absorb capital without generating a corresponding, active human benefit. Therefore, designing state regulations and Shariah fintech parameters that enforce active notifications and effortless opt-outs is not merely a secular regulatory upgrade; it is a religious necessity under *Dar' al-mafasid* to shield young consumers from systematic, algorithmic wealth exploitation.

Method

This study employs a quantitative descriptive research design to investigate the perceptions and behaviors of Generation Z regarding digital application auto-renewals. The descriptive approach was selected to provide a systematic and accurate account of the facts and characteristics of the target population without manipulating variables. The research was conducted in Bandung, Indonesia, a major urban center known for its high density of digital-native residents and tech-savvy university students.

"The primary data was collected through a structured electronic questionnaire distributed via purposive sampling. This sampling technique was deliberately chosen to ensure that only individuals with highly relevant lived experiences were included, thereby guaranteeing the data's alignment with the research objectives. Accordingly, the sample consisted of 50 respondents who met the specific criteria of being members of Generation Z (born between 1997 and 2012) and having active experience with paid digital application subscriptions. To reach this specific demographic, the questionnaire was distributed online via targeted survey links shared within university student networks and Gen Z-centric social media communities in Bandung. The survey instrument was divided into three sections: demographic profiling, subscription behavioral patterns, and ethical-jurisprudential perceptions. Behavioral and perceptual variables were measured using a 5-point Likert scale. Furthermore, the instrument was subjected to validity and reliability testing to ensure academic rigor; the detailed results of these tests are reported in the subsequent Results section."

Prior to data collection, rigorous research ethics were enforced. Informed consent was explicitly obtained from all respondents, ensuring their voluntary agreement to participate and guaranteeing the strict confidentiality of their personal data. To verify the robustness of the survey instrument, validity and reliability tests were conducted prior to the main analysis. Construct validity was established for all questionnaire items, and internal consistency was confirmed using Cronbach's alpha, ensuring that all measured variables met the acceptable reliability thresholds for academic research.

Following data collection, data analysis was performed using descriptive statistical techniques, including frequency distribution and percentage analysis, to identify dominant trends within the sample. Furthermore, a qualitative thematic analysis was applied to the open-ended explanatory responses collected within the questionnaire, wherein respondents articulated the reasoning behind their perceptions of fairness and Sharia compliance. This textual data was manually coded and categorized into recurring theoretical themes—such as 'information asymmetry,' 'habituation,' and 'ambiguity of consent.' These themes were then directly incorporated into the discussion section to explain the underlying psychological and jurisprudential reasoning behind the quantitative trends, effectively contextualizing the numerical data within the broader frameworks of socio-technology and *Fiqh Muamalah*. This dual-layered analysis ensures that the quantitative results are not only statistically sound but also theoretically grounded in contemporary academic and religious discourse.

While the primary research design employs a quantitative descriptive approach, the survey instrument integrates open-ended questions to capture deeper contextual insights, necessitating a supplementary qualitative analysis. The quantitative data analysis was performed using descriptive statistical techniques, including frequency distribution and percentage analysis, to identify dominant trends within the sample. Furthermore, a qualitative thematic analysis was applied to the open-ended explanatory responses. This thematic analysis was conducted through three systematic steps: (1) familiarization with the raw textual data through repeated reading; (2) manual open coding to extract recurring keywords and concepts articulated by respondents regarding fairness and Sharia compliance; and (3) the categorization of these codes into overarching theoretical themes—such as 'information asymmetry,' 'habituation,' and 'ambiguity of consent.' These themes were then directly incorporated into the discussion section to explain the underlying psychological and jurisprudential reasoning behind the quantitative trends, effectively contextualizing the numerical data within the broader frameworks of socio-technology and

Fiqh Muamalah. This dual-layered analysis ensures that the quantitative results are not only statistically sound but also theoretically grounded in contemporary academic and religious discourse.

Results and Discussion

The following is the demographic profile of the respondents, categorized by age, gender, occupation, and income. Outlining these characteristics is essential for contextualizing the Generation Z sample and provides a necessary foundation for analyzing their digital subscription behaviors and awareness of auto-renewal mechanisms.

Table I Demographic Profile of Respondents (Age, Gender, Occupation, and Income)

Characteristics	Category	Frequency (n)	Percentage
Age	19–20 years	12	24%
	21–23 years	28	56%
	24–25 years	10	20%
Gender	Male	20	40%
	Female	30	60%
Occupation	University Student	31	62%
	Private Sector Employee	13	26%
	Freelancer / Entrepreneur	6	12%
Income	< IDR 3,000,000	27	54%
	IDR 3,000,000 – IDR 5,000,000	15	30%
	> IDR 5,000,000	8	16%

Based on Table I, most respondents fall within the 21–23 age demographic (56%) and are female (60%). Furthermore, the largest segment of the sample consists of university students (62%) with a monthly income below IDR 3,000,000 (54%). This demographic profile indicates that the respondents primarily represent an early productive age group, exhibiting the typical characteristics of active digital service consumers.

Questionnaire Results

Table II Intensity of Digital Application Usage

Category	Frequency (n)	Percentage (%)
Very Often	20	40%
Often	14	28%
Fairly Often	11	22%
Rarely	5	10%
Never	0	0%

As presented in Table II, the findings reveal that most respondents exhibit a high intensity of digital application usage. To ensure clarity in data interpretation, the survey instrument operationally defined the response categories as follows: 'very often' (usage occurring multiple times a day), 'often' (regular daily usage), 'fairly often' (usage occurring several times a week), 'rarely' (usage occurring once a week or less), and 'never' (absolute zero usage). Specifically, 68% of respondents reported frequent usage (combining the 'very often' and 'often' categories), while 22% reported occasional usage (the 'fairly often' category). Only 10% stated that they 'rarely' use digital applications, and no respondents reported 'never' using them. This underscores that daily digital engagement is an inherent lifestyle trait for this demographic.

Table III Ownership of Paid Digital Application Subscriptions

Category	Frequency (n)	Percentage (%)
Yes	37	74%
No	13	26%

Table III illustrates the prevalence of paid digital subscriptions among the respondents. A significant majority, accounting for 74% of the sample, actively hold paid subscriptions to digital applications, whereas only 26% do not. This high adoption rate emphasizes the normalization and heavy integration of subscription-based business models into the daily lives and consumption habits of Generation Z.

Table IV Intensity of Digital Application Subscriptions

Category	Frequency (n)	Percentage (%)
Very Often	10	20%
Often	10	20%
Fairly Often	14	28%
Rarely	10	20%
Never	6	12%

Building upon the ownership data, Table IV details the intensity with which respondents engage in digital application subscriptions. About 40% of the respondents frequently subscribe to digital services (comprising 20% 'very often' and 20% 'often'). Another 20% subscribe often, leaving only a minority of 32% who rarely or never engage in subscription models. This highlights a strong, active reliance on recurring digital services.

Table V Subscription Payment Methods (Auto-Debit)

Category	Frequency (n)	Percentage (%)
Very Often	10	20%
Often	18	36%
Fairly Often	12	24%
Rarely	7	14%
Never	3	6%

Table V highlights the primary mechanism facilitating these subscriptions: the auto-debit system. Over half of the respondents (56%) frequently utilize auto-debit as their subscription payment method. When combined with those who use it often (24%), it becomes evident that automated recurring payments are the dominant financial conduct for these services, establishing the structural foundation for the auto-renewal phenomenon being studied.

Table VI Frequency of Receiving Renewal Notifications

Category	Frequency (n)	Percentage (%)
Very Often	10	20%
Often	16	32%
Fairly Often	12	24%
Rarely	7	14%
Never	5	10%

Table VI assesses the communication transparency of digital platforms by measuring how often users receive renewal notifications. While a slight majority (52%) report receiving notifications frequently ('very often' and 'often'), a sizable portion of respondents experience a communication gap. A quarter of the sample (24%) state they rarely or never receive—or notice—these notifications, which serve as a critical variable in unintentional subscription renewals.

Table VII Level of Awareness Regarding Auto-renewal

Category	Frequency (n)	Percentage (%)
Highly Aware	9	18%
Aware	18	36%
Neutral	11	22%
Unaware	8	16%
Highly Unaware	4	8%

Table VII evaluates the respondents' cognitive awareness of the auto-renewal mechanisms attached to their accounts. Although 54% of the users classify themselves as aware or highly aware, a concerning 24% admit to being unaware or highly unaware of their active autorenewals, with another 22% remaining neutral. This substantial lack of definitive awareness highlights user vulnerability and potential issues with explicit, continuous consent.

Table VIII Level of Usage After Subscription

Category	Frequency (n)	Percentage (%)
Very Often	10	20%
Often	11	22%
Fairly Often	9	18%
Rarely	9	18%
Never	11	22%

Table VIII presents one of the most critical behavioral findings regarding post-subscription utility. The data is highly polarized: while 42% of respondents frequently use the applications they pay for, an almost equal segment (40%) admits to rarely or never using the services despite maintaining active subscriptions. From an Islamic legal perspective, this high percentage of non-usage directly introduces the issue of paying for unutilized benefits, raising questions regarding *gharar* (uncertainty) and economic waste.

Table IX Perception of Fairness Regarding Auto-renewal

Category	Frequency (n)	Percentage (%)
Very Fair	4	8%
Fair	8	16%
Neutral	15	30%
Unfair	15	30%
Very Unfair	8	16%

As shown in Table IX, the respondents' perception of the fairness of auto-renewal systems leans heavily toward the negative. Half of the respondents (46%) perceive the practice as unfair or very unfair, driven by the financial deductions occurring for utilized services as noted in Table 8. Only 24% view

the system as fair, suggesting a strong underlying consumer dissatisfaction with the current ethical implementation of autorenewals.

Table X Perception of Auto-renewal in Islamic Law

Category	Frequency (n)	Percentage (%)
Halal	14	28%
Mubah	17	34%
Neutral	9	18%
Makruh	6	12%
Haram	4	8%

Interestingly, Table X contrasts the respondents' ethical dissatisfaction with their understanding of Islamic jurisprudence. Despite viewing the practice as functionally unfair, a clear majority (62%) still perceive auto-renewal as legally permissible within Islamic law (28% *Halal* and 34% *Mubah*). Only 20% categorize it as discouraged (*Makruh*, 12%) or prohibited (*Haram*, 8%). This indicates a significant disconnect between the users' sense of transactional justice (*'adl*) and their formal understanding of *fiqh muamalah* regarding modern digital contracts.

Islamic Legal Perspective: Re-evaluating *Ridha*, *Gharar*, and *'Adl* in Digital *Ijarah*.

Within the framework of Islamic commercial jurisprudence (*fiqh muamalah*), digital subscriptions are primarily categorized under *'aqd al-ijarah* (leasing or service contracts), where an ongoing fee (*ujrah*) is exchanged for the continuous utility of a service (2017). The validity of this contract hinges fundamentally on *ridha* (mutual, informed consent). While the initial subscription undoubtedly fulfills the condition of *ridha*, the auto-renewal mechanism complicates the continuity of this consent (Kamali, 2019). Because 24% of respondents are unaware of their active renewals and a sizable portion fails to receive adequate notification, the transition into subsequent billing cycles often occurs without explicit, renewed *ridha*. In Islamic law, silence or inaction caused by forgetfulness or technological obscurity cannot robustly substitute for active consent, particularly when financial deductions occur automatically.

Furthermore, the prevalent issue of users paying for unutilized services (40%) introduces critical questions regarding *gharar* (uncertainty) and *'adl* (fairness). When a user's balance is automatically deducted for a service, they no longer use—often due to a lack of awareness—the transaction borders on *aklu amwal an-nas bil-bathil* (consuming others' wealth unjustly). The service provider receives compensation without providing a reciprocal, realized benefit to the oblivious user, thereby violating the principle of *'adl* (Alam et al., 2019). Interestingly, the study reveals a profound jurisprudential disconnect among Generation Z: despite 46% feeling the system is functionally unfair, a solid majority (62%) still perceives auto-renewal as legally permissible (*Halal* or *Mubah*) under Islamic law. This dichotomy suggests a critical gap in contemporary digital literacy regarding Islamic ethics. It indicates that while users intuitively recognize the socio-economic imbalance (*'adl*) of the transaction, they lack the specific jurisprudential framework to critically evaluate modern digital contracts (Rabbani et al., 2020), highlighting an urgent need to integrate *fiqh muamalah* principles into the digital literacy discourse for Muslim consumers.

Socio-Technological Perspective: The Paradox of Convenience and Passive Consumption

The empirical findings of this study highlight a complex socio-technological paradigm among Generation Z regarding digital subscriptions. The data indicates a remarkably high integration of digital services into the daily lives of this demographic, with 68% reporting frequent usage and 74% actively maintaining paid subscriptions. Technologically, these platforms have successfully minimized transactional friction through

the implementation of auto-debit systems, which are frequently utilized by over half of the respondents (56%). While this seamless infrastructure offers unprecedented convenience and uninterrupted service access, it simultaneously introduces a vulnerability known as "passive consumption." The architecture of these digital platforms often prioritizes frictionless onboarding while complicating the cancellation process, subtly exploiting user inertia (Luguri & Strahilevitz, 2021).

This technological design directly impacts user awareness and behavioral outcomes. Despite living in a highly connected ecosystem (We Are Social & DataReportal, 2024; Francis & Hoefel, 2018), a significant communication gap exists; a quarter of respondents (24%) rarely or never notice renewal notifications. Consequently, this leads to a concerning disconnect between subscription and actual utilization. The data reveal that 40% of users rarely or never use the services they continue to pay for, aligning with broader industry observations (Deloitte, 2023). From a sociological standpoint, this illustrates a shift from active purchasing to passive financial leakage. The auto-renewal mechanism, while technically efficient for retention (Chen & Zhang, 2018; Danaher & Smith, 2020), creates a "subscribe-and-forget" culture. This technological nudging is reflected in the users' perception of fairness, where half of the respondents (46%) view the auto-renewal system as unfair or very unfair, suggesting that technological convenience disproportionately benefits the service providers at the expense of consumer autonomy and financial mindfulness.

The "Dark Pattern" Debate: Information Asymmetry and User Autonomy

The findings presented in Table IX, where 46% of respondents perceive auto-renewal as "unfair" or "very unfair," invite a critical discussion viewed through the theoretical lens of "Dark Patterns" in modern UX design. While this study did not directly measure or audit the specific user interface architectures of the subscribed applications, the behavioral symptoms reported by respondents strongly align with the outcomes of dark pattern implementation. Dark patterns are defined as user interface designs specifically crafted to trick users into making decisions that benefit the service provider but are not in the user's best interest (Luguri & Strahilevitz, 2021). The empirical data from Table VI, which shows a significant communication gap—with 24% of users rarely or never receiving renewal notifications—indicates a severe state of "information asymmetry." Consequently, even without a direct UX audit, the respondents' lived experiences of involuntary financial continuation suggest that the current auto-renewal mechanisms functionally mirror the exploitative nature of dark patterns by structurally diminishing user autonomy.

In this context, information asymmetry occurs because the service provider possesses full clarity regarding the billing cycle and the automated deduction schedule, while the consumer remains in a state of "bounded rationality." The auto-renewal mechanism exploits this asymmetry by utilizing "forced continuity," where a free trial or an initial subscription automatically rolls into a paid period unless the user takes active, often cumbersome, steps to cancel. This design choice effectively capitalizes on user forgetfulness. When users are not notified of an impending charge, their ability to exercise digital sovereignty is compromised. The perceived unfairness reported by the respondents is, therefore, not merely a dissatisfaction with the price but a reaction to the erosion of transactional autonomy, where the technology prioritizes platform retention metrics over transparent consumer choice (Chen et al., 2018).

The Psychological Gap: Cognitive Dissonance and Habituated Consent

A striking paradox emerges when comparing Table IX and Table X: a sizable portion of Generation Z perceives auto-renewal as ethically "unfair," yet 62% classify it as "Halal" or "Mubah" (permissible) under Islamic law. This indicates a state of cognitive dissonance, where the user's intuitive sense of justice (*'adl*) conflicts with their formal understanding of religious permissibility. This gap can be explained by the phenomenon of "habituated consent."

In the digital age, the act of "accepting" terms and conditions has become a thoughtless, repetitive muscle memory—a ritualistic click rather than a conscious agreement. Because Gen Z has grown up in an

ecosystem where autorenewal is the default standard, they have habituated themselves to these contracts, viewing them as an inescapable "legal reality" of the internet. This habituation leads to a superficial interpretation of *ridha* (consent). Users may believe that because they clicked "Accept" once, the contract is legally sound in the eyes of Sharia, even if the subsequent deductions feel exploitative. This highlights a critical need for a more nuanced education in *Fiqh Muamalah*, moving beyond the binary of "Halal/Haram" to focus on the higher objectives of the Sharia (*Maqasid al-Sharia*), specifically the protection of wealth (*Hifz al-Mal*) and the prevention of harm (*Dar' al-mafasid*).

Comparative Analysis: Indonesian Gen Z vs. Global Trends

When comparing the results of this study to global industry reports, both similarities and distinct local variations appear. According to Deloitte (2023), "subscription fatigue" is a global phenomenon, with consumers worldwide becoming increasingly frustrated by the proliferation of recurring fees. However, the Indonesian Gen Z sample shows a higher degree of tolerance for unutilized subscriptions; while McKinsey (2018) reports that global consumers are quick to cancel subscriptions they do not use, 40% of this study's respondents continue to pay for services they rarely or never utilize (Table VIII).

This discrepancy may be attributed to the unique digital landscape in Indonesia, where digital payments are often tied to multi-purpose "Super Apps." The integration of subscription fees into daily-use e-wallets makes the deductions less visible compared to the more traditional credit card statements used in Western markets. Furthermore, the cultural value of "social prestige" associated with owning premium digital accounts (e.g., Spotify Premium or Netflix) may outweigh the perceived financial loss of non-usage. While global Gen Z behavior is increasingly characterized by "active churn" (switching between services), Indonesian Gen Z appears to be in a transition phase—possessing high digital adoption rates but still developing the financial "digital hygiene" required to actively manage and prune their subscription portfolios (We Are Social & DataReportal, 2024).

Policy Recommendation

The findings of this research necessitate a shift from purely profit-driven subscription models toward a "*consumer-centric ethical framework*." As digital applications become increasingly integral to daily life, the responsibility to ensure transactional justice must be shared between regulatory bodies and service providers. This framework is built upon the pillars of transparency, active consent, and the alignment of digital practices with the higher objectives of Sharia (*Maqasid al-Sharia*).

Government and Regulatory Interventions

Transitioning to "mandatory *opt-in*," current regulatory environments in many jurisdictions, including Indonesia, often allow for "*opt-out*" defaults, where the burden of action lies with the consumer to prevent a charge. To protect digital sovereignty, the government should mandate an "*Opt-In*" default for all auto-renewal contracts. Under this policy, a subscription would automatically expire at the end of its term unless the user provides explicit, active consent to renew. This would effectively eliminate the "Dark Pattern" of forced continuity.

Furthermore, regulators should enforce "double-confirmation" protocols for recurring payments. Like the authentication required for one-time high-value transactions, auto-renewals should require secondary confirmation via a push notification or SMS 48 hours before the deduction occurs. Legally, this ensures that the "silence" of a user is never interpreted as consent. Regulatory bodies such as the OJK (Financial Services Authority) should also require platforms to provide a "One-Click Cancellation" feature that is as easy to access as the "One-Click Subscribe" button, thereby restoring the balance of power between the provider and the consumer.

Sharia-Compliant Fintech

A "Halal-Certified" Subscription Infrastructure. For fintech companies operating within the Islamic finance sector, there is a unique opportunity to lead through ethical differentiation. Sharia-compliant fintech should develop a "Halal-Certified" subscription notification system. This system would go beyond mere reminders by integrating a "Utility Audit" feature. If the platform detects that a user has not accessed the service for a specific period (e.g., 30 days), the system will automatically pause the subscription and seek active reconfirmation before the next billing cycle. This aligns with the prohibition of *Gharar* (uncertainty) and ensures that wealth is not consumed unjustly (*Aklu amwal an-nas bil-bathil*).

Additionally, Sharia-compliant platforms should implement a "Pro-Rata Refund Guarantee" for unintentional renewals. If a user realizes they were charged but have not utilized the service's benefits, a fair portion of the fee should be refundable. This practice upholds the principle of *'Adl* (fairness) and reinforces the sanctity of *Ridha* (mutual consent). By championing these "Ethical by Design" principles, Islamic fintech can provide a blueprint for a more transparent digital economy that respects both the financial and religious values of the global Muslim community.

Theoretical Implications: Extending Socio-Technological and Jurisprudential Frameworks

The empirical findings of this research significantly extend and modify the foundational theoretical frameworks utilized in this study. From a socio-technological perspective, the data expands upon the traditional "*dark pattern*" theory. While existing literature primarily defines dark patterns as active, deceptive user interface manipulations (Luguri & Strahilevitz, 2021), this study introduces the concepts of "structural invisibility" and "habituated consent." Within the context of Generation Z's heavy reliance on integrated Indonesian super-apps, the findings suggest that financial exploitation does not strictly require active deception; rather, it thrives on the normalization of frictionless, invisible micro-deductions that systematically bypass the user's active cognitive evaluation.

Furthermore, from a jurisprudential standpoint, this study modifies the contemporary application of *fiqh muamalah* concerning *gharar* and *ridha*. Classical frameworks often treat *ridha* (consent) as a static, one-time prerequisite fulfilled entirely at the contract's initiation. However, the behavioral data in this study argues that in automated digital *ijarah al-a'mal* (service contracts), consent must be retheorized as a dynamic, continuous requirement. Additionally, the research expands the concept of *gharar* (uncertainty) beyond traditional material ambiguity—such as unknown prices or defective goods—to include "algorithmic *gharar*." This is a modern, temporal form of uncertainty where the consumer loses spatial and temporal awareness of their own ongoing financial commitments. Consequently, this study modifies the theoretical boundary of *'adl* (transactional justice) in the digital age, asserting that without continuous, verified notification, an automated billing cycle inherently degrades from a valid lease into an unjust extraction of wealth.

In synthesis, the findings of this study explicitly resolve the three core research questions posed at the outset. First, regarding the socio-technological behavior of Generation Z, the data confirm that auto-renewal mechanisms systematically foster a culture of "passive consumption"; the convenience of seamless payments is overshadowed by dark patterns that exploit bounded rationality, ultimately resulting in high rates of unutilized subscriptions and profound consumer dissatisfaction. Second, concerning the jurisprudential validity of this practice under *fiqh muamalah*, the analysis reveals that automated, unnotified deductions for dormant utilities introduce *gharar fi al-wujud* (uncertainty of realized benefit) and fail to sustain continuous *ridha* (mutual consent), thereby compromising the foundational mandate of *'adl* (transactional justice). Finally, to reconcile these socio-technological realities with Islamic commercial ethics, this study demonstrates that regulatory bodies and Sharia-compliant fintech must move beyond traditional financial compliance by implementing "ethical-by-design" architectures—specifically, mandatory double opt-in frameworks and usage-based pausing—to actively fulfill the

objectives of *Maqasid al-Shariah*, particularly the protection of consumer wealth (*Hifz al-Mal*) against algorithmic exploitation.

Conclusion

"This study concludes that the practice of autorenewal in digital subscriptions has become a deeply embedded component of the digital lifestyle among the sampled Generation Z respondents in Bandung, driven by a high reliance on automated payment systems and an ecosystem that prioritizes seamless convenience. However, this convenience fundamentally masks a widespread issue of "passive consumption." A sizable portion of Gen Z users exhibit a concerning lack of awareness regarding their active subscriptions and frequently fail to receive—or notice—renewal notifications. Consequently, this socio-technological architecture fosters a "subscribe-and-forget" culture, leading to continuous financial deductions for services that a significant percentage of users rarely or never utilize. This dynamic results in a strong consumer perception that the current auto-renewal mechanisms are perceived as inherently unfair, as these mechanisms passively capitalize on user inertia.

From the perspective of Islamic commercial jurisprudence (*fiqh muamalah*), the current implementation of auto-renewal practices presents significant ethical and legal challenges. The systemic lack of user awareness and the obscurity of renewal notifications compromise the continuous fulfillment of *ridha* (mutual consent), which is a foundational pillar of the *'aqd al-ijarah* (service contract). Furthermore, the automated deduction of funds for unutilized services introduces elements of *gharar* (uncertainty) and violates the principle of *'adl* (fairness), as the service provider extracts financial compensation without delivering reciprocal utility. This borders on the unjust consumption of wealth (*aklu amwal an-nas bil-bathil*).

This research exposes a critical paradox among Generation Z: while users intuitively recognize the socio-economic unfairness of these practices, a majority still mistakenly perceive them as legally sound (*Halal* or *Mubah*) under Islamic law. Therefore, there is an urgent need to enhance the digital financial literacy of Muslim consumers, specifically by integrating *fiqh muamalah* principles into modern digital contexts. Furthermore, digital service providers and regulators must advocate for "ethical by design" interfaces that ensure transparent communication, require active and explicit consent for renewals, and protect users from passive financial exploitation.

While this study provides critical insights into the intersection of digital subscriptions and *fiqh muamalah*, certain methodological limitations must be acknowledged to properly contextualize the findings. Primarily, the research relies on a small sample size of 50 respondents and is geographically confined to a single urban research setting, Bandung. Because Bandung operates as a major educational and technological hub with a highly concentrated population of digital natives, the behavioral patterns and jurisprudential perceptions observed herein may not fully reflect the realities of Generation Z in semi-urban or less digitally integrated regions of Indonesia. Consequently, these methodological constraints limit the broader national generalizability of empirical results. Acknowledging this, the current study is best interpreted as a foundational, exploratory baseline regarding urban digital ethics rather than a definitive national metric.

Theoretically, this research contributes to the evolution of contemporary Islamic commercial jurisprudence by conceptualizing "algorithmic *gharar*" and redefining *ridha* (consent) as a continuous, dynamic requirement rather than a static, one-time agreement within automated digital contracts. To build upon these foundational findings, it is highly recommended that future research pursue specific cross-border comparative analyses—such as contrasting the digital subscription behaviors and jurisprudential perceptions of Muslim Generation Z in Indonesia with those in Malaysia. Such comparative studies will be instrumental in determining how varying national digital ecosystems, super-app architectures, and Sharia regulatory environments influence consumer vulnerability and the operationalization of ethical digital finance.

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Declaration of Generative Artificialintelligence (AI) Use

"During the preparation of this work the authors used Gemini in order to brainstorm initial ideas, outline the structure, and explore potential concepts for the study. After using this tool/service, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article."

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