

A Revenue Growth Framework for Subscription-Based E-Commerce

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Abstract—Subscription commerce has evolved from a niche fulfillment mechanism into a strategic e-commerce model that converts episodic transactions into continuing customer relationships. Although recurring billing can improve revenue predictability, the evidence also shows that subscription growth is fragile when firms optimize enrollment while underinvesting in value realization, retention, fulfillment economics, and customer trust. This study develops a Subscription Revenue Growth Framework (SRGF) through a convergent mixed-methods evidence synthesis. The quantitative strand integrates causal studies of customer purchases, engagement, churn, and lifetime value with current industry benchmarks. The qualitative strand codes conceptual research, executive-interview studies, and public-policy evidence to identify the organizational and behavioral mechanisms that sustain recurring revenue. The integrated findings indicate that durable growth depends on seven mutually reinforcing capabilities: offer–market fit, pricing and packaging flexibility, activation, continuous engagement, churn prevention, expansion, and unit-economic governance. The framework formalizes recurring revenue growth as the net result of new, expansion, and reactivation revenue less contraction and churn, while positioning trust, transparent consent, easy cancellation, data intelligence, and operational reliability as cross-cutting foundations. The paper contributes by connecting consumer psychology, customer lifetime value, revenue operations, and e-commerce fulfillment into one managerial control system. It also proposes testable relationships and a phased implementation roadmap for retailers, marketplaces, and digital service providers seeking profitable rather than merely visible subscription growth.

Search Terms— Subscription commerce, recurring revenue, e-commerce, customer lifetime value, churn, retention, personalization, subscription pricing, customer experience, mixed methods.

I. INTRODUCTION

E-commerce has historically been organized around discrete transactions: a shopper discovers a product, evaluates alternatives, completes a purchase, and may or may not return. Subscription commerce replaces this episodic logic with a continuing exchange in which the customer authorizes repeated payment in return for recurring access, replenishment, curation, convenience, privileges, or outcomes. The model is now visible across software, media, food, apparel, beauty, pet care, mobility, education, marketplaces, and business-to-business services. Its appeal is straightforward: recurring contracts improve revenue visibility, deepen first-party data, and create repeated opportunities to deliver value. Industry evidence also indicates that firms using recurring monetization have recently grown faster than broad market benchmarks, although the magnitude varies substantially by sector and model design.

The strategic problem is that recurring billing is not equivalent to recurring value. A firm may report strong gross additions while simultaneously accumulating early-life churn, discount dependence, failed payments, rising fulfillment costs, or customers who remain subscribed through inattention rather than satisfaction. Recent research demonstrates both sides of this tension. Subscription programs can increase purchase frequency, spend, engagement, and content consumption, yet operational studies show that higher order frequency can reduce incremental profit when delivery and service costs are not redesigned. Economic evidence further indicates that seller revenue may partly depend on consumer inattention and switching frictions, raising governance and reputational risks.

This tension is especially important in e-commerce because the subscription proposition crosses multiple functions. Merchandising must determine which products are naturally replenishable or curatable. Product and user-experience teams must make enrollment, modification, pausing, and cancellation understandable. Pricing teams must manage tiers, commitment periods, discounts, and usage charges. Supply-chain teams must forecast demand and preserve

service quality. Data teams must estimate customer lifetime value (CLV), churn risk, and expansion propensity. Finance must distinguish gross recurring revenue from contribution-margin growth. Consequently, subscription commerce cannot be managed as a payment feature; it is a lifecycle operating model.

This paper addresses three research questions: (RQ1) Which mechanisms convert subscription adoption into recurring revenue growth? (RQ2) Under what conditions do subscription-driven increases in purchasing and engagement produce profitable growth rather than cost-shifting or customer lock-in? (RQ3) What integrated managerial framework can guide the design, measurement, and scaling of subscription commerce? The main contribution is the Subscription Revenue Growth Framework (SRGF), a lifecycle-based model that integrates offer design, monetization, activation, engagement, retention, expansion, operations, analytics, and trust. The paper also provides a metric architecture, testable propositions, and a maturity roadmap suitable for empirical validation and enterprise implementation.

II. CONCEPTUAL BACKGROUND AND LITERATURE REVIEW

A. Subscription Commerce Archetypes

Subscription commerce includes several economically distinct archetypes. Replenishment subscriptions automate repeat purchase of predictable consumables. Curation subscriptions deliver assortments selected by the seller or an algorithm and create value through discovery and surprise. Access subscriptions provide continuing use of digital content, software, services, or shared assets. Paid membership programs charge a fee for privileges such as shipping, discounts, exclusive inventory, or priority service. Hybrid and outcome-based subscriptions combine a recurring base fee with usage, performance, or add-on charges. These archetypes differ in value frequency, inventory exposure, variable cost, personalization requirements, and churn drivers; therefore, they should not be evaluated through a single benchmark.

TABLE I. SUBSCRIPTION COMMERCE ARCHETYPES AND CONTROL METRICS

Archetype	Offer Logic	Primary Customer Value	Critical Metrics
Replenishment	Automatic delivery of predictable consumables	Convenience, availability, savings	Skip/pause rate, fill rate, contribution CLV
Curation	Periodic assortment selected for the customer	Discovery, personalization, surprise	Keep rate, preference accuracy, return rate
Access	Ongoing right to use digital content or service	Breadth, frequency, low marginal access cost	Activation, engagement, voluntary churn
Paid membership	Fee for privileges across transactions	Shipping, discounts, exclusivity, status	Incremental spend, benefit cost, NRR
Hybrid/usage	Base subscription plus usage or add-ons	Flexibility and value alignment	Usage depth, expansion MRR, bill predictability

B. Recurring Revenue Economics

The economic advantage of a subscription is not only the regularity of payments; it is the ability to manage customer value as a stock rather than treating sales as isolated flows. CLV models emphasize expected future margin, retention probability, acquisition cost, service cost, and discounting. Customer-based valuation research further links acquisition and retention processes to enterprise value. In operational terms, monthly recurring revenue (MRR) is governed by a simple bridge:

$$\Delta MRR = \text{New MRR} + \text{Expansion MRR} + \text{Reactivation MRR} - \text{Contraction MRR} - \text{Churned MRR}$$

This identity reveals why acquisition alone is an incomplete growth strategy. A business can increase gross additions and still contract if churn and downgrades exceed new and expansion revenue. Net revenue retention (NRR) captures this dynamic for an existing cohort, while gross revenue retention (GRR) isolates the durability of the opening recurring base. Contribution-margin CLV and CAC payback add the missing profitability dimension.

A healthy subscription model therefore optimizes the entire revenue bridge rather than a single top-of-funnel conversion rate.

C. Behavioral Mechanisms: Value, Attachment, and Lock-In

Subscription adoption is shaped by both utilitarian and relational mechanisms. Perceived value in e-commerce reflects the trade-off among benefits, monetary cost, effort, uncertainty, and service quality. For replenishment models, convenience and reliability may dominate. For curation models, discovery, novelty, and self-expression are more salient. Attachment-based research argues that consumers can develop a relationship with the subscription service and brand, increasing adoption and loyalty when the service fit's identity and routines. Customer-journey research similarly emphasizes that experience is cumulative across pre-purchase, purchase, use, service, renewal, and exit touchpoints.

Subscriptions can also change behavior after enrollment. Iyengar, Park, and Yu found a large, persistent increase in customer purchases from a paid program and attributed only part of the effect to direct economic benefits; non-economic mechanisms, including sunk-cost effects, explained a substantial share. Wu, Guo, and Luo found that subscriptions increased content consumption and generation, particularly among previously less-engaged users. Datta, Knox, and Bronnenberg showed that streaming adoption increased both the quantity and diversity of music consumption. These findings imply that subscription fees can motivate customers to extract value from the relationship. However, the same mechanisms can become exploitative when firms rely on inertia, obscure renewal terms, or make cancellation disproportionately difficult.

D. Retention, Churn, and Customer Lifetime Value

Retention is the central compounding mechanism of recurring revenue. Churn removes current revenue, reduces the future base available for expansion, and raises the acquisition burden required to maintain growth. Recent diffusion research demonstrates that churn changes not only steady-state subscriber counts but also the timing and magnitude of adopter, user, and monetary growth. At the customer level, churn prediction is challenging because cancellation events are often rare relative to retained observations; class imbalance, asymmetric intervention costs, and heterogeneous CLV require profit-aware rather than accuracy-only models.

A practical distinction is required between voluntary and involuntary churn. Voluntary churn reflects declining value, poor fit, dissatisfaction, price sensitivity, or changed circumstances. Involuntary churn arises from payment failure, expired credentials, technical billing errors, or authorization problems. The interventions differ: voluntary churn requires product, service, pricing, or flexibility changes; involuntary churn requires retries, token updates, payment routing, and clear communications. Retention should also be measured by tenure cohort because aggregate churn can conceal severe deterioration among newly acquired customers. Industry benchmarking indicates that acquisition rates have weakened relative to earlier years, reinforcing a strategic shift toward retention and lifecycle profitability.

E. Operational and Governance Constraints

For physical-goods subscriptions, revenue growth creates operational commitments. Higher order frequency can increase pick-pack-ship costs, customer-service contacts, packaging use, and returns. Wagner, Pinto, and Amorim found that online grocery subscribers spent more and ordered more frequently, but the resulting behavioral and

delivery changes could reduce the retailer's incremental profit. This result is critical: subscription success must be evaluated with contribution margin after benefit, fulfillment, return, support, and payment costs. Flat-fee models can also attract high-usage customers whose cost-to-serve exceeds the economic design of the plan.

Governance is equally material. The long-term value of a subscription depends on informed consent, transparent renewal and price communication, accessible account controls, and a cancellation process proportionate to enrollment. U.S. consumer-protection guidance states that charges must be authorized and that negative-option or continuity programs cannot be billed without express consent. Enforcement activity continues to focus on confusing cancellation paths and charges that continue after cancellation attempts. Trust is therefore not merely a compliance constraint; it is a retention and brand-equity input.

III. RESEARCH METHODOLOGY

A. Research Design

The study uses a convergent mixed-methods evidence-synthesis design. Quantitative and qualitative evidence were analyzed in parallel and then integrated through a joint-display procedure. This approach is appropriate because subscription performance is simultaneously a measurable revenue process and a socio-technical relationship involving perceived value, routines, organizational capabilities, and governance. The final evidence set comprises 26 sources: 21 peer-reviewed academic studies, three industry research reports, and two public-policy sources. The review emphasizes e-commerce, digital services, paid membership, recurring-revenue economics, churn, CLV, pricing, and customer experience.

B. Quantitative Strand

The quantitative strand extracted directional and, where available, causal evidence on purchase amount, order frequency, engagement, retention, churn, CLV, and profitability. Priority was given to field data, quasi-experimental designs, matching with difference-in-differences, customer-level transaction analysis, and large-scale benchmark datasets. Evidence was coded by outcome, mechanism, context, and boundary condition. Industry benchmarks were not treated as causal estimates; they were used to establish contemporary scale and managerial relevance.

C. Qualitative Strand

The qualitative strand used thematic coding of conceptual studies, interview-based research, and regulatory evidence. Initial codes captured customer value, attachment, convenience, personalization, flexibility, pricing fairness, customer success, ecosystem design, operational reliability, consent, and cancellation. Codes were consolidated into higher-order themes representing the capabilities required to convert recurring billing into recurring value. The coding process also captured negative cases, including unprofitable high-frequency behavior, passive retention, overuse, and friction-based cancellation.

D. Integration and Validity

Integration occurred through a joint display that compared the direction of quantitative outcomes with the mechanisms identified qualitatively. A mechanism was retained in the framework when it was supported by multiple source types or when a strong causal study established a material boundary condition. Triangulation reduced dependence on any single industry benchmark or theoretical lens. Because this is a secondary evidence synthesis rather than a new customer-level dataset, the resulting propositions should be tested across sectors, price points, and subscription archetypes.

Convergent Mixed-Methods Evidence-Synthesis Design

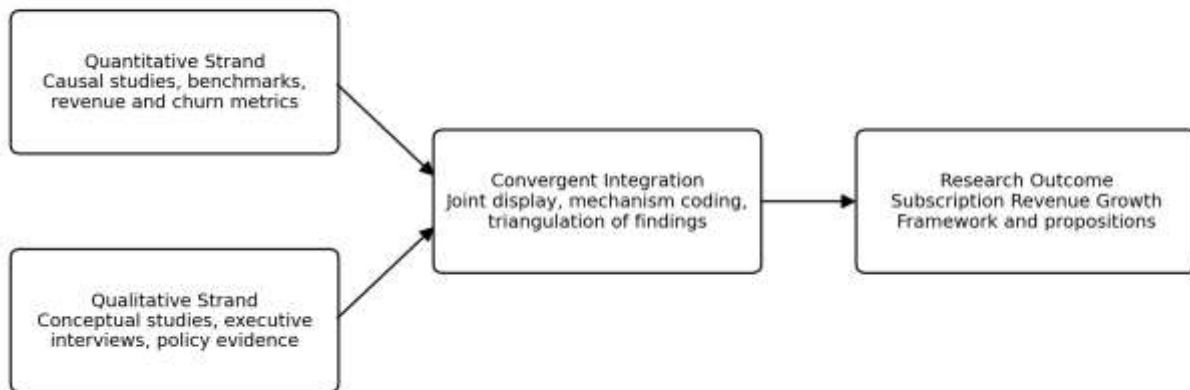


Fig. 1. Convergent mixed-methods evidence-synthesis design.

IV. INTEGRATED FINDINGS

A. Subscription Effects Are Positive but Heterogeneous

Across the evidence, subscriptions generally increase customer activity after adoption, but the magnitude and economic quality of the effect vary. Purchase programs can increase spending and frequency; digital access can increase consumption breadth and depth; membership can increase both consumption and contribution. These effects are not uniform across customers. Lower-engagement users may respond more strongly to the commitment mechanism, while already-heavy users may capture more economic benefits than the seller anticipated. This heterogeneity makes targeting and plan design essential. A subscription should be offered when expected incremental margin, retention, and strategic value exceed benefit and service costs—not simply when propensity to enroll is high.

B. Offer–Market Fit Precedes Pricing Optimization

The strongest recurring propositions match the natural cadence of customer need. Replenishment works when consumption is predictable and stockouts are costly. Curation works when customers value discovery but want reduced search effort. Access works when the content or service is broad enough to support repeated use. Membership works when benefits accumulate across transactions. A mismatch creates either underutilization, perceived waste, excessive returns, or rapid cancellation. Qualitative evidence therefore places offer–market fit before promotional pricing. Discounts may accelerate enrollment but cannot compensate for a weak value rhythm.

C. Activation Is the First Retention Intervention

Many subscription businesses treat retention as a late stage save activity. The evidence implies the opposite: retention begins with time-to-value. The customer should understand how to use benefits, configure preferences, schedule deliveries, discover content, or realize savings early in the relationship. Activation metrics should therefore be defined as value-confirming behaviors rather than account creation. Examples include completing preference capture, consuming a first item, placing a benefit-eligible order, achieving a threshold of weekly usage, or accepting a personalized schedule. Early activation creates behavioral evidence that supports later renewal.

D. Engagement Converts Fixed Fees into Perceived Value

Engagement is the bridge between payment and renewal. Subscription fees increase the customer’s motivation to use benefits, but firms must make that value observable. Personalized recommendations, replenishment reminders, progress summaries, savings statements, usage dashboards, and relevant discovery reduce the cognitive effort required to realize the plan’s value. The effect should be measured incrementally because engagement volume can be inflated without improving satisfaction or margin. The appropriate objective is quality-adjusted engagement: behaviors that predict retention, expansion, or contribution profit.

E. Churn Has Asymmetric Growth Effects

Churn is more damaging than the loss of one period's fee. It reduces the future expansion base, wastes acquisition spend, weakens cohort density, and can produce negative word of mouth. The impact is especially severe in the first months because acquisition costs have not yet been recovered. Conversely, preventing low-value churn through indiscriminate discounts can destroy margin. The appropriate retention objective is expected incremental profit: the probability that an intervention changes behavior multiplied by the retained contribution value, less incentive and service cost. This logic favors uplift modeling, survival analysis, and treatment-budget constraints over generic churn scores.

F. Operational Reliability and Trust Moderate Revenue Growth

For physical products, recurring demand can improve forecasting and procurement, yet service failures become recurring as well. Incorrect assortment, late delivery, stock substitutions, packaging waste, and returns undermine the promised convenience. For digital services, outages, entitlement errors, and confusing billing create the same effect. Trust moderates every stage: transparent terms improve qualified acquisition; clear value communication improves activation; predictable billing supports retention; easy plan modification prevents avoidable cancellation; and fair exit preserves reactivation potential. The integrated evidence therefore rejects friction-based retention as a sustainable growth strategy.

TABLE II. MIXED-METHODS JOINT DISPLAY OF SUBSCRIPTION EVIDENCE

Evidence Domain	Integrated Finding	Mechanism	Managerial Implication
Purchase behavior	Subscriptions can increase spend and order frequency.	Economic benefits plus commitment/sunk-cost mechanisms.	Target by incremental margin, not enrollment propensity alone.
Engagement	Access subscriptions increase consumption and contribution.	Perceived lock-in and motivation to use paid benefits.	Design early activation and value-visibility loops.
Profitability	Higher activity can reduce profit when service costs rise.	Flat benefits and frequent fulfillment can create adverse economics.	Use contribution-margin CLV and cost-to-serve guardrails.
Churn	Churn changes both scale and timing of monetary growth.	Loss of base revenue and future expansion opportunity.	Manage cohorts, voluntary/involuntary churn, and uplift.
Trust	Inattention and cancellation friction may raise short-run revenue.	Passive retention, switching costs, and dark patterns.	Require transparent consent, controls, and easy cancellation.

V. SUBSCRIPTION REVENUE GROWTH FRAMEWORK

The Subscription Revenue Growth Framework (SRGF) organizes subscription commerce as a lifecycle control system. At the accounting level, recurring growth is produced by new, expansion, and reactivation revenue and reduced by contraction and churn. At the behavioral level, customers progress through acquisition, activation, engagement, retention, and expansion. At the capability level, the lifecycle is enabled by value-proposition fit, pricing and packaging, data and experimentation, operations, and trust. The framework is intentionally archetype-neutral: the same

control logic applies to physical replenishment, curation boxes, digital access, paid membership, and hybrid usage plans, although the metrics and cost structure differ.

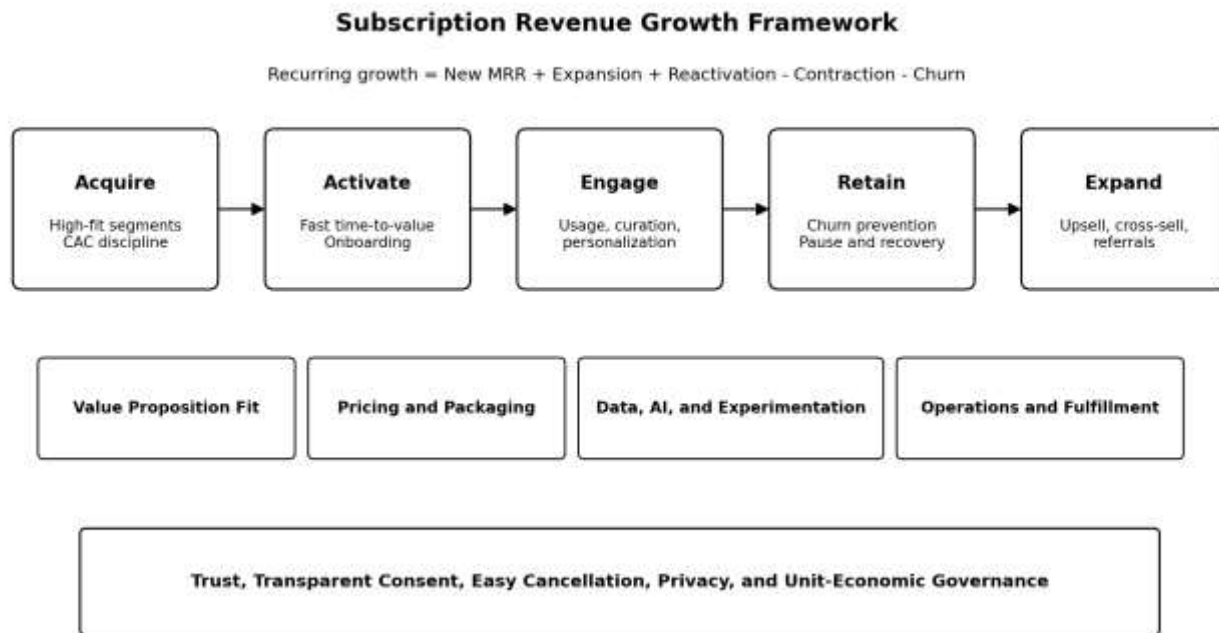


Fig. 2. Subscription Revenue Growth Framework (SRGF).

A. Pillar 1: Offer–Market Fit

A subscription should solve a repeated customer problem at a defensible cadence. The design process begins with the job-to-be-done, consumption variability, desired control, and acceptable commitment. Firms should validate whether customers want automatic replenishment, access, discovery, privileges, or outcomes. The key test is whether recurring delivery creates more net value than repeated one-time purchasing. Suitable indicators include repeat-purchase regularity, stockout pain, search cost, benefit utilization, willingness to delegate choice, and retention after promotional periods.

B. Pillar 2: Pricing and Packaging Flexibility

Pricing converts heterogeneous willingness to pay and usage into a manageable revenue architecture. Effective designs may include monthly and annual options, tiered benefit bundles, usage components, minimum commitments, family or team plans, and add-ons. Flexibility is not the absence of structure; it is controlled choice. Skip, pause, frequency adjustment, quantity change, and downgrade options can preserve the relationship when circumstances change. Pricing experiments should evaluate NRR, contribution margin, and long-run renewal—not only checkout conversion. Unexpected price jumps and opaque promotional transitions can reset reference prices and trigger cancellation.

B. Pillar 3: Activation and Time-to-Value

Activation establishes the causal path from enrollment to realized benefit. The firm should define a small set of behaviors that confirm value and instrument them as lifecycle events. A curation service may require preference completion and a high first-box keep rate; a membership program may require use of shipping or discount benefits; a digital service may require content consumption across several sessions. Onboarding messages, defaults, recommendations, and service recovery should be designed to move the subscriber toward these behaviors within an archetype-specific activation window.

D. Pillar 4: Continuous Engagement and Personalization

Recurring value must be refreshed. Personalization should use explicit preferences, transactional signals, content interactions, service contacts, and contextual constraints to improve relevance. However, the objective is not maximal communication or usage; it is retention-adjusted value. Experiments should compare treatment effects on activation, satisfaction, margin, renewal, and complaint rates. Recommendation systems must also incorporate inventory, profitability, diversity, fatigue, and customer-control constraints rather than ranking solely by predicted clicks.

E. Pillar 5: Churn Prevention and Recovery

Churn management requires diagnosis before intervention. Voluntary-churn models should distinguish value failure, low usage, price pressure, service failure, product mismatch, and life-event changes. Involuntary-churn systems should optimize payment retries, token refresh, card-account updating, routing, and communication timing. Save offers should be selected using incremental treatment effect and expected contribution value. Pause and downgrade options can preserve future reactivation, while a respectful cancellation experience protects trust and creates cleaner reason data.

F. Pillar 6: Expansion and Ecosystem Value

Expansion converts retained relationships into compounding revenue. Mechanisms include tier upgrades, add-ons, complementary products, additional users, higher usage, premium service, and partner benefits. Expansion should be triggered by demonstrated value and customer need, not merely tenure. In physical commerce, cross-category subscriptions and bundles can improve basket economics; in digital services, feature and seat expansion can raise NRR. The central metric is incremental contribution from the existing base after cannibalization and benefit cost.

G. Pillar 7: Unit-Economic, Operational, and Trust Governance

The final pillar governs all others. Finance should maintain a recurring-revenue bridge, cohort P&Ls, CAC payback, contribution CLV, and benefit-cost allocation. Operations should measure fill rate, on-time delivery, returns, support contacts, payment acceptance, and entitlement accuracy. Trust controls should cover consent evidence, renewal notice, price-change communication, privacy, cancellation accessibility, and post-cancellation billing. A growth initiative should not scale unless it passes both customer-value and unit-economic thresholds.

TABLE III. SUBSCRIPTION REVENUE AND LIFECYCLE METRIC ARCHITECTURE

Metric	Definition	Decision Use
MRR/ARR	Normalized recurring revenue per month/year	Scale and predictability
GRR	$(\text{Opening MRR} - \text{contraction} - \text{churn}) / \text{Opening MRR}$	Durability before expansion
NRR	$(\text{Opening MRR} + \text{expansion} + \text{reactivation} - \text{contraction} - \text{churn}) / \text{Opening MRR}$	Compounding from existing base
Logo churn	Canceled subscribers / opening subscribers	Relationship attrition
Contribution CLV	Discounted expected gross profit less service and retention costs	Economic customer value
CAC payback	Acquisition cost / monthly contribution margin	Capital recovery speed
Activation rate	Subscribers completing value-confirming behavior / new subscribers	Early value realization
Involuntary churn	Payment-failure cancellations / opening subscribers	Billing reliability
Pause/reactivation	Paused or returned subscribers by cohort	Relationship preservation

Metric	Definition	Decision Use
Benefit cost ratio	Cost of consumed benefits / subscription and incremental margin	Plan sustainability

VI. RESEARCH PROPOSITIONS AND EMPIRICAL VALIDATION

The SRGF yields testable propositions that can guide future empirical research and enterprise experimentation. The propositions distinguish direct growth effects from mediating and moderating mechanisms.

- P1: Offer–market fit has a positive effect on retention and contribution-margin CLV, mediated by perceived recurring value.
- P2: Activation speed has a positive effect on later engagement and renewal, with a stronger effect among customers with lower pre-subscription engagement.
- P3: Pricing and plan flexibility reduce voluntary churn, but excessive complexity weakens acquisition and value comprehension.
- P4: Personalized engagement increases NRR when recommendations improve realized value; the effect is weakened by communication fatigue and poor relevance.
- P5: Profit-aware churn interventions outperform probability-only churn interventions because treatment effects and customer value are heterogeneous.
- P6: Operational reliability positively moderates the relationship between subscription-driven order frequency and contribution profit.
- P7: Transparent consent and low-friction cancellation reduce short-run passive retention but improve trust, reactivation, and long-run customer equity.

A robust validation design would combine merchant-level panel data with customer-level behavioral data and qualitative interviews. The quantitative component could use difference-in-differences around subscription launch or plan changes, survival models for time-to-churn, uplift models for retention treatments, and hierarchical models for cross-archetype heterogeneity. Dependent variables should include NRR, GRR, contribution CLV, cohort payback, order frequency, engagement, and complaint or cancellation effort. The qualitative component should interview customers, product leaders, customer-success teams, and operations managers to explain mechanisms and implementation constraints. A convergent analysis would compare estimated treatment effects with perceived-value and operational themes.

Selection bias is a primary threat because customers who enroll may already be heavier users. Causal evaluation should therefore use randomized offers where feasible or quasi-experimental methods such as matching, instrumental variables, synthetic controls, and staggered adoption designs. Profitability analysis must include the full cost of benefits, fulfillment, returns, support, payment processing, discounts, and retention incentives. Ethical review should test whether renewal, cancellation, and personalization practices preserve informed choice.

VII. MANAGERIAL IMPLEMENTATION ROADMAP

A. Phase 1: Diagnose and Select the Use Case

The first phase identifies where recurring value already exists in customer behavior. Teams should analyze purchase intervals, repeat categories, service usage, customer pain points, and cost-to-serve. Candidate use cases should be scored on need regularity, gross margin, demand predictability, personalization potential, operational feasibility, and cancellation risk. The output is a narrowly defined pilot rather than a company-wide subscription mandate.

B. Phase 2: Pilot the Value and Economics

The pilot should test the minimum viable proposition with explicit guardrails. Cohorts should be measured from enrollment through activation, repeat value realization, renewal, service contacts, and cancellation. Pricing tests should include a holdout where possible. Physical-goods pilots must model delivery frequency, substitutions, packaging, returns, and inventory effects. Decision gates should be based on contribution CLV, activation, early churn, and customer feedback rather than subscriber count alone.

C. Phase 3: Build Lifecycle and Data Capabilities

Once the value proposition is validated, the firm should implement a subscription ledger, event taxonomy, identity resolution, entitlement management, payment orchestration, cohort reporting, experimentation, and customer controls. The data model must distinguish subscriber status, plan, tenure, benefit use, engagement, payment state, service failures, and cancellation reasons. Analytical models should be deployed with monitoring for calibration, treatment lift, fairness, and drift.

D. Phase 4: Scale with Governance

Scale introduces portfolio complexity. Firms should establish a cross-functional subscription council spanning product, commerce, finance, operations, data, legal, and customer service. The council should own the recurring-revenue bridge, pricing calendar, benefit economics, experimentation standards, and trust controls. Plans that grow enrollment but fail NRR, contribution, or customer-effort thresholds should be redesigned or retired.

TABLE IV. SUBSCRIPTION COMMERCE MATURITY ROADMAP

Stage	Primary Focus	Core Deliverable	Success Criterion
1. Diagnose	Behavioral cadence, economics, pain points	Use-case scorecard and baseline cohorts	Evidence of repeated customer value
2. Pilot	Offer, price, activation, fulfillment	Controlled launch and cohort P&L	Positive contribution CLV with acceptable early churn
3. Operationalize	Ledger, events, billing, analytics, controls	Lifecycle platform and dashboards	Reliable measurement and intervention capability
4. Scale	Portfolio, expansion, ecosystem, governance	Cross-functional operating model	Sustained NRR and trusted customer experience
5. Optimize	Causal personalization and profit-aware retention	Continuous experimentation system	Incremental margin growth, not vanity engagement

VIII. DISCUSSION

A. Theoretical Contribution

The paper contributes by integrating four research streams that are often treated separately: subscription adoption and consumer psychology, CLV and customer-based valuation, churn and engagement analytics, and e-commerce operations. The SRGF reframes subscription commerce as a value-realization system rather than a pricing format. It also distinguishes the accounting mechanics of recurring revenue from the behavioral and organizational mechanisms that generate those mechanics. This distinction clarifies why identical billing models can produce different outcomes across firms and customers.

A second contribution is the explicit treatment of boundary conditions. Subscription adoption may raise purchases and engagement, yet the net effect depends on benefit cost, service intensity, customer heterogeneity, and operational

reliability. Retention is not intrinsically beneficial when it is purchased with unprofitable incentives or obtained through inattention. The framework therefore aligns customer equity with contribution economics and trust.

B. Managerial Contribution

For managers, the framework provides a common operating language. Product teams can connect activation and engagement to revenue retention. Finance can connect MRR bridges to contribution CLV. Operations can quantify how service choices affect renewal and margin. Data teams can prioritize uplift, survival, and causal measurement. Customer-experience and legal teams can treat transparent cancellation and consent as lifecycle design requirements. The framework also discourages the common error of benchmarking all subscriptions by a single churn rate without considering archetype, tenure, price, or service cost.

C. Ethical and Strategic Implications

The most consequential ethical issue is the difference between earned retention and passive retention. Earned retention results from continuing value; passive retention results from inattention, confusion, or disproportionate exit effort. While both may appear as revenue in the short term, they have different effects on trust, complaints, regulatory exposure, and reactivation. Sustainable subscription strategy should therefore make value visible and exit understandable. The strategic objective is not to prevent every cancellation; it is to maximize mutually beneficial customer lifetime value.

IX. LIMITATIONS AND FUTURE RESEARCH

This study has four limitations. First, it synthesizes published evidence rather than estimating a new unified dataset. Second, the evidence spans different archetypes, sectors, countries, and time horizons, limiting direct comparison of effect sizes. Third, industry benchmarks may contain selection effects and should not be interpreted as causal. Fourth, rapidly evolving payment, privacy, and consumer-protection environments may change acceptable practices and implementation costs.

Future research should test the SRGF with longitudinal, multi-merchant data; compare physical and digital subscription economics; estimate the causal value of pause and downgrade options; examine the interaction of generative AI with curation, service, and churn prevention; and measure whether easy cancellation increases reactivation and referrals. Research should also evaluate environmental effects of recurring physical shipments, including packaging, returns, failed deliveries, and overconsumption. Finally, standardized definitions of active subscriber, churn, reactivation, NRR, and contribution CLV would improve comparability across studies and industries.

X. CONCLUSION

Subscription commerce is rising because it offers a compelling exchange: customers receive convenience, access, personalization, or privileges, while firms gain repeated revenue and richer relationships. Yet the model is not inherently superior to transactional e-commerce. Its advantage emerges only when recurring billing is supported by recurring value, reliable operations, disciplined unit economics, and trusted customer control.

The mixed-methods evidence indicates that subscriptions can increase purchasing and engagement, but these gains are heterogeneous and can be offset by churn, service cost, or friction-based retention. The Subscription Revenue Growth Framework addresses this problem by integrating acquisition, activation, engagement, retention, and expansion with offer fit, pricing, analytics, operations, and governance. Its central managerial principle is direct: optimize the net recurring-revenue bridge and contribution customer equity, not gross subscriber additions. Firms that follow this

principle can use subscriptions to create durable relationships and profitable growth rather than merely converting one-time purchases into recurring charges.

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