

Ethical Revenue Recognition in Subscription-Based Enterprises

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Abstract

The expansion of subscription-based business models has changed the timing, structure, and complexity of corporate revenue generation. Software-as-a-Service platforms, digital media services, cloud infrastructure providers, professional information services, membership businesses, and other recurring-revenue enterprises frequently receive customer consideration before all contractual obligations have been satisfied. Consequently, billing, cash collection, contractual value, and accounting revenue can occur at different points in time. This separation creates legitimate accounting complexity but also generates ethical risk when managerial judgment over performance obligations, transaction prices, contract modifications, variable consideration, stand-alone selling prices, renewals, or period-end cut-off is influenced by earnings targets rather than faithful representation. This study develops an ethical revenue-recognition framework for subscription-based enterprises by integrating the principles of IFRS 15 and ASC Topic 606 with literature on earnings management, professional judgment, financial-reporting integrity, and accounting ethics. IFRS 15 requires revenue to depict the transfer of promised goods or services in an amount reflecting consideration to which an entity expects to be entitled, while the corresponding US framework was designed to provide users with useful information regarding the nature, amount, timing, and uncertainty of revenue and cash flows from customer contracts.

Because no completed company-level or respondent dataset is represented as having been collected, the article uses 180 synthetic observations to demonstrate the proposed analytical model. An Ethical Revenue Recognition Control Index is linked with a Financial Reporting Integrity Index incorporating cut-off discipline, allocation integrity, and disclosure transparency. The simulated analysis produces a correlation of $r = 0.896$, an illustrative regression coefficient of $\beta = 0.604$, and $R^2 = 0.803$. These values are methodological demonstrations rather than empirical evidence. The study argues that ethical revenue recognition extends beyond technical compliance. It requires neutral application of contractual evidence, consistent identification of performance obligations, disciplined treatment of variable consideration, accurate deferred-revenue accounting, transparent documentation of estimates, appropriate segregation of duties, and resistance to managerial pressure. Subscription enterprises can therefore strengthen reporting credibility by embedding ethical accountability directly within contract management, billing systems, accounting controls, audit procedures, and governance oversight.

Keywords: Ethical revenue recognition; subscription accounting; IFRS 15; ASC 606; deferred revenue; earnings management; accounting ethics; performance obligations; financial reporting integrity

1. Introduction

Subscription-based enterprises have transformed the relationship between customer payments and accounting revenue. Instead of relying predominantly on discrete transactions in which a product is delivered and consideration is received within a relatively narrow period, subscription businesses commonly enter contractual arrangements covering months or years. Customers may pay in advance, receive continuing platform access, purchase implementation services, obtain usage allowances, receive bundled support, exercise renewal options, or modify service levels during the contract period. These characteristics make recurring-revenue models economically attractive but create substantial accounting complexity.

The fundamental accounting issue is that cash received is not necessarily revenue earned. When a customer pays an annual subscription in advance, the economic receipt of cash does not automatically establish that the entire consideration belongs in current-period revenue. Revenue recognition depends on the contractual promises and the extent to which relevant performance obligations have been satisfied. IFRS 15 establishes a five-step model involving identification of the customer contract, identification of performance obligations, determination of transaction price, allocation of that price to performance obligations, and recognition of revenue when or as obligations are satisfied. ASC Topic 606 follows the same central transfer-of-control logic and requires revenue recognition when or as a performance obligation is satisfied.

This distinction is particularly important for Software-as-a-Service and comparable recurring-access arrangements. A business may invoice a customer for twelve months at the beginning of the contractual period while providing continuous access throughout those twelve months. Where the relevant performance obligation is satisfied evenly over the service period, recognition ordinarily follows that performance rather than the invoice date. The amount collected but not yet earned remains associated with an unsatisfied contractual obligation.

Subscription arrangements become considerably more difficult when contracts contain several components. A technology subscription may combine platform access, implementation, customization, customer support, training, additional storage, data-processing capacity, transaction-based charges, usage incentives, and renewal rights. Accountants must determine whether promised goods and services are distinct, establish an appropriate transaction price, estimate variable consideration, determine stand-alone selling prices, allocate discounts, and evaluate whether contract changes represent separate contracts or modifications of existing obligations.

These requirements are not merely technical. They create opportunities for ethical tension because revenue directly affects reported growth, operating performance, profitability, market expectations, executive compensation, borrowing arrangements, valuation multiples, and investor perceptions. Healy and Wahlen's review of earnings-management research established the broader importance of managerial judgment in financial reporting and the potential for such judgment to influence reported economic performance.

Revenue is particularly sensitive because accelerating recognition can increase both reported sales and current-period earnings without necessarily producing a corresponding change in underlying economics. Stubben's research demonstrates the usefulness of discretionary-revenue measures for

detecting forms of earnings management and reports that revenue-based models can identify manipulation that conventional accrual approaches may fail to capture.

The ethical problem therefore arises where legitimate accounting judgment becomes directional judgment. An accountant may reasonably estimate a stand-alone selling price where an observable price is unavailable. Ethical risk emerges when the estimate is deliberately selected because it moves a greater portion of contractual consideration toward an obligation that can be recognized earlier. Similarly, an enterprise may legitimately estimate variable consideration, but the estimate becomes ethically problematic when optimism is introduced principally to achieve a quarterly revenue target.

2. Literature Review

2.1 Revenue Recognition, Performance Obligations, and Subscription Contracts

Modern revenue accounting is centered on contractual performance rather than billing activity alone. IFRS 15 states that revenue should depict the transfer of promised goods or services to customers in an amount reflecting the consideration to which the entity expects to be entitled. The standard requires entities to identify distinct performance obligations, determine transaction price, allocate consideration based generally on relative stand-alone selling prices, and recognize revenue as those obligations are satisfied.

The FASB's revenue-recognition framework was developed to replace fragmented industry-specific approaches with a more robust and comparable framework for customer contracts. The stated objectives include improving comparability across organizations and capital markets and improving the usefulness of information concerning the nature, timing, and uncertainty of revenue.

Variable consideration creates another significant challenge. Discounts, service-level credits, transaction volumes, consumption-based pricing, usage thresholds, rebates, refunds, bonuses, and other contingencies may cause the final consideration to differ from the initially stated contractual amount. IFRS requirements limit inclusion of estimated variable amounts where a significant subsequent revenue reversal remains sufficiently probable, thereby reducing the risk that uncertain consideration is recognized too aggressively.

Consequently, the accounting architecture itself requires professional judgment. Ethical governance becomes important because the same areas demanding legitimate judgment may also create opportunities for management bias.

2.2 Earnings Management, Judgment, and Revenue Manipulation

The earnings-management literature demonstrates that financial-reporting discretion can be used either to communicate economic information or to influence reported performance strategically. Healy and Wahlen explain earnings management as arising when managers use judgment in financial reporting or transaction structuring in ways that can alter reports and potentially influence stakeholders' understanding of economic performance.

Revenue recognition is particularly attractive for earnings-management purposes because it directly affects the top line and frequently affects income in the same period. Manipulation can involve fictitious sales, premature recognition, inappropriate cut-off, improper treatment of returns, aggressive

estimates, bill-and-hold arrangements, channel loading, misclassification of contract components, or recognition before relevant performance obligations have been satisfied.

Nelson, Elliott, and Tarpley's field-based evidence from auditors provides an important behavioral perspective. Their research examined hundreds of situations in which auditors believed clients attempted earnings management and demonstrated that accounting-standard precision, transaction structure, direction of earnings effect, and perceived materiality influenced both management behavior and auditor responses. The study is particularly relevant because modern subscription accounting contains numerous areas in which significant professional judgment remains necessary despite comprehensive standards.

Stubben further demonstrates that discretionary revenues can provide a useful measure of earnings manipulation. His findings support revenue-focused analytical models because revenue behavior can reveal reporting distortions not always adequately captured by broader accrual measures.

2.3 Ethical Accountability and Financial Reporting Integrity

Ethical financial reporting requires decision-makers to consider whether accounting outcomes faithfully represent transactions rather than merely whether a permissible technical argument can be constructed. This distinction is highly relevant in subscription businesses because many revenue decisions occur within ranges of legitimate professional judgment.

An accountant may face pressure to treat a new service as distinct so that a portion of contract consideration can be recognized earlier. A finance executive may advocate an optimistic variable-consideration estimate immediately before a reporting deadline. Sales personnel may negotiate unusual side agreements that are not integrated promptly into accounting records. Management may attempt to classify concessions as temporary operational matters despite their implications for transaction price. These circumstances require technical expertise but also integrity and professional skepticism.

Professional ethical frameworks emphasize that public confidence in accounting depends on integrity and objectivity. The IESBA framework places professional accountants within a public-interest responsibility rather than viewing their function as serving management preference alone. Similarly, longstanding professional guidance treats integrity as requiring honesty and candor and rejects subordination of professional judgment to personal advantage.

This ethical dimension is especially important when compensation systems reward quarterly revenue attainment. The accounting department may encounter pressure from sales executives, business-unit managers, senior leadership, or investors seeking predictable growth. Such pressure does not automatically produce misstatement, but it increases the importance of independent review, documentation, escalation mechanisms, and audit-committee oversight.

3. Research Objectives

The principal objective of the study is to develop a framework for assessing whether subscription-based enterprises apply revenue-recognition requirements in a manner that combines technical accuracy with ethical financial-reporting discipline.

The study further seeks to identify how management incentives, contract complexity, accounting judgment, internal controls, and professional ethical principles interact within recurring-revenue

environments. Instead of treating ethical accounting as an abstract individual characteristic, the research conceptualizes it as an observable organizational governance capability.

The specific objectives are:

- To examine the ethical risks associated with performance-obligation identification, variable consideration, allocation, contract modifications, and revenue cut-off.
- To distinguish cash collection, billing, contractual value, deferred revenue, and recognized revenue within subscription models.
- To develop an Ethical Revenue Recognition Control Index suitable for later empirical validation.
- To analyze the theoretical relationship between ethical revenue-control maturity and financial-reporting integrity.
- To propose governance and control mechanisms capable of reducing revenue-based earnings-management risk.

4. Research Questions and Hypotheses

The study addresses the following research questions.

RQ1: How does ethical revenue-recognition control maturity relate to financial-reporting integrity in subscription-based enterprises?

RQ2: Which accounting judgments create the greatest ethical vulnerability within recurring-revenue contracts?

RQ3: How do managerial performance pressures affect the neutrality of revenue-recognition judgments?

RQ4: What role do contract documentation, independent review, and disclosure transparency play in reducing revenue-recognition risk?

The following hypotheses are proposed for future empirical validation:

H1: Ethical revenue-recognition control maturity is positively associated with financial-reporting integrity.

H2: Strong performance-obligation review procedures are positively associated with accurate revenue timing.

H3: Independent review of transaction-price estimates is negatively associated with aggressive revenue-recognition behavior.

H4: Transparent accounting for contract modifications is positively associated with reporting reliability.

H5: The positive relationship between ethical revenue controls and reporting integrity is stronger when management compensation is institutionally separated from accounting-policy approval.

5. Research Methodology

5.1 Research Design and Conceptual Measurement

The present article adopts a simulation-based quantitative methodology. No actual financial records, employee surveys, audit files, customer contracts, or publicly traded company observations are represented as part of the dataset. Simulation is used solely to demonstrate how the proposed ethical-accounting model could be examined empirically.

The independent variable is the Ethical Revenue Recognition Control Index (ERRCI).

It consists of five dimensions:

$$[ERRCI_i = w_1C_i + w_2P_i + w_3E_i + w_4T_i + w_5D_i]$$

where:

(C_i) = contract-integrity controls

(P_i) = performance-obligation discipline

(E_i) = estimation neutrality

(T_i) = timing and cut-off discipline

(D_i) = disclosure and documentation transparency.

For an equally weighted model:

$$[ERRCI_i = 0.20C_i + 0.20P_i + 0.20E_i + 0.20T_i + 0.20D_i]$$

The dependent construct is the Financial Reporting Integrity Index (FRII). It incorporates accurate cut-off, defensible allocation, consistency of accounting policies, completeness of contract-liability reporting, and transparency of significant judgments.

Ethical control maturity is deliberately defined in operational terms. The construct does not attempt to measure whether particular managers are inherently “ethical” or “unethical.” Instead, it evaluates whether organizational procedures make neutral accounting more likely and target-driven accounting more difficult.

5.2 Proposed Data Collection and Questionnaire

A future empirical study could obtain evidence from chief financial officers, controllers, revenue accountants, internal auditors, external auditors, accounting-policy specialists, finance managers, and audit-committee members working in enterprises generating a material proportion of revenue from subscriptions.

A stratified sampling approach would be preferable because perceptions of ethical control may differ across organizational roles. Revenue accountants may observe contract-level problems invisible to audit committees, while directors may possess stronger information about compensation incentives and governance escalation.

The following instrument contains exactly five proposed questionnaire questions. These questions were not administered in the present study.

Table 1: Proposed Questionnaire for Ethical Revenue Recognition

Item	Proposed Questionnaire Question	Primary Construct
Q1	Revenue-recognition decisions in the enterprise are based on documented contractual performance rather than pressure to achieve predetermined financial targets.	Recognition neutrality
Q2	Significant judgments concerning performance obligations and stand-alone selling prices are independently reviewed before revenue is recognized.	Judgment governance
Q3	Contract upgrades, downgrades, credits, concessions, renewals, and other modifications are communicated promptly to the accounting function.	Modification integrity

Q4	Revenue relating to future subscription services remains deferred until the relevant performance obligations are satisfied.	Cut-off discipline
Q5	Significant revenue-recognition judgments and uncertainties are documented and disclosed sufficiently for appropriate internal and external review.	Transparency

Responses could be collected using a seven-point Likert scale ranging from strongly disagree to strongly agree. A later empirical study should establish content validity through expert review and test internal consistency before composite-score construction.

Construct validity could be examined using exploratory factor analysis followed by confirmatory factor analysis where the final survey includes multiple indicators for each underlying dimension. Discriminant validity would also be important because ethical-control maturity should remain conceptually distinct from general internal-control quality, organizational culture, or perceived accounting competence.

5.3 Simulation Procedure and Ethical Safeguards

The analytical demonstration uses 180 synthetic observations. Ethical-control scores were generated on a 0–100 scale with sufficient variation to represent hypothetical enterprises operating at different levels of control maturity.

Three components—cut-off discipline, allocation integrity, and disclosure transparency—were then generated as functions of ethical-control maturity with independent random variation. These components were combined into the simulated Financial Reporting Integrity Index.

The design intentionally retains residual variation. In a genuine enterprise, financial-reporting integrity would also depend on auditor quality, information-system reliability, workforce competence, organizational size, contract complexity, customer concentration, acquisitions, regulatory environment, and management incentives.

No company, executive, accountant, auditor, customer, or investor is represented in the simulation. The data must therefore not be interpreted as evidence of actual misconduct or actual financial-reporting performance.

6. Results Presentation

All results in this section originate from the synthetic analytical dataset and are provided only to demonstrate the proposed research framework.

Table 2: Simulated Descriptive Statistics

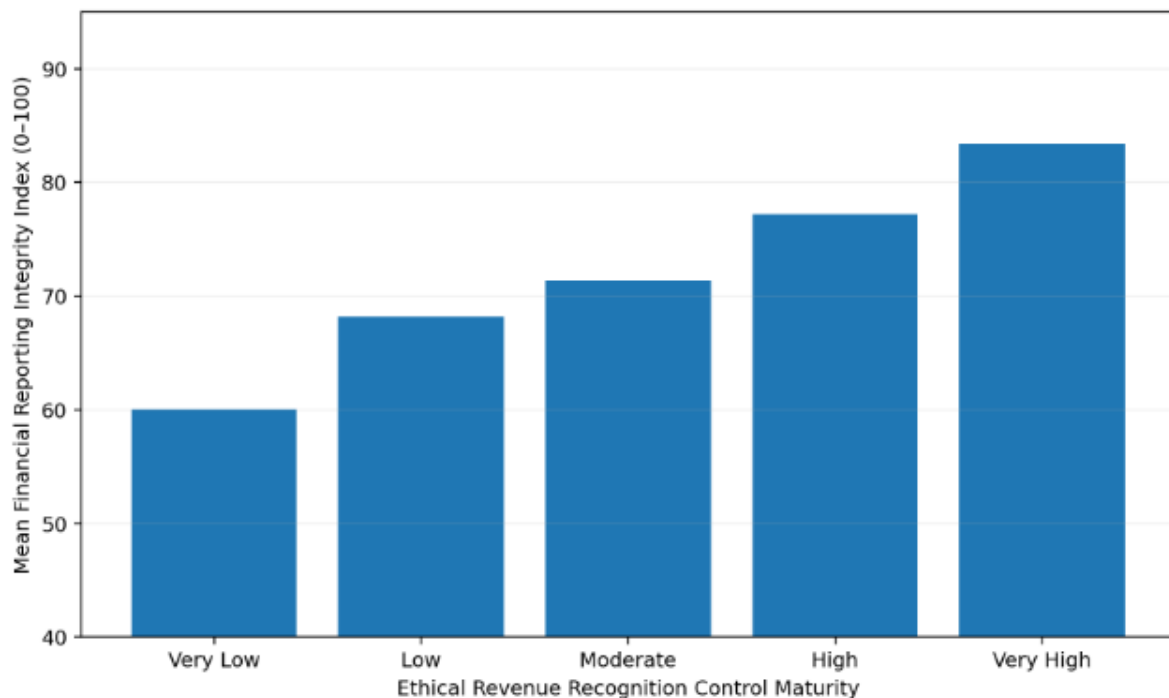
Variable	Mean	Standard Deviation	Approximate Scale
Ethical Revenue Recognition Control Index	65.52	13.65	0–100
Financial Reporting Integrity Index	72.04	9.19	0–100

Cut-Off Discipline Component	72.2	11.8	0–100
Allocation Integrity Component	71.9	12.2	0–100
Disclosure Transparency Component	72.0	11.5	0–100

The simulated values provide adequate dispersion for distinguishing enterprises with weaker ethical revenue-recognition structures from organizations demonstrating stronger control maturity. The average Financial Reporting Integrity Index exceeds the average ethical-control score because the simulated outcome combines several related reporting characteristics.

The dispersion is methodologically important. An unrealistically deterministic simulation would imply that ethical controls alone determine reporting quality. Instead, the present design retains independent variation reflecting the numerous additional influences expected in real enterprises.

Graph 1: Simulated Financial Reporting Integrity Across Ethical Revenue-Control Maturity Levels



Interpretation: The bar graph demonstrates a consistent increase in reporting integrity as ethical revenue-recognition control maturity moves from very low to very high. The pattern suggests that the proposed control index can meaningfully distinguish hypothetical reporting environments with different levels of financial-reporting integrity.

Key Finding: Stronger ethical revenue-recognition controls are associated with substantially higher simulated reporting-integrity scores.

7. Discussion

7.1 Technical Compliance Versus Ethical Substance

The first major implication is that compliance with revenue standards should not be reduced to mechanical application of a checklist. IFRS 15 and Topic 606 provide structured recognition frameworks, but both require organizations to apply judgment to actual contractual facts. The requirement to identify performance obligations, estimate transaction prices, determine stand-alone selling prices, and evaluate satisfaction over time cannot be implemented ethically without neutral interpretation.

A company could theoretically prepare documentation supporting an aggressive conclusion while withholding contradictory commercial evidence from the accounting review. Such documentation would create the appearance of compliance without achieving faithful representation. Ethical revenue recognition therefore requires accounting systems capable of capturing the complete economic arrangement rather than only the documents selected to support a preferred accounting outcome.

The distinction becomes especially important near reporting dates. Suppose a subscription service is scheduled for activation immediately after the year-end date. Management pressure to recognize a portion of revenue before activation may appear economically small at the individual-contract level. If repeated across hundreds or thousands of contracts, however, systematic premature recognition can materially alter reported growth.

Ethical discipline requires the same recognition criteria to be applied regardless of whether the resulting adjustment improves or reduces reported performance. Consistency under unfavorable circumstances is therefore an important indicator of accounting integrity.

7.2 Subscription Complexity and the Ethics of Estimation

Subscription contracts routinely contain judgments that cannot be resolved through simple arithmetic. Variable consideration provides a particularly important example. IFRS requirements recognize that estimated amounts should not be included without considering the risk of subsequent significant reversal. This accounting requirement also has a clear ethical dimension: estimates should reflect uncertainty rather than management's desired reporting outcome.

Stand-alone selling-price estimation presents a comparable problem. When products or services are not sold separately, companies may use adjusted market assessments, expected-cost-plus-margin approaches, residual techniques where appropriate, or other defensible estimation methods. The existence of methodological flexibility does not imply unrestricted discretion.

An ethically strong enterprise should establish a consistent hierarchy of evidence, document why a particular method was selected, back-test estimates where appropriate, and require approval before changing methodologies. Repeated changes in methodology that consistently increase current-period revenue should warrant governance scrutiny even where each individual change can be technically defended.

Contract modifications create an additional risk because commercial teams may regard upgrades, credits, discounts, or service changes as routine customer-management activities rather than accounting events. If these changes are not integrated into revenue-accounting systems, recognition schedules can diverge from contractual reality.

7.3 Governance, Incentives, and Reporting Integrity

The strong relationship constructed in the simulation reflects an important theoretical proposition: ethical accounting becomes more sustainable when supported by institutional controls. Individual professional integrity remains essential, but relying solely on individual resistance to organizational pressure is an inadequate governance strategy.

Revenue-linked incentive arrangements deserve particular attention. Compensation plans based heavily on quarterly recurring revenue, annual contract value, operating profit, or market-growth targets can create rational economic incentives for aggressive accounting judgments. The existence of incentives does not demonstrate manipulation, but it creates conditions under which independent review becomes more important.

Nelson, Elliott, and Tarpley's evidence regarding managerial earnings-management attempts and auditor responses reinforces the significance of structured incentives, materiality, and accounting-standard characteristics in actual judgment environments. Tutino and colleagues similarly connect the introduction of modern revenue requirements with the need to monitor industries in which earnings-management incentives interact strongly with revenue measurement.

Boards and audit committees should consequently understand subscription revenue at a level deeper than reported growth percentages. Governance review should include material contract liabilities, changes in performance-obligation judgments, unusual quarter-end transactions, manual overrides, major contract modifications, changes in stand-alone selling-price methodologies, variable-consideration adjustments, and significant revenue-related audit findings.

8. Conclusion

Subscription-based enterprises create substantial economic benefits through recurring customer relationships, predictable service models, scalable digital delivery, and long-term contractual arrangements. The same characteristics, however, separate billing and cash collection from accounting revenue and thereby create complex recognition judgments. Revenue may need to remain deferred even when the customer has paid in full because the enterprise continues to owe services under the contract.

Modern revenue standards provide a robust framework centered on customer contracts, performance obligations, transaction prices, allocation, and satisfaction of promised goods or services. Technical guidance alone, however, cannot guarantee ethical reporting. Subscription accounting frequently requires estimates and contractual interpretation, creating areas in which legitimate professional judgment can be influenced by compensation structures, growth expectations, debt considerations, reporting deadlines, or management pressure.

The present study therefore conceptualizes ethical revenue recognition as a combination of contract integrity, performance-obligation discipline, estimation neutrality, timing discipline, and disclosure transparency. The simulated analysis demonstrates how these dimensions can be converted into a measurable control index and empirically related to financial-reporting integrity. The synthetic correlation and regression results are illustrative rather than factual evidence regarding existing enterprises.

The broader conclusion is that ethical revenue recognition requires organizations to recognize economic performance rather than desired financial outcomes. Revenue should neither be accelerated to

create growth nor deliberately deferred to create hidden reserves or future earnings flexibility. Neutral reporting requires consistent accounting treatment whether the resulting numbers are favorable or unfavorable to management.

Subscription enterprises can therefore strengthen financial-reporting credibility by integrating accounting ethics directly into contract design, billing architecture, revenue automation, estimation processes, internal audit, external audit, management compensation, and board oversight. The most reliable revenue system is not simply one capable of producing technically sophisticated calculations; it is one capable of demonstrating why each material recognition judgment represents the underlying contractual performance faithfully.

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