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## Integrating Accounting Processes into Tax Management; a Process-Based Case Study of AP–AR–GL

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### Abstrac

The growing complexity of business transactions driven by digitalisation increases the need for effective integration between accounting processes and tax management. Many tax risks arise not from non-compliance, but from weaknesses in transaction classification, recognition, and process controls. This study examines accounting–tax integration using a process-based approach focused on Accounts Payable, Accounts Receivable, and the General Ledger. Employing a qualitative case study with document analysis, the study identifies tax risk points across transaction flows. Findings show that tax risks emerge mainly at early processing stages due to weak classification and broad account aggregation. The study proposes an integrated accounting–tax model emphasizing transaction-level tax attributes and structured reconciliation, supporting proactive tax risk management.

**Keywords:** accounting process integration; tax management; tax risk; accounts payable; accounts receivable; general ledger.

### INTRODUCTION

In contemporary business practice, corporate transactions have become increasingly complex as a result of business diversification, digital transformation, and the extensive adoption of integrated accounting information systems. Companies are no longer limited to conventional procurement and sales activities; instead, they are engaged in service-based transactions, cross-border payments, digital services, and multi-channel sales models. These developments demand accounting practices that are not only accurate for financial reporting purposes but also aligned with tax obligations inherently embedded in each transaction (Organisation for Economic Co-operation and Development [OECD], 2018).

Recent economic and taxation discussions suggest that a substantial portion of tax disputes and fiscal corrections arise not from intentional non-compliance, but from weaknesses in transaction classification and accounting–tax alignment. Indonesian business media have highlighted recurring audit themes in which discrepancies emerge between accounting records and the economic substance of transactions, particularly in service transactions and multi-channel sales activities (Bisnis Indonesia, 2022; Kontan, 2023). Similar concerns have been highlighted globally, where tax administrations emphasize that insufficient transaction-level controls and poor accounting data quality significantly increase tax risk exposure (OECD, 2021).

This phenomenon reflects a structural gap between accounting and tax functions within organizations. Accounting is often positioned primarily as a financial reporting mechanism, while taxation is treated as an administrative compliance obligation addressed near reporting deadlines. Such separation leads to reactive tax management, where tax issues are identified after transactions have already been recorded and consolidated. From a risk management perspective, this approach is inefficient because effective controls should be embedded at the transaction and process levels rather than applied through ex-post corrections (Committee of Sponsoring Organizations of the Treadway Commission [COSO], 2017).

Academic studies support the argument that tax risk is closely linked to the quality of accounting processes and internal controls. Hanlon and Heitzman (2010) argue that tax outcomes are driven by underlying accounting choices and transaction structures. Graham et al. (2014) further demonstrate that corporate tax planning behaviour is shaped by internal organisational processes, and that weak integration increases uncertainty and compliance costs. Despite these insights, empirical and conceptual studies that explicitly examine AP–AR–GL integration as a structured framework for tax management remain limited, especially in emerging market contexts such as Indonesia.

Accordingly, this study aims to analyse the integration of accounting processes within tax management using a process-based analytical approach. The research focuses on how AP, AR, and GL processes contribute to early identification, control, and mitigation of tax risk throughout the transaction cycle.

## **RESEARCH METHOD**

### **Research Design**

This study applies a qualitative case study approach with a descriptive–analytical design. Case study methodology is appropriate for examining complex organisational processes and internal control practices within real-life contexts (Yin, 2018).

### **Unit of Analysis**

The unit of analysis is the accounting process, focusing on AP, AR, and GL as integrated transaction cycles that produce tax-relevant data and influence income tax and VAT treatment.

### **Case Context**

The study is conducted on a single anonymised entity (“Entity A”), operating in a consumer durable goods business environment featuring domestic and cross-border procurement, multi-channel sales, and after-sales/warranty transactions.

### **Data Sources and Collection**

Data are derived from document analysis of accounting records, transaction documents, internal procedures, and regulatory references. Multiple sources are used to strengthen triangulation and credibility (Creswell & Poth, 2018). Process tracing is applied by following transaction flows from initiation to GL posting to identify control points and tax risk exposures (Mundy & Owen, 2013).

### **Data Analysis**

The analysis includes: (1) transaction mapping across AP–AR–GL; (2) identification of tax risk points; (3) development of an integrated accounting–tax model informed by evidence patterns and relevant literature (Bronkhorst, 2016).

## **RESULTS AND DISCUSSION**

### **Findings on Accounts Payable (AP) Process and Tax Risk**

The analysis of the Accounts Payable (AP) process reveals that tax risk primarily originates at the **transaction initiation and classification stage**, rather than at the payment or reporting stage. In Entity A, procurement transactions include a wide range of services such as installation, maintenance, logistics, information technology subscriptions, and professional services. These transactions carry different income tax withholding and VAT implications, yet are frequently recorded under broad expense accounts.

Consistent with prior findings by Hanlon and Heitzman (2010), the study observes that inadequate transaction classification at the AP level leads to ambiguity in tax determination, particularly for withholding taxes under PPh Articles 23 and 26. When service-type distinctions are not clearly captured at the invoice or purchase order stage, tax treatment decisions are deferred until reconciliation, increasing the likelihood of omission or misapplication.

Furthermore, documentation practices play a critical role. The findings indicate that incomplete supporting documents—such as unclear service descriptions or missing tax residency information for foreign vendors—limit the organization’s ability to substantiate tax treatment during audits. This supports the argument that tax risk is embedded in accounting documentation quality rather than solely in tax calculation procedures (Graham et al., 2014).

### **Findings on Accounts Receivable (AR) Process and VAT Exposure**

In the Accounts Receivable (AR) cycle, tax exposure is strongly influenced by **sales channel diversity**. Entity A operates multiple sales channels, including direct retail, distributors, and online platforms. Each channel exhibits different characteristics in terms of pricing mechanisms, promotional schemes, returns, and warranty handling.

The findings show that output VAT determination becomes complex when discounts, cashback programs, and bundling arrangements are not consistently reflected in accounting records. In several instances, promotional adjustments were recorded as marketing expenses rather than sales deductions, resulting in misalignment between revenue recognition and VAT calculation. This observation aligns with OECD (2018), which emphasizes that VAT risks increase in environments with complex pricing structures and digital sales channels.

The study also identifies that product returns and warranty replacements present recurring challenges. When warranty-related transactions are not clearly distinguished between goods replacement and service provision, VAT treatment becomes inconsistent. These findings support prior studies indicating that AR processes must incorporate tax logic to manage VAT exposure effectively, especially in consumer goods industries (Seetharaman et al., 2017).

### **Findings on General Ledger (GL) Posting and Tax Transparency**

The General Ledger (GL) serves as the consolidation point for AP and AR transactions and ultimately determines the visibility of tax-relevant information. The analysis reveals that **over-aggregation of tax-sensitive accounts** significantly reduces tax transparency. Expenses related to marketing, technical services, and outsourced labor were frequently grouped under generalized expense accounts, obscuring their tax characteristics.

This practice complicates tax reconciliation and increases reliance on manual adjustments during tax reporting. Consistent with COSO (2017), the findings indicate that control effectiveness deteriorates when critical information is not traceable at the account level. The absence of tax-specific account mapping also limits the organization’s ability to perform timely tax risk assessments. These results reinforce the notion that GL design is not merely an accounting issue but a key determinant of tax risk management effectiveness (Mundy & Owen, 2013).

### **Reconciliation Practices and Control Gaps**

Reconciliation analysis highlights that Entity A relies heavily on **post-period reconciliations** between accounting records and tax obligations. While reconciliations are performed for withholding taxes and VAT, they are largely corrective rather than preventive.

The findings indicate that reconciliations are most effective when transaction-level tax attributes are consistently captured in AP and AR processes. Without such attributes, reconciliations become manual, time-consuming, and prone to error. This observation is consistent with Bronkhorst (2016), who argues that tax risks are best addressed through process-based controls rather than through after-the-fact adjustments.

### **Integrated Accounting–Tax Management Model (Discussion)**

Based on the findings, this study proposes an **Integrated Accounting–Tax Management Model** centered on AP–AR–GL process alignment. The model emphasizes that tax outcomes are the result of cumulative accounting decisions made throughout the transaction lifecycle. Key elements of the model include:

1. **Tax Attribute Capture at Source**; Integrating tax-relevant attributes—such as service classification, vendor residency, and VAT applicability—into transaction initiation processes.
2. **Account Mapping Discipline**; Designing the chart of accounts to segregate tax-sensitive transactions, enabling transparency and reducing reliance on manual tax adjustments.

3. **Process-Level Controls;** Embedding tax considerations within standard operating procedures for procurement, sales, and accounting.
4. **Standardized Reconciliation Framework;** Shifting reconciliations from corrective tools to validation mechanisms that confirm the effectiveness of upstream controls.

This model aligns with existing literature that advocates for proactive tax risk management through accounting system design rather than reactive compliance strategies (Graham et al., 2014; OECD, 2021).

### Summary of Findings (Process-Based)

The key findings indicate that tax risk most frequently originates at the early stages of transaction processing, particularly within the Accounts Payable (AP) and Accounts Receivable (AR) cycles. These risks tend to intensify during General Ledger (GL) consolidation when account classifications are overly broad and tax-relevant attributes are not captured at the point of transaction initiation. To enhance analytical clarity and strengthen the evidential basis of the discussion, the findings are presented in the following evidence-based table.

**Table 1. Findings Matrix: AP–AR–GL Integration and Tax Risk Exposure (Entity A)**

<b>Process Area</b>
AP (Procure-to-Pay)
<b>Observed Pattern (Process Tracing)</b>
Service invoices are recorded under broad expense accounts, and service types are not consistently specified at the transaction entry stage.
<b>Typical Evidence Reviewed</b>
Purchase orders, invoice descriptions, goods receipt or receiving documents (where applicable), vendor master data.
<b>Tax Exposure / Risk Mechanism</b>
Misclassification of service types leads to incorrect withholding tax determination logic.
<b>Potential Tax Impact</b>
Under- or over-withholding of tax and increased likelihood of audit adjustments.
<b>Recommended Process Control</b>
Implementation of a standardized service taxonomy, mandatory “service type” fields at AP entry, and tax flagging mechanisms.
<b>Supporting Literature</b>
Hanlon and Heitzman (2010); Graham et al. (2014)
<b>Process Area</b>
AP (Cross-border / Digital Services)
<b>Observed Pattern (Process Tracing)</b>
Vendor residency status and the nature of services (subscription, royalty, or technical services) are not consistently captured.
<b>Typical Evidence Reviewed</b>
Vendor master records, contract summaries, invoices, internal procurement requests.
<b>Tax Exposure / Risk Mechanism</b>
Lack of residency and treaty evidence affects withholding tax classification and documentation readiness.
<b>Potential Tax Impact</b>
Higher audit exposure due to insufficient substantiation of tax treatment.
<b>Recommended Process Control</b>

Mandatory residency attributes, DAFT/Certificate of Residence (CoR) checklist, and contract tagging by service type.
<b>Supporting Literature</b>
OECD (2018); OECD (2021)
<b>Process Area</b>
AP (VAT / Input VAT)
<b>Observed Pattern (Process Tracing)</b>
Supporting VAT evidence and linkage to the General Ledger vary across vendors and service categories.
<b>Typical Evidence Reviewed</b>
Tax invoices or VAT evidence, supplier invoices, GL postings.
<b>Tax Exposure / Risk Mechanism</b>
Weak documentation linkage reduces traceability and increases the risk of disallowed VAT credits.
<b>Potential Tax Impact</b>
Disallowed input VAT credits and reconciliation gaps.
<b>Recommended Process Control</b>
Document completeness checklist, standardized GL linkage, and periodic validation of VAT documentation.
<b>Supporting Literature</b>
COSO (2017); Seetharaman et al. (2017)
<b>Process Area</b>
AR (Order-to-Cash)
<b>Observed Pattern (Process Tracing)</b>
Multi-channel sales result in inconsistent treatment of promotions, discounts, and cashback schemes.
<b>Typical Evidence Reviewed</b>
Sales invoices, promotional terms, credit memos, return documentation.
<b>Tax Exposure / Risk Mechanism</b>
Inconsistent treatment affects VAT tax base and revenue presentation.
<b>Potential Tax Impact</b>
VAT base mismatches and audit queries related to taxable amount determination.
<b>Recommended Process Control</b>
Standardized promotion classification rules and mandatory promo code mapping in sales systems.
<b>Supporting Literature</b>
OECD (2018)
<b>Process Area</b>
AR (Returns and Warranty Handling)
<b>Observed Pattern (Process Tracing)</b>
Warranty replacement documentation does not consistently distinguish between goods replacement and service provision.
<b>Typical Evidence Reviewed</b>
Return notes, service reports, replacement transaction records.
<b>Tax Exposure / Risk Mechanism</b>
Ambiguity leads to inconsistent VAT and revenue adjustment logic.
<b>Potential Tax Impact</b>
Uncertainty in VAT treatment and inconsistent financial disclosures.
<b>Recommended Process Control</b>

Warranty decision trees and standardized documentation distinguishing goods replacement from service activities.
<b>Supporting Literature</b>
Seetharaman et al. (2017)
<b>Process Area</b>
GL (Posting and Account Mapping)
<b>Observed Pattern (Process Tracing)</b>
Tax-sensitive transactions are aggregated within broad GL accounts.
<b>Typical Evidence Reviewed</b>
Chart of accounts, GL transaction details, account mapping documentation.
<b>Tax Exposure / Risk Mechanism</b>
Aggregation reduces tax transparency and increases reliance on manual reclassification.
<b>Potential Tax Impact</b>
Higher reconciliation burden and increased probability of audit adjustments.
<b>Recommended Process Control</b>
Redesign of chart of accounts with tax-sensitive account segmentation and formal mapping governance.
<b>Supporting Literature</b>
COSO (2017); Mundy and Owen (2013)
<b>Process Area</b>
Reconciliation (Income Tax and VAT)
<b>Observed Pattern (Process Tracing)</b>
Reconciliation activities are primarily corrective and require significant manual effort.
<b>Typical Evidence Reviewed</b>
Reconciliation files, GL extracts, withholding tax evidence, VAT documentation.
<b>Tax Exposure / Risk Mechanism</b>
Upstream weaknesses force downstream manual adjustments.
<b>Potential Tax Impact</b>
Higher error risk and delayed tax reporting.
<b>Recommended Process Control</b>
Shift toward preventive controls and implementation of standardized reconciliation templates.
<b>Supporting Literature</b>
Bronkhorst (2016); COSO (2017)

The evidence presented in Table X demonstrates that tax risk is not an isolated outcome of tax reporting activities, but rather a cumulative result of transaction processing decisions made throughout the accounting cycle. The findings indicate that weaknesses emerging at the early stages of Accounts Payable (AP) and Accounts Receivable (AR) processes tend to propagate and intensify during General Ledger (GL) consolidation, where overly broad account classifications further obscure tax-relevant information.

At the AP level, the recurring absence of consistent service classification and vendor residency attributes illustrates how tax risk originates at transaction initiation. When tax-relevant attributes are not captured at source, tax determination becomes deferred to later stages, increasing reliance on manual judgment during reconciliation. This pattern supports prior research suggesting that tax outcomes are embedded in accounting choices and transaction structures rather than determined solely at the compliance stage (Hanlon & Heitzman, 2010; Graham et al., 2014).

Similarly, the AR-related findings highlight the role of business complexity—particularly multi-channel sales, promotional schemes, and warranty handling—in shaping VAT exposure. Inconsistent documentation and classification across sales channels complicate the determination of the

taxable base and revenue presentation. These observations align with international guidance emphasizing that digitalization and complex commercial arrangements heighten VAT compliance risk when accounting systems lack process-level alignment (OECD, 2018).

At the GL level, the aggregation of tax-sensitive transactions into generalized accounts reduces transparency and limits the organization's ability to identify tax risk proactively. This finding reinforces enterprise risk management principles, which emphasize the importance of traceability and meaningful classification within operational data flows to support effective control (COSO, 2017). Consistent with ERP literature, the results also demonstrate that technological integration alone is insufficient to mitigate tax risk without disciplined governance and process configuration (Mundy & Owen, 2013; Seetharaman et al., 2017).

Overall, the table and accompanying analysis underscore the importance of adopting a process-based perspective in tax risk management. By examining AP–AR–GL processes as interconnected control points, the study illustrates how proactive tax risk mitigation can be achieved through early capture of tax attributes, disciplined account mapping, and standardized reconciliation procedures. This integrated view provides empirical support for shifting tax management from a reactive compliance function to a proactive component of internal control and enterprise risk management.

### **Discussion: Why These Findings Matter**

The AP findings demonstrate that the earliest stages of transaction processing are critical for tax risk control. When service-type identification is unclear at entry, tax determination becomes deferred and relies on manual judgement during reconciliation. This aligns with the view that tax outcomes are embedded in accounting choices and classification structures (Hanlon & Heitzman, 2010). The evidence patterns also support field findings that organisational processes shape the effectiveness of tax planning and compliance (Graham et al., 2014).

In AR, multi-channel selling creates complexity in VAT determination due to varying commercial schemes, such as discount structures, cashback mechanisms, bundling, and returns. OECD (2018) notes that digitalisation and complex transaction arrangements increase tax compliance risks, and the present findings illustrate how that risk materialises operationally through inconsistent documentation and classification across sales channels.

At the GL level, over-aggregation reduces tax transparency. Broad accounts obscure tax characteristics, increase manual effort during reconciliation, and weaken the organisation's ability to diagnose tax risk early. This supports ERM principles that control effectiveness requires traceability and meaningful classification structures embedded within operational data flows (COSO, 2017). The findings also align with ERP literature indicating that integration does not automatically eliminate compliance risk unless governance and control configuration are intentionally designed (Mundy & Owen, 2013; Seetharaman et al., 2017).

### **Proposed Integrated Accounting–Tax Management Model (Entity A)**

Based on the findings, the study proposes a model that reframes tax management as a process-integrated control system:

1. Tax attribute capture at source (AP/AR entry): service taxonomy, residency flags, promo codes, warranty decision tags.
2. CoA and mapping discipline: segmentation of tax-sensitive transactions to enable traceability.
3. Preventive controls and validation: documentation checklists, mandatory fields, and periodic control testing.
4. Standardised reconciliation: reconciliation becomes a validation tool rather than a corrective mechanism.

This model supports a proactive approach consistent with tax risk management literature and compliance guidance (Graham et al., 2014; OECD, 2021).

## **CONCLUSION AND IMPLICATIONS**

### **Conclusion**

This study examines the integration of accounting processes within tax management through a process-based case analysis of Accounts Payable (AP), Accounts Receivable (AR), and the General

Ledger (GL). The findings demonstrate that tax risk is not merely a consequence of non-compliance at the reporting stage, but is fundamentally embedded in transaction processing, accounting classification, and documentation practices throughout the accounting cycle.

The analysis reveals that weaknesses in transaction classification at the AP and AR levels—particularly for service procurement, multi-channel sales, promotions, and warranty-related transactions—significantly increase exposure to withholding tax and VAT risks. These risks are further amplified when tax-sensitive transactions are aggregated within broad GL accounts, reducing transparency and complicating reconciliation. Consistent with prior research, the study confirms that reactive tax management approaches relying on post-period corrections are less effective than proactive controls embedded within accounting processes (Hanlon & Heitzman, 2010; Graham et al., 2014).

By synthesizing empirical observations with established literature, this study proposes an Integrated Accounting–Tax Management Model that positions AP–AR–GL alignment as the core mechanism for tax risk control. The model emphasizes early capture of tax attributes, disciplined account mapping, and standardized reconciliation routines. In doing so, it reframes tax management as an extension of internal control and enterprise risk management rather than as a stand-alone compliance function (COSO, 2017; OECD, 2021).

### **Implications for Practice**

For practitioners, the findings underscore the importance of designing accounting processes with tax considerations embedded at the transaction level. Accounting and tax functions should collaborate in defining transaction categories, documentation standards, and chart-of-accounts structures that support accurate tax determination. Such integration reduces reliance on manual adjustments, enhances audit readiness, and improves the reliability of tax reporting.

Organizations operating in complex business environments—characterized by service procurement, digital transactions, and multi-channel sales—can particularly benefit from adopting a process-based integration approach. Embedding tax logic within AP and AR processes enables earlier risk identification and mitigates downstream compliance costs. These practical implications align with evidence that effective tax risk management depends on organizational processes rather than technical tax expertise alone (Mundy & Owen, 2013; Seetharaman et al., 2017).

### **Implications for Policy and Regulation**

From a regulatory perspective, the study suggests that tax compliance assessments should consider the quality of accounting processes and internal controls. Policies and audit frameworks that encourage transparency at the transaction and account-mapping levels may improve compliance outcomes more effectively than measures focused solely on penalties and enforcement. This is particularly relevant in the context of digital transactions and VAT on electronic commerce, where documentation quality and accounting traceability are critical (OECD, 2018).

### **Implications for Research**

Academically, this study contributes to the accounting and taxation literature by extending the discussion beyond compliance and calculation issues toward a process-based integration framework. It highlights AP–AR–GL processes as viable units of analysis for examining tax risk and compliance. Future research may build on this framework by conducting comparative case studies across industries or by incorporating quantitative measures to assess the impact of accounting–tax integration on compliance outcomes.

### **Limitations and Future Research**

This study is subject to certain limitations. As a qualitative case study, the findings are analytically rather than statistically generalizable. Additionally, the analysis focuses on a single organizational context. Future studies may explore multiple cases or adopt mixed-method approaches to further validate and refine the proposed integration model.

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