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Governance in the Procure to Pay cycle: internal controls, compliance, and risk management in integrated financial operations.

Governance in the Procure-to-Pay Cycle: Internal Controls, Compliance and Risk Management in Integrated Financial Operations

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Summary

The Procure to Pay (PTP) cycle encompasses purchasing decisions, supplier registration and relationship management, invoice processing, payments, travel and expenses, and other corporate disbursement mechanisms. Because it spans different areas and systems, the process occupies a sensitive position in financial governance. This article examines how internal controls, segregation of duties, data quality, indicators, and automation can be articulated to reduce risks without compromising operational fluidity. The research utilizes a structured narrative review of traceable institutional books, standards, and studies, with emphasis on COSO, PCAOB, the Federal Reserve, and the Association for Financial Professionals. The analysis shows that PTP maturity depends on the integration of process design, managerial accountability, auditable evidence, exception management, and the judicious use of technology.

Keywords: Procure to Pay; accounts payable; internal controls; compliance; financial governance; risk management.

Abstract

The Procure-to-Pay (PTP) cycle encompasses purchasing decisions, supplier onboarding and management, invoice processing, payments, travel and expenses, and other corporate disbursement mechanisms. Because it crosses multiple functions and systems, the process occupies a sensitive position in financial governance. This article examines how internal controls, segregation of duties, data quality, performance indicators, and automation can be combined to reduce risk without undermining operational flow. The study adopts a structured narrative review of traceable books, standards, and institutional research, with emphasis on COSO, PCAOB, the Federal Reserve, and the Association for Financial Professionals. The analysis indicates that PTP maturity depends on the integration of process design, managerial accountability, auditable evidence, exception management, and the judicious use of technology.

Keywords: Search to Pay; accounts payable; internal controls; compliance; financial governance; risk management.

1. Introduction

Procure to Pay is no longer understood merely as an administrative sequence between the

Requesting a purchase and settling an obligation. In complex organizations, the cycle

Connects procurement, supplier registration, receiving, document validation, accounting,

treasury, travel and expenses, and corporate cards. Davenport (1993) already observed that processes

Businesses need to be analyzed across the board, because their performance rarely coincides.

within the formal boundaries of the departments.

This reading is especially important in accounts payable. A flaw created at the beginning of the flow can...

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It only appears at the time of payment, when the possibility of correction is lower and the cost of
The exception is greater. COSO (2013) argues that internal controls should be linked to
Objectives, risks, information, and monitoring of the organization. Applied to PTP, this principle
shifts attention from isolated checks to a distributed control architecture across
the whole process.

The payments environment has also made the issue more sensitive. Research from the Association for
A survey conducted by Financial Professionals (AFP, 2025) with 521 corporate professionals found that 79%
of the responding organizations experienced attempted or actual instances of payment fraud in 2024.

Given this context, the objective of this article is to discuss six dimensions of PTP governance:
end-to-end integration, internal controls, master data, corporate disbursements, indicators and
automation.

2. Methodology

The research was developed through a structured narrative review. Sources were selected.
academics, reference books, professional standards, and institutional research related to
business processes, internal controls, shared services, payments and transformation
operational.

The selection prioritized materials whose authorship, responsible institution, date, and content could be determined.
identified and tracked. Among the conceptual bases are Davenport (1993), Hammer and Champy
(1993), Bergeron (2003), Ulbrich (2006), the COSO Internal Control - Integrated Framework (2013)
and the PCAOB AS 2201 standard.

For contemporary data on payment risk, the AFP Payments Fraud and
Control Survey Report 2025, whose results refer to the year 2024. Information about the
Payment infrastructure issues were addressed in the 111th Annual Report of the Board of Governors.
of the Federal Reserve System.

The analysis was organized by governance objectives, not by specific technology. This option
It reduces the risk of turning the study into a description of tools and allows for discussion of principles that...
They remain relevant in different business structures.

The findings were grouped into six thematic areas. Within each area, the aim was to relate the literature.
of processes, control frameworks and recent evidence, distinguishing conceptual recommendations
from empirical results.

Finally, the intention is not to establish a universal PTP model nor to replace accounting valuations.
tax, legal, or auditing processes. The purpose is to offer a critical overview of how these processes work.

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Integrated financial systems can combine efficiency, traceability, and control discipline.

3.1 PTP as an end-to-end process

Davenport (1993) defines a process as a structured set of activities designed to produce
a result for a client or market. This perspective is useful to PTP because it highlights that the
The bottom line doesn't belong exclusively to purchasing, accounts payable, or treasury. The quality of
The cycle depends on the interfaces between these functions.
Hammer and Champy (1993), when discussing process reengineering, criticize structures in which
Activities are optimized locally without attention to the complete workflow. In PTP, this fragmentation
This can occur when one area measures only purchase speed, another only invoice volume, and...
Another option is simply payment processing, without a common quality metric.
An end-to-end approach requires clear ownership of the process. This does not mean concentrating
all decisions within a single role, but identifying responsibilities, escalation criteria and
control points. Bergeron (2003) notes that shared services structures depend on
Explicit governance is needed to ensure that standardization does not lead to detachment from the business.
It is also necessary to distinguish between standard and exception workflows. Invoices with purchase orders, receipts
Consistent data may follow a different path than that intended for discrepancies.
Separation allows for focusing human analysis where risk and complexity are greatest.
An integrated view brings PTP closer to cash management. Due dates, payment terms,
The concentration of disbursements and outstanding payments affects financial predictability. The annual report of
Federal Reserve (2025) shows the coexistence of different payment infrastructures, such as ACH,
Fund transfers, checks, and instant payments, reinforcing the need for processes.
capable of operating in diverse environments.
Thus, end-to-end architecture is not just a way to organize tasks. It creates a foundation.
so that purchase, registration, approval, and payment decisions are analyzed as parts of a
same financial system.

3.2 Internal controls, segregation of duties and evidence

COSO (2013) organizes internal control into five components: control environment, assessment
risk management, control activities, information and communication, and monitoring. In the PTP, these
Components appear from defining authority levels to reviewing payments and exceptions.
PCAOB, in AS 2201, defines internal control over financial reporting as a process intended

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to provide reasonable assurance regarding the reliability of the information and adequate authorization of income and expenses. Although the standard is intended for auditing purposes, its concepts help to...
To understand why documentation and traceability are relevant in disbursement flows.
Segregation of duties is a classic example. When registering suppliers, making bank changes,
Invoice approval and payment release become excessively concentrated, increasing the risk.
of error or fraud. The separation needs to exist both in the organizational design and in the profiles of access to systems.

Preventive and detective controls serve different functions. PCAOB itself (AS 2201)
recognizes this complementarity: some controls seek to prevent the event; others seek to
Identify it after it has occurred. In PTP, systemic blockages can coexist with reconciliations.
Exception reviews and subsequent analyses.
Evidence of implementation is equally important. A written policy does not, by itself, demonstrate that...
The control process occurred. Logs, electronic approvals, supporting documents, and review records.
They allow for the reconstruction of the decision and increase auditability.
Therefore, internal control should not be understood as a bureaucratic layer added at the end.
When incorporated into the process design, it can reduce rework and make exceptions more manageable.
visible, while simultaneously preserving speed and safety.

3.3 Vendor master data and information integrity

The quality of PTP starts before the first invoice. Registration, banking and tax data of
Suppliers feed data into subsequent stages; if this data is incomplete or inconsistent, the failure occurs.
It spreads through the process. Davenport (1993) relates process innovation to information quality.
that supports the activities.
Bank changes deserve special attention. AFP (2025) reported that business email
Compromise remained the primary avenue for attempted or actual payment fraud.
cited by 63% of respondents. This data reinforces the need for independent validation when
Sensitive instructions are modified.
Vendor impersonation also gained relevance in AFP research (2025). This type of occurrence
This demonstrates that a seemingly legitimate request can exploit existing business relationships.
Confirmation procedures through previously validated channels reduce dependence on content.
from a single message.
Data integrity also affects automation. Matching, routing, and validations depend on it.
Consistent identifiers. Duplicates or incomplete fields can transform a

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Automation tool for accelerated exception generation mechanism.

Master data governance includes periodic review, deactivation of obsolete records, and separation.

between requesting and approving critical changes. These procedures can be measured by

Indicators of duplication, completeness, and onboarding time.

Therefore, supplier registration is not a peripheral task. It functions as a control mechanism.

preventive and as informational infrastructure of the PTP, influencing payment, compliance,

Automation and analytical capabilities.

3.4 Payments, T&E and corporate cards

Payments to suppliers, travel and expenses, and corporate cards drive decision-making.

Operational aspects related to resource outflow. Although they have their own rules, these areas share...

Principles of authorization, documentation, classification, and monitoring.

AFP research (2025) shows that exposure to fraud remains high: 79% of participants

They reported attempts or occurrences in 2024. Checks were the instrument most frequently subject to such attempts.

Fraud was cited by 63% of respondents. These results do not exclusively describe accounts a

They pay, but they also assess the risk environment in which corporate disbursements are executed.

In T&E, policies need to reduce ambiguities without hindering legitimate situations. Categories

Clear documentation, limits, and approval workflows make expenses comparable and facilitate analysis.

later. The information generated can support negotiations with suppliers and policy reviews.

Corporate cards increase agility, but require their own controls. Limits, usage profiles,

Reconciliations and documentation need to be aligned with financial policy. The balance between controls

The preventive and detective measures described by the PCAOB are also applicable to this context.

Urgent payments represent another point of attention. The urgency may be legitimate, but not

traceability should be eliminated. Frequent exceptions should be classified and analyzed, as they may

to reveal flaws in planning, registration, or approval.

An integrated disbursement policy allows you to treat suppliers, employees, and cards under one umbrella.

Common principles. This consistency reduces gaps and clarifies the responsibility of each party.

participant in the process.

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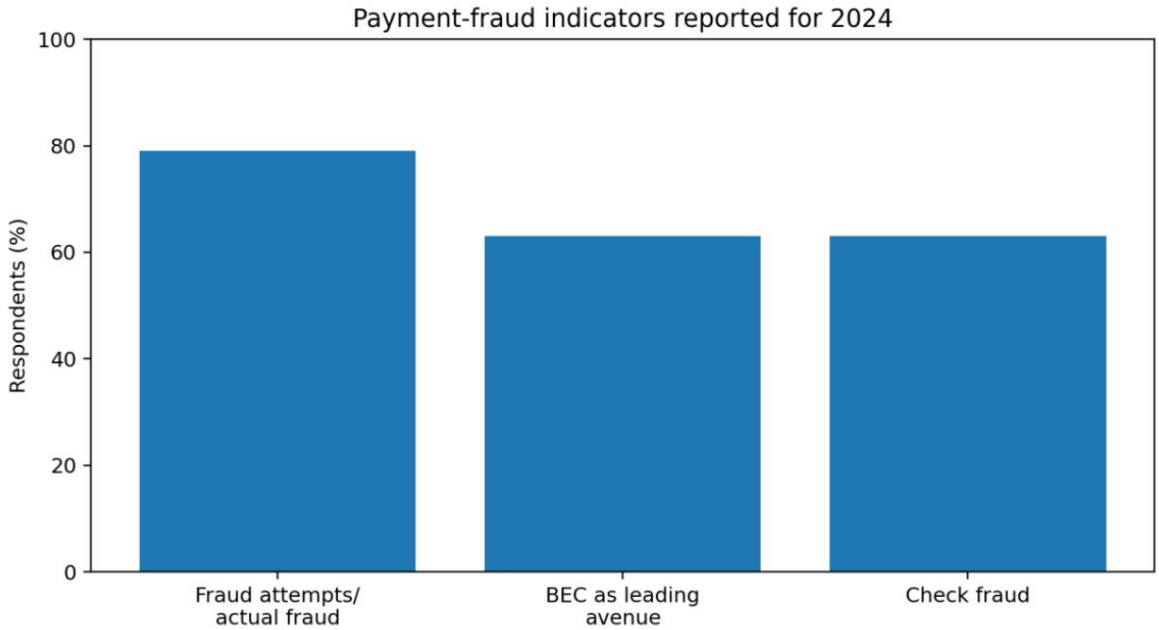


Figure 1. Selected indicators of payment fraud for 2024. Source: [Company Name]

own based on AFP (2025).

3.5 KPIs, SLAs and exception handling

PTP management requires measures that represent capacity, quality, and risk. Volume

Processed, cycle time, on-time payments, backlog, blocked invoices, old orders, and rate.

Exceptions are examples of indicators that help to make problems visible.

Bergeron (2003) highlights the role of service level agreements in shared structures.

However, an SLA is only useful when it clearly defines the start date, end date, responsibilities, and conditions.

that interrupt the counting of the deadline.

Speed indicators need to be combined with quality metrics. Reduce average time.

Processing without considering rework can produce a false improvement. Ulbrich (2006) warns

Shared services initiatives may repeat the limitations of reengineering projects.

when they prioritize structure without understanding the process.

Exception analysis is particularly valuable. A blocked invoice doesn't just represent a...

Pending; it contains information about the cause of the deviation. Classifying reasons allows for identification.

suppliers, areas or stages that concentrate rework.

SLAs must also respect governance. If the operation is awaiting approval from the requesting area,

The total time cannot be interpreted as solely reflecting accounts payable performance. Separate

Internal and external timing improves diagnosis and accountability.

KPIs become governance tools when they trigger action. The dashboard should lead to a...

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discussion about cause, responsible party, deadline and expected result, preventing the measurement from becoming Activity disconnected from improvement.

3.6 Automation and operational intelligence with control

PTP automation can encompass document capture, workflows, matching, routing,
Electronic payments and data analysis. Davenport (1993) already linked information technology.
He acknowledged the possibility of redesigning processes, but warned that the value does not lie in technology alone.
Automating an unstable process tends to reproduce inconsistencies on a larger scale. Before that
The implementation, inputs, rules, exceptions, and responsibilities need to be understood.
Logic brings digital transformation closer to the classic discipline of process design.
In 2024, COSO published specific guidance on internal controls in robotic automation.
processes. The publication reinforces that RPA needs to be integrated into the governance and control structure.
including responsibilities, risks and monitoring.
Automated controls can consistently apply rules and generate execution trails.
At the same time, they create new risks related to parameterization, credentials, interfaces, and changes to
The fact that a control system is automatic does not eliminate the need for supervision.
Operational intelligence emerges when logs and indicators are used to understand patterns.
Time per stage, recurrence of exceptions, and concentration of pending items can support prioritization and
Resource allocation.
Thus, the most sustainable transformation combines technology, process, and people. Automation should
reduce repetitive effort and enhance analytical capacity, while increasing responsibility for decisions,
Exceptions and controls remain clearly assigned.

4. Conclusion

PTP occupies a critical position because it connects purchasing decisions, obligations, disbursements, and records.
Financial. Its performance cannot be evaluated solely by the volume of transactions processed.
The literature on processes demonstrates that functional fragmentation tends to obscure causes and transfer information.
problems between areas. The end-to-end view offers a more consistent way to assign
Responsibility and measuring results.
The COSO and PCAOB frameworks show that internal control involves design, execution,
Information and monitoring. In the PTP, this translates into levels of authority, segregation, evidence, and reconciliation.
and structured exception handling.

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Master data quality acts as a preventative control. Reliable information from
Suppliers reduce errors, support automation, and make sensitive changes more traceable.
The fraud environment documented by AFP in 2025 reinforces the need for vigilance regarding payments.
continuous. The answer, however, should not be the indiscriminate multiplication of approvals, but rather...
A combination of controls proportionate to the risk.
Indicators and SLAs contribute when they balance speed, quality, and compliance. Metrics
Without root cause analysis, you can improve numbers without improving the process.
Automation increases capacity and consistency, but it needs to be governed. Systems can execute
rules; the organization remains responsible for the quality of these rules, for access, and for
exceptions.
It is concluded that the maturity of the PTP depends on the integration between governance, data, controls,
People and technology. Financial operations become more robust when efficiency and control are...
treated as complementary dimensions of the same design.

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