ICEBEF 2026 - 18 November 2026

Internal Audit Capability Development after IACM Self-Assessment:
Process Evaluation, Constraints, and Institutionalization at Perum LPPNPI (AirNav Indonesia)

Andi Pransius Perangin-angin · Purwatiningsih
Master of Accounting
Faculty of Economics and Business
Universitas Indonesia

BACKGROUND

Capability Assessment Does Not Guarantee the Institutionalization of Practice

Formal establishment of an internal audit function does not necessarily ensure adequate capability.

Arena & Azzone (2009); Abbott et al. (2016)



Capability Assessment

The Internal Audit Capability Model (IACM) identifies current conditions and internal audit development needs.

IIARF (2009)



Follow-up Actions

Identified needs call for follow-up actions and implementation in work practices.



Institutionalization

Practices need to be integrated into work routines, with evidence of recurrence across periods.

Slaouti (2021)

Research Context: Internal Audit Division (IAD), Perum LPPNPI (AirNav Indonesia), an Indonesian state-owned enterprise

2023 — SELF-ASSESSMENT

Level 2

Infrastructure

Identified development needs toward Level 3 (Integrated)

→

2023–2026 — FOLLOW-UP DEVELOPMENT

Retrospective Tracing

Follow-up actions addressing the identified development needs

Data collected in 2026

Research Problem

How are needs identified through the self-assessment followed up and developed into organizational work practices?

RESEARCH GAP

IACM Research Needs to Examine Post-Assessment Follow-up Developments



Previous Studies

Have largely focused on:

- Capability levels and Key Process Area (KPA) fulfillment
- Capability improvement strategies
- Factors and barriers to development

Wua et al. (2020); Firmansyah et al. (2022); Airlangga & Rossieta (2023)



Research Gap

Less is known about how development needs identified through self-assessment progress differently over time.

This is particularly relevant when follow-up actions within the same internal audit function show uneven progress.

This Study's Approach

01 

Formalization

Availability of formal rules

02 

Implementation

Execution of follow-up actions

03 

Integration

Evidence of use in work routines

Research Objective

To map follow-up actions, assess their development status, and identify conditions associated with differences in progress across initiatives.

CONCEPTUAL FRAMEWORK

Three Complementary Perspectives for Understanding Internal Audit Capability Development



WHAT?

IACM

Identifies internal audit capability development needs.

2023 self-assessment baseline



WHY?

Institutional Theory

Helps understand why initiatives develop differently through the relationship between formal rules and organizational practice.

Meyer & Rowan (1977);
Burns & Scapens (2000)



HOW?

Dynamic Capabilities Perspective

Traces how development needs are recognized, addressed, and integrated into work routines.

Sensing - Seizing - Transforming

These perspectives are used together to assess

The Development of Follow-up Actions



Formalization



Implementation



Integration into Work Routines

References: The Institute of Internal Auditors Research Foundation (2009); Meyer & Rowan (1977); Burns & Scapens (2000); Teece (2007).

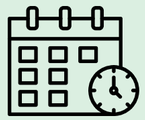
METHODOLOGY

A Qualitative Case Study with Retrospective Tracing (2023–2026)



Research Design

An embedded single-case study at the IAD of Perum LPPNPI.



Study Period

Retrospective tracing of developments from 2023 to 2026.



Unit of Analysis

Each follow-up initiative arising from the IACM self-assessment.

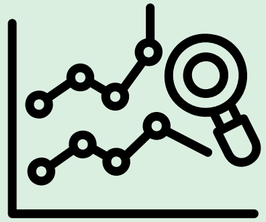


Data Collection

10 Informants

6 from IAD and 4 from outside IAD.

9 semi-structured interviews, 1 written response, and document analysis.
September 14 – October 5, 2026



Data Analysis

Interactive model of Miles et al. (2014)

1. Chronological tracing
2. Evaluation across three dimensions
3. Cross-initiative comparison
4. Theoretical interpretation



Trustworthiness and Researcher Position

- Source and method triangulation, member checking, and an audit trail.
- The researcher is an IAD insider; proximity to the case requires careful management through cross-checking evidence.



Two Comparator Initiatives

ITMS INSIGHT and ASIAP/SAP (existing corporate systems) were used as comparators to examine variations in development, not to demonstrate successful institutionalization.

MAPPING DEVELOPMENT NEEDS

From the 2023 Self-Assessment to Capability Development Initiatives

2023 Self-Assessment Baseline

Level 2

Infrastructure

→

Level 3 Statements

89

59 Met
30 Not Yet Met

→

Identification & Reconciliation

2023 self-assessment working papers

↓

Confirmation by the 2023 self-assessment team leader

↓

Content-based reconciliation

→

17

Development Needs

→

9

Development Initiatives

17 development needs grouped into 9 initiatives



2 Comparator Initiatives — Analyzed Separately

ITMS INSIGHT and ASIAP/SAP

RECONCILIATION NOTES

Statements were categorized into evaluated development needs, comparator initiatives, and statements outside the scope of evaluation.

This study traces follow-up actions from the 2023 self-assessment; it does not reassess IAD's capability level in 2026.

RESEARCH FINDINGS

Follow-up Actions Show Different Patterns of Development

Development Pattern	Initiatives	Empirical Evidence
1. Practice Precedes Formalization	Advisory; risk-based annual audit planning; coordination with BPK, BPKP, and external auditors	Advisory conducted; draft guideline under review. Risk-based planning underway; no specific formal rules. Coordination occurs; no formal mechanism.
2. Formal Rules Exist, but Implementation Varies or Remains Partial	IAD–Risk Management coordination; competency fulfillment	Risk profiles evaluated periodically; Composite Risk/RMI as needed. Staff rotation suboptimal; CISA credentials not yet held.
3. Initiated but Not Yet Completed	Feedback mechanisms; reward mechanisms; internal audit application	Feedback and reward mechanisms under review and approval. Application developed incrementally with the IT function.
4. Specific Follow-up Actions Not Yet Implemented	QAIP; formal coordination mechanisms with BPK, BPKP, and external auditors; Audit Committee reporting procedures	QAIP follow-up not implemented; external support plans affected by BPKP availability. Related coordination/reporting occurs; specific follow-up actions not implemented.

Comparators — Already Used in Practice: ITMS INSIGHT and ASIAP/SAP. Evidence of recurrence across periods remains limited.
Note: Coordination with BPK, BPKP, and external auditors occurs in practice; the specific follow-up to establish formal mechanisms has not been implemented.

Formal rules alone are insufficient indicators of capability development. Evidence of implementation, integration into work routines, and recurrence across periods is also required.

CONDITIONS AFFECTING DEVELOPMENT

Differences in Progress Are Associated with Conditions Faced by Each Initiative

Supporting Conditions



Management support and internal commitment
Support development efforts broadly, including initiatives still in progress.

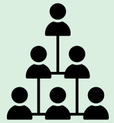


Availability of corporate systems
ITMS INSIGHT and ASIAP/SAP have been used in IAD activities, utilizing existing corporate systems.



Regulation
Can increase attention to particular development needs, such as QAIP.

Constraining Conditions



Multi-level review and approval
Prolongs the completion of formalization.



Limited personnel and workload demands
Restrict capacity for development activities beyond core audit assignments.



Limited specialist credentials
Restrict the availability of personnel for assignments requiring specialized expertise.



Dependence on other units and external parties
Completion depends on the IT function or external parties, such as BPKP.

Notable Comparison



ITMS INSIGHT and ASIAP/SAP
Existing corporate systems → already used in IAD activities.



Internal Audit Application
Requires joint development with IT → still under development.

Management support is a general condition but does not sufficiently explain differences in progress across initiatives.

THEORETICAL INTERPRETATION

Development Needs Have Been Identified, but Not All Responses Are Integrated into Practice



SENSING

The 2023 IACM self-assessment helped IAD identify capability development needs.



SEIZING

Responses have begun through drafting, decision-making, training activities, and requests for support.



TRANSFORMING

Application development and efforts to integrate changes into work routines are underway, but not all responses have become integrated and recurring practices.

Where Progress Stalls

Completion of formalization • Resource availability • Specialist credentials • Authority outside IAD

Sensing and seizing may occur without equivalent progress in transforming.

Comparison with Maryani (2017)

MARYANI (2017) - GOVERNMENT INTERNAL AUDIT UNITS (APIP)

IACM institutionalization was primarily driven by coercive pressure from BPKP as the lead agency and presidential directives.

THIS STUDY — PERUM LPPNPI

Regulation influences specific development needs but is not the dominant explanation. The role of external parties varies across contexts and needs.

Identifying needs and initiating responses do not guarantee their integration into recurring organizational routines.

CONCLUSION

Capability Development Should Be Assessed Through Implementation and Consistency in Practice

Main Conclusion

Follow-up actions from the IACM self-assessment have progressed unevenly across formalization, implementation, and integration into work routines.

Academic Contribution

- Extends the focus beyond capability assessment to capability development and institutionalization.
- Highlights variations in progress across initiatives within a single internal audit function.

Practical Implications

- Complete outstanding follow-up actions.
- Formalize practices already in place.
- Document the use of practices across periods.

Limitations and Future Research

A single-case study with a retrospective approach and limited evidence of recurrence across periods. Future research could use longitudinal observation in other organizations.

Capability development should be assessed not only by the existence of formal rules, but also by implementation and consistency in practice.

Thank You

Andi Pransius Perangin-angin · Purwatiningsih
Master of Accounting, Faculty of Economics and Business
Universitas Indonesia

andi.pransius@ui.ac.id