



Layered Process Audits (LPA): Building Accountability into Quality Control

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What is a Layered Process Audit (LPA)?



Structured Audit System

A formalized system where **multiple management levels** audit the same critical process.



Process Discipline

Ensures rigorous process consistency, consistency, promotes discipline, and facilitates early detection of potential errors before they become defects.



Industry Standard Alignment

Originally utilized in the automotive sector, LPAs align directly with global quality requirements like **IATF 16949** standards.

LPAs fundamentally build accountability and reinforce strict adherence to established standard work practices across the organization.

The Mechanism: How LPAs Create Verification Layers

LPAs function as a cascade of verification, ensuring that not only is the process followed, but also that previous verification steps were effective.

Level 1: Operators

Perform daily, frequent checks focused on tool settings, material material correctness, and ensuring initial steps are followed.
followed.

Level 3: Managers & Executives

Confirm overall process adherence, review the integrity of audit completion, and check the effectiveness of corrective actions.

Level 2: Supervisors

Review the operator's compliance and standard work adherence, typically performed performed weekly to reinforce discipline.

- Audits are conducted by staff from multiple organizational levels at set intervals.
- Checklists are brief, highly focused, and centered on specific behaviors and high-risk process steps.
- Each layer serves to verify the successful execution and compliance confirmed by the preceding layer.
- All identified findings must be tracked, analyzed for root cause, and resolved with prompt corrective action.



Key Benefits of Adopting Layered Process Audits

LPAs move quality control from a reactive function to a proactive cultural imperative.



Culture of Accountability

Embeds quality ownership at every level of the organization, fostering genuine continuous improvement.



Proactive Error Prevention

Significantly reduces the incidence of recurring process failures and prevents costly quality escapes reaching the customer.



Enhanced Communication

Forces necessary interaction and information flow across various departments and operational silos.



Real-Time Performance Data

Generates immediate and actionable metrics for monitoring process health and audit completion rates.

- ❏ LPAs directly support robust compliance, especially for global quality management system requirements (e.g., requirements (e.g., ISO/IATF), by proving documented adherence to critical procedures.

Systematic Implementation Steps for LPA Success



Identify Critical Processes

Determine which processes are high-risk or most prone to variation and require layered oversight.



Develop Focused Checklists

Create checklists that are concise (3-5 items) and concentrate on observable behaviors, not just documentation.



Train All Auditors

Ensure auditors at every level understand their specific audit objectives and the importance of professional feedback.



Define Frequency & Ownership

Establish clear rules on how often each layer must audit and who is accountable for completing them.



Track, Resolve, and Analyze

Use the audit results to drive immediate corrective actions and perform root cause analysis on recurring findings.

Implementation Tip: Leverage digital LPA solutions (e.g., EASE, Intouch) to automate scheduling, simplify data tracking, and tracking, and accelerate analysis and reporting.

References and Further Reading

For a deeper dive into Layered Process Audits, consult the following authoritative guidelines and publications:

- Automotive Industry Action Group (AIAG). **Layered Process Audits Guidelines (LPA-1)**.
<https://blog.aiag.org/detail-and-examples-promote-more-effective-layered-process-audits.com>
- General Motors. **LPA Manual (Current Edition)**.
<https://plexusintl.com/us/blog/understanding-cqi-8-and-layered-process-audits-a-beginners-guide/>
- International Automotive Task Force (IATF). **IATF 16949:2016 – Automotive Quality Management System Standard**.
<https://www.aiag.org/expertise-areas/quality/iatf-16949-2016.com>
- EASE Inc. **Layered Process Audit Best Practices Whitepaper (2022)**.
<https://www.iatfglobaloversight.org/oem-requirements/customer-specific-requirements.com>