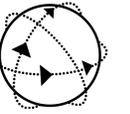


Developing a Robust Self Audit



Internal Audits are one of the most valuable
tools companies can use to improve

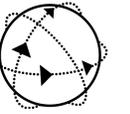
ASA 2022 Conference



Agenda

- *What is an Audit*
- *Why Self- Audits are Important*
- *Common pitfalls: why audits fail to deliver results*
- *Key Elements in designing a robust audit system*
 1. *Evidence based Audit Systems*
 2. *Accountability Based Audit systems*
 3. *SWOT and Risk Based Audit Systems*
 4. *Visible and incognito Audit Systems*
 5. *Lean & Streamlined Audit Systems*
- *What works best and what we recommend*

Q & A

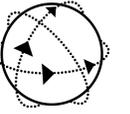


What is an audit?

- An audit is an information gathering activity to determine whether actual work practice and the intended results comply with the documented management system requirements
- Audits answer a very important sustainability question : Can you prove that you are following your process?
- Audits can identify Strengths, Weaknesses and gaps, Opportunities for improvement and potential Threats & liabilities to your organization

Audits describe the state of business management system

Audit Exercise

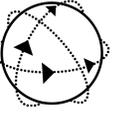


What do you like or Dislike about audits

| Likes | Dislikes |
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Audits Could be fun!

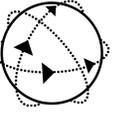
Why Self Audits are Important?



- Self-Audits aka Internal Audits are **mandatory** if you maintain and are registered to any international standard like AS/ ISO ASA100 or any other industry required or Government Regulated Standard
- Aerospace customers require a robust self audit system
- Easily pass toughest regulatory agency audits if you have a solid internal audit system
- If you are detailed and strict with your internal systems, escapes won't happened and your customers will be satisfied

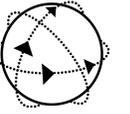
Robust Self Audit system is critical for customer satisfaction and retention

Common Pitfalls – Why audits fail to deliver results



- Most self-audits are conducted in a hurry right before a 3rd party audit
- Audit Schedule is not designed for effective results
- Auditors are not properly trained and conduct superficial audits
- Auditor assignments are not based on the classical turtle diagram
- Internal issues, risks, evidence and comprehensive assessment is missing
- Not enough value packed into the internal audits

Poorly designed audit program will lead to repeated system failure and embarrassment



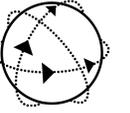
Audit Exercise

What are some audit pitfalls and undesirable effects for your organization

| Pitfalls | Effects |
|----------|---------|
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Audit Pitfalls

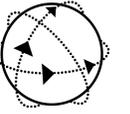
Robust Audit system designs



1. Evidence based audit Systems
2. Accountability based Audit Systems
3. SWOT and Risk Based Audit Systems
4. Visible and Incognito Audit Systems
5. Lean and Streamlined Audit Systems

Best Audit Systems will deliver 100% Positive Results no matter when the system is tested

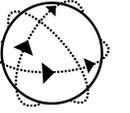
Audit Exercise



What audit system do you follow at your company

| Audit System | Benefits |
|---------------------|-----------------|
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Existing Audit System at your Company

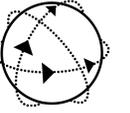


Evidence based audit Systems

What are Evidence Based audit systems

- This audit protocol Insists on obtaining evidence for all the “Shall” in the standard
- Very thorough and robust
- Complies 100% with the standard
- Very cumbersome and sometimes annoying for the auditee!

Best Audit Systems will deliver 100% Positive Results no matter when the system is tested

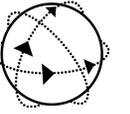


Evidence based audit Systems

Why Choose Evidence Based audit systems

- Records evidence for all the “Shall’s” in the standard
- Thorough and robust assessment of the QMS
- 100% compliance to the standards and requirements

Best Audit Systems will deliver 100% Positive Results no matter when the system is tested

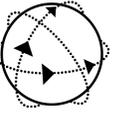


Evidence based audit Systems

How to design evidence based Self Audit systems

- List **all the requirements** in an excel format
 - All requirements include Standards, Regulatory, Customer and Company internal
- Have the auditors collect evidence for each one of the listed requirement
- As much as possible use industry standard checklists to make it easy for yourself
- Audit thoroughly, document profusely, and produce a comprehensive & Concise audit report

Realize time is of essence: investing some time for evidence based audit could mean being well prepared for any 2nd or 3rd party test

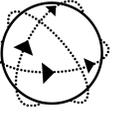


Evidence based audit Systems

Pitfalls and risks

- Resource heavy
- Time consuming
- Rigid design
- Could prove to be cumbersome

Watch out for the time constraint and resources you may need to spend to complete a thorough audit

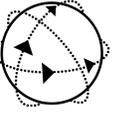


Evidence based audit Systems

Benefits and Results

- 2nd and 3rd party auditors love this type of self- audit
- This type of self audit produces 100% compliance to requirements
- Depends on the standards for the design
- Detailed documented state of QMS

Realize time is of essence: investing some time for evidence based audit could mean being well prepared for any 2nd or 3rd party test



Evidence based audit Systems

Examples of Checklists

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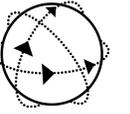
Self-Audit Checklist

Page 8

| ASA-100 Standard | QM Section/Page | Procedures | Work Instructions | N/A | Notes | Comments | Compliant | Non-compliant |
|--|-----------------|------------|-------------------|-----|-------|----------|-----------|---------------|
| <p>C. All training, both formal (classroom) and on-the-job training (OJT), shall be documented and the records shall be maintained for all employees who underwent training. Training records shall be retained for at least two years after the employee has left employment with the company. Each training record shall include:</p> <ul style="list-style-type: none"> •A description of the training; •Date(s) and length of instruction; •Name of the student; •Name of the person (instructor) and organization conducting the training (the organization may be the accredited organization itself, such as when OJT is provided); •Any additional information required by law or regulation. | | ✓ | | | | | ✓ | |

Use the checklist that works best for your QMS

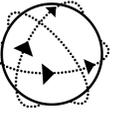
Audit Exercise



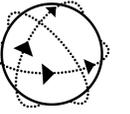
What are some Benefits of Evidence Based Audit Systems

| Benefits | Effects |
|-----------------|----------------|
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Benefits of Evidence Based Audits



Accountability based audit Systems

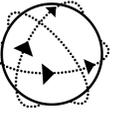


Accountability based audit Systems

What are Accountability Based audit systems

- Accountability based audit systems focus on 360 degrees assessment of the business. These include but are not limited to
- Vision and mission audits
- Core objectives and their link to the policy
- Financial metrics
- Key regulatory and statutory compliance and,
- Ethics and management practices

Best Audit Systems will deliver 100% Positive Results no matter when the system is tested

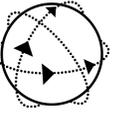


Accountability based audit Systems

Why Choose Accountability Based audit systems

- Restore shareholder confidence
- Build customer satisfaction
- Satisfy government and regulatory requirements for ethics and other regulated initiatives i.e., anti-bribery, conflict minerals, FARs and other such detailed regulatory requirements

Best Audit Systems will deliver 100% Positive Results no matter when the system is tested

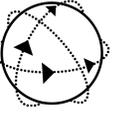


Accountability based audit Systems

How to design Accountability based Self Audit systems

- Review policies, objectives roles and responsibilities
- Prepare audit checklists using established reference base – this would ensure questions are unbiased and focus on the values, mission, vision and their downstream objectives
- Use simply designed excel or word table-based format to make is easy to follow
- Include as applicable, the Industry, Regulatory, and customer related statutory requirements
- Be clear about what answers you are expecting to satisfy the requirement

Accountability based audit could demonstrate & establish credibility of the organization

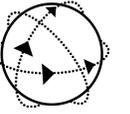


Accountability based audit Systems

Common Pitfalls and risks

- Push back from management
- Information not readily available or accessible
- Resource constraints
- Inconsistencies in reports which may have been designed for a specify purpose e.g., get a loan

Non standardized information and resistance from management could cause failure



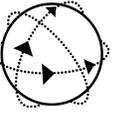
Accountability based audit Systems

Benefits and Results

- Valuation of the organization
- Credibility and reputation of the organization in the industry
- Answerability of managers to the shareholders and employees
- Validate the quarterly, monthly, or periodic reports

*Boost Company Credibility & Valuation in the industry
and Validate reports*

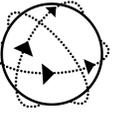
Audit Exercise



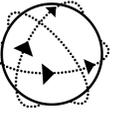
What are some audit pitfalls and undesirable effects of
Accountability Based audit systems

| Pitfalls | Effects |
|----------|---------|
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*Accountability based audit Pitfalls &
Effects*



SWOT & Risk based audit Systems

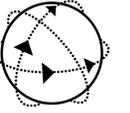


SWOT & Risk based audit Systems

What are SWOT & Risk Based audit systems

- SWOT & Risk based audit systems are most Value-added audits
- They focus on an assessment of Strengths – Weaknesses – Opportunities –Threats (SWOT) and Risks to the business
- SWOT & Risks are both part of continual improvement and ISO /AS Standard requirements

SWOT & Risk Based audits deliver the best value among all the assessments

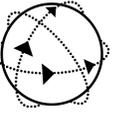


SWOT & Risk based audit Systems

Why Choose SWOT & Risk Based audit systems

- Identifies the most important issues Strengths, Weaknesses, Opportunities and Threats for the organization
- Minimizes and mitigates risks & liabilities
- Caters to a balanced business sustainability

There are no nasty surprises or hidden factories when SWOT and Risk based audits are in place

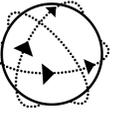


SWOT & Risk based audit Systems

How to design SWOT & Risk based Self Audit systems

- In a brainstorming session identify all the strengths, best practices, Weaknesses of business processes, people, Improvement opportunities and potential liabilities to the organization
- Review and identify all the Risks to the organization
 - Usually, you would have them listed in a risk matrix
- Prepare audit checklists using the list identified above that includes all key SWOT items and risks
- Use simply designed excel or word table-based format to make is easy to follow

SWOT & Risk based audit are very effective and proved the best value and ROI

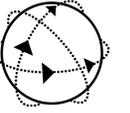


SWOT & Risk based audit Systems

Common Pitfalls and risks

- No infrastructure for identifying SWOT or Risks
- Management Reviews do not include SWOT or risks
- Reactionary mode fighting fires
- Corrective and Preventive actions not robust

Risk and SWOT analysis are Proactive ways to manage future mistakes and liabilities

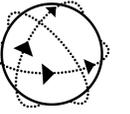


SWOT & Risk based audit Systems

Benefits and Results

- Reduce Liabilities to the organization
- Identify and Build up on strengths and best practices
- Identify new Opportunities
- Identify and address potential threats
- Validate QMS sustainability using this method

No Embarrassing Surprises – Proactive approach- Most Value added



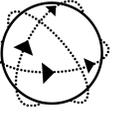
Audit Exercise

What 5 factors are important for SWOT and Risk based audit systems and their pitfalls

| Factors | Pitfalls |
|---------|----------|
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SWOT & Risk Factors & Pitfalls

Visible & Incognito audit Systems

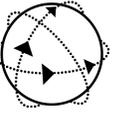


Visible & Incognito audit Systems

What are Visible & Incognito audit systems

- Visible, as the name connotes are high profile campaign type audits
 - While audits are mostly unwelcome due to their disruptive nature, They're accepted by all if it's an initiative backed by top management – Hence Campaign and visible audit systems
- Incognito Audit systems as coined by Lean Aerospace and LeanQA are audit controls built into the ERP systems.
 - Audit data is collected by setting up control points and running periodic reports to gather data

Visible & Incognito audits deliver consistently predictable and reliable results

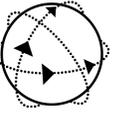


Visible & Incognito audit Systems

Why Choose **Visible & Incognito** audit systems

- Increased awareness among personnel when campaigns are launched
- Awareness increases the chances of audit becoming successful and decrease the negative effects that personnel don't like regarding audits
- Minimizes and mitigates risks & liabilities with buy in from the population
- Caters to a balanced business sustainability behind the scenes!

*There are no nasty surprises or hidden factories when
SWOT and Risk based audits are in place*

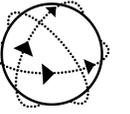


Visible audit Systems

How to design **Visible** based Self Audit systems

- Get Support from Top Management for Audit Campaign
- Select and train auditors cross functionally
- Keep the audit checklist basic, simple and effective to demonstrate quick wins
- Use simply designed excel or word table-based format to make is easy to follow
- Advertise and get buy in ahead of time be communicating, communicating and communicating

*Visible Audit Systems are Backed by Top Management ,
Bring up awareness and there are no surprises – greater
acceptance*

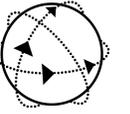


Visible & Incognito audit Systems

How to design **Incognito** Self Audit systems

- Review the ERP capabilities and reporting
- Select key characteristics and controls that provide value for the audit
- Implement those controls in the ERP System
- Auto Generate reports on a periodic basis, compile and report in the management reviews
- Analyze results and add additional audit controls as necessary. E.g., following up on CARS, or their effectiveness, Sales order reviews, PO reviews etc.

Incognito Audit Systems work in the background within the ERP System non intrusively and constantly produce audit data

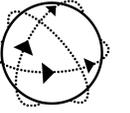


Visible & Incognito audit Systems

Common Pitfalls and risks

- Need complete top management support
- Would not work if the campaign is poorly advertised and executed
- Need complete understanding of ERP system capability
- Need to Map process for key controls and objectives that need to be monitored

Visible and Incognito Systems need management support and detailed execution to be successful



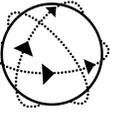
Visible & Incognito audit Systems

Benefits and Results

- Heightened Awareness of Personnel for their job functions
- Accountability and visibility
- Team work
- Automation and utilization of capacities and Capabilities
- Good methods to implement audits effectively

Buy -in across the board – Heightened awareness and monitoring via ERP system

Audit Exercise

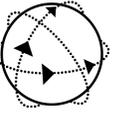


What are the key benefits of Visible & Incognito audit systems

| Visible | Incognito |
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Key Benefits

Lean & Streamlined Audit Systems

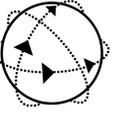


Lean & Streamlined Audit Systems

What are Lean streamlined audit systems

- Lean and Streamlined Audit Systems focus on:
 - Value specified in the eyes of the customer
 - Assessment of how the value flows and is it eliminating the 8-wastes
 - Are the checks and balances designed to make the value flow at the pull of the customer
 - Are employees empowered and trained to deliver customer delight
 - Is improvement part of the company culture

*Lean & Streamlined audits are the next generation audits
built upon ISO / AS Foundation*

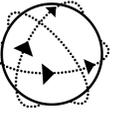


Lean & Streamlined Audit Systems

What are Lean streamlined audit systems

- Lean Audit Systems deliver advanced value to organizations using the assessment of existing lean processes.
- They utilize the lean tools to deliver efficient value
- They are part of the work systems in Mature Organizations that are practicing lean methodology for continuous improvement

*Lean & Streamlined audits are the next generation audits
built upon ISO / AS Foundation*

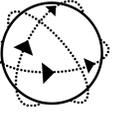


Lean & Streamlined audit Systems

Why Choose **Lean & Streamlined** audit systems

- When you need to boost internal and external customer confidence
- When you need to identify waste in your processes
- Audit Current state of 6-S in your organization
- Get amplified value from your audit process
- ROI for organization is measurable using the controls placed for Lean audits
- Positive results are guaranteed

Be Prepared to view hidden factories and embark on improvement projects by the dozens! After this audit



Lean & Streamlined audit Systems

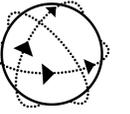
How to design **Lean & Streamlined** Self Audit systems

- Value stream Map current state of your business management system
- Identify controls, objectives and value in the eyes of the customer
- Design checklist to ensure value is flowing at the pull of the customer
- Question the empowerment and effectiveness of the training system and ensure it's adding value
- Check for built in controls in the Management review and improvement process

Lean Audit System Design must be done by Lean Experts and trained professionals

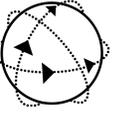
Audit Exercise

What Lean Tools do you practice?



| Lean Tools | |
|----------------------------------|--|
| Process Mapping | |
| Value Stream Mapping | |
| 8 Wastes | |
| 6 S | |
| Error proofing | |
| Root Cause Analysis | |
| Kaizen Culture | |
| Point of use – POU Shadow boards | |
| KAN- BAN | |
| Visual Workplace | |

Lean can catapult your organization to the next level

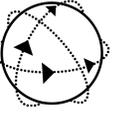


Lean & Streamlined audit Systems

Common Pitfalls and risks

- Need complete top management support and a lean transformational campaign
- Would not work if the foundation of ISO / AS process and improvement culture is missing
- Poorly designed lean system audit by non- lean experts
- Failure to show quick wins and get buy-in from management and personnel

Lean Audit System work best in organizations with mature processes and with growth mindset



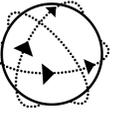
Lean & Streamlined audit Systems

Benefits and Results

- Maximum value delivered – biggest ROI
- Produces efficient outcomes that are better, faster and cheaper
- Helps in Lean Transformation journey
- Customer satisfaction at its peak
- Automation and utilization of capacities and Capabilities using lean techniques and tools
- By far the best type of auditing you can conduct

Lean Streamlined audits are the most value added and the best type of audits you can conduct

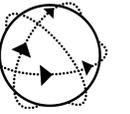
Audit Exercise



What are the key benefits of Lean & Streamlined audit systems

| Lean Audits | Effects |
|--------------------|----------------|
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Key Takeaways

- *What is an Audit*
- *Why Self- Audits are Important*
- *Common pitfalls: why audits fail to deliver results*
- *Key Elements in designing a robust audit system*
 1. *Evidence based Audit Systems*
 2. *Accountability Based Audit systems*
 3. *SWOT and Risk Based Audit Systems*
 4. *Visible and incognito Audit Systems*
 5. *Lean & Streamlined Audit Systems*

LEAN AEROSPACE

Our Services

Contact: SHAWN@LEANAEROSPACE.COM

QMS Consulting

- **ASA 100 Implementation / Audit Support**
- **AS 9100D, AS 9120B, AS 9110C Implementation / Audit Support**
- **Internal Auditing**
- **CMMI**

Training & Coaching

- **Leadership & Managerial Skills**
- **Lean Six Sigma**
- **Internal Auditing**
- **Soft Skills**
- **Knowledge Management Software**

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THANK-YOU.

