

2023 API PIPELINE CONFERENCE AND EXPO

PIPELINE, CONTROL ROOM AND CYBERNETICS

May 1-3, 2023 JW Marriott Nashville | Nashville, TN

Lessons Learned – Are We Following Through?



Lessons Learned: Are We Following Through?

Topics

- Lessons Learned – Defined
- Sources
- Industry Challenges
- Basic Process Flow
- Why Following Through is Important
- Potential Solutions
- Common Challenges

Lessons Learned: Are We Following Through?

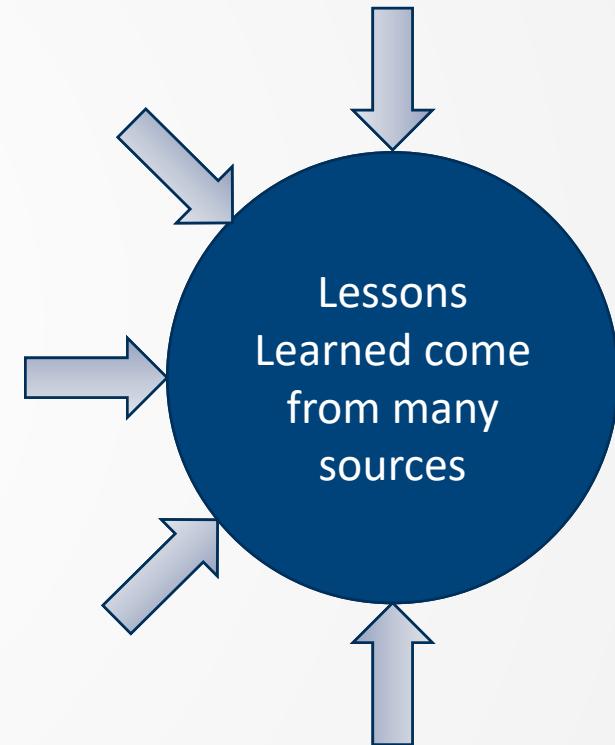
Lessons Learned – Defined

An organizational improvement implemented and sustained to prevent unintended consequences.

Lessons Learned: Are We Following Through?

Sources of Lessons Learned

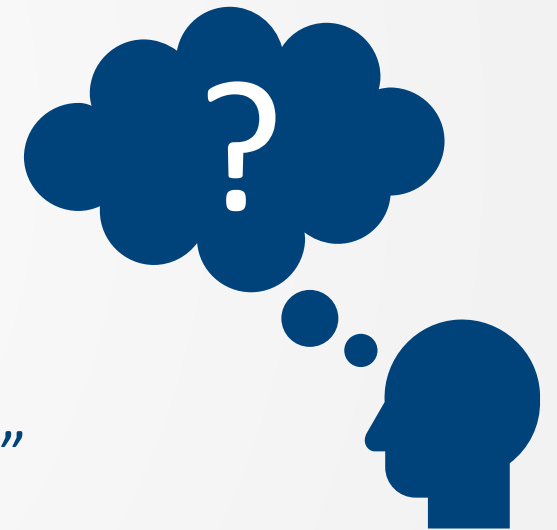
- Emergency response exercises
- Incident investigations
- Risk assessments
- Audits and assessments
- Project start-ups / Facility commissioning
- Management review actions
- Industry associations
- Regulatory enforcement actions
- Other?



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Industry Perspective

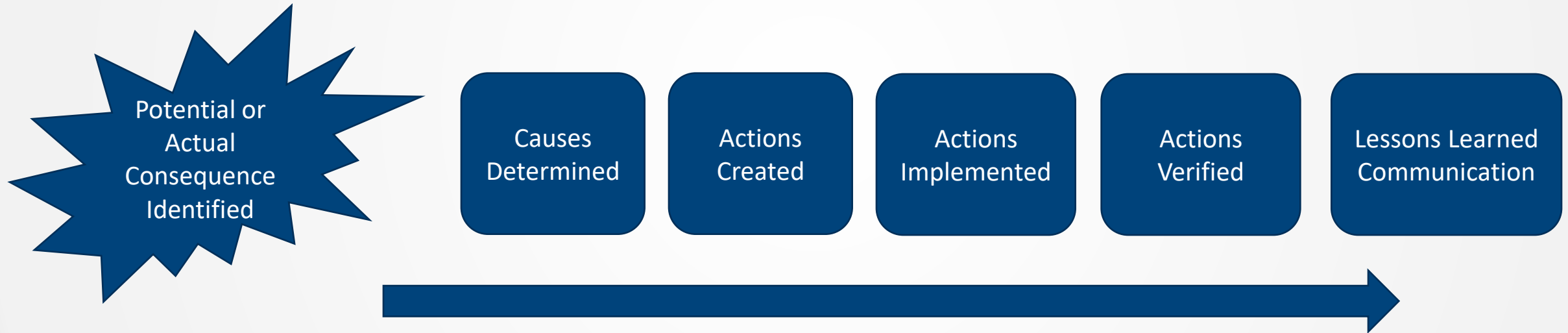
- “We’ve identified many lessons learned - which are most important?”
- “What do we do with them now?”
- “Who is going to do something about it?”
- “Who is going to fund this?”
- “What happens when actions are overdue?”
- “When does leadership need to be involved?”
- “Are we actually addressing the root cause?”
- “Do we need to verify that this learning has been implemented?”



What challenges and successes have you had in addressing lessons learned in your organization?

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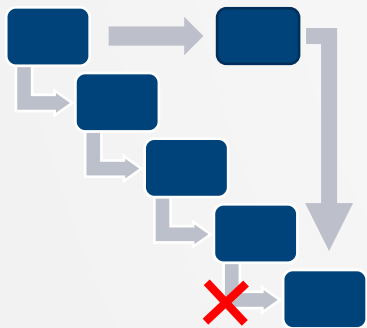
Basic Process Flow



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Why following through is important

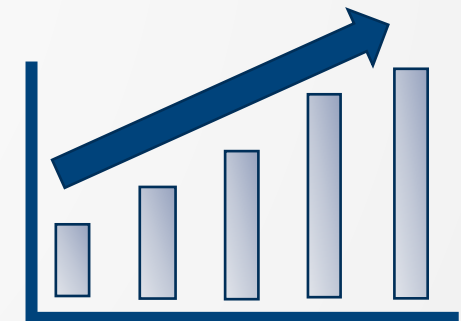
Any process with multiple steps and stakeholders is inherently subject to breakdowns during the hand-offs



The consequence of not learning from past events can erode the confidence in the industry



Strong desire amongst organizations to lead the energy evolution to learn, improve, and achieve operations excellence



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Potential Solutions

Many organizations' challenges are related to the following organizational aspects required to effectively implement and sustain lessons learned:

- Leadership and Governance
- Safety Culture
- PSMS Structure
- Technology

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Leadership and Governance Considerations

- Clear accountabilities set for implementing and reviewing actions
- Timelines established based on relative importance and/or risk
- Escalation path to leadership is defined based on the risk and criticality of the learning and corrective action

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Safety Culture Considerations

- API RP 1173 states *“the organization encourages two-way conversations about learnings and commits to apply them throughout the organization”*
- Everyone understands the company’s goals for implementing lessons learned
- Systematic consideration of the lessons learned process, who needs to play a role, what can go wrong, and proactively mitigating these potential issues
- Focus on x % highest priority learnings is matched with adequate resources to manage them
- Goals are realistic and we’re confident that we are accomplishing the work that is most important to our safety and performance
- Employees are engaged and taking ownership of lessons learned and the actions required to implement them

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PSMS Structure Considerations

Define a Lessons Learned and Corrective Actions process that defines:

- Accountability for implementing the process
- Criteria for conducting root cause analysis and involving technical experts
 - Have we uncovered the right lesson learned and know what needs to change?
- Assignment of learnings and actions to single accountable parties so it's clear who needs to take action, and what they need to do
- Ensure that significant actions are baked into our plans – and resourced appropriately.
- Verification steps hardwired into the process.

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Technological Considerations

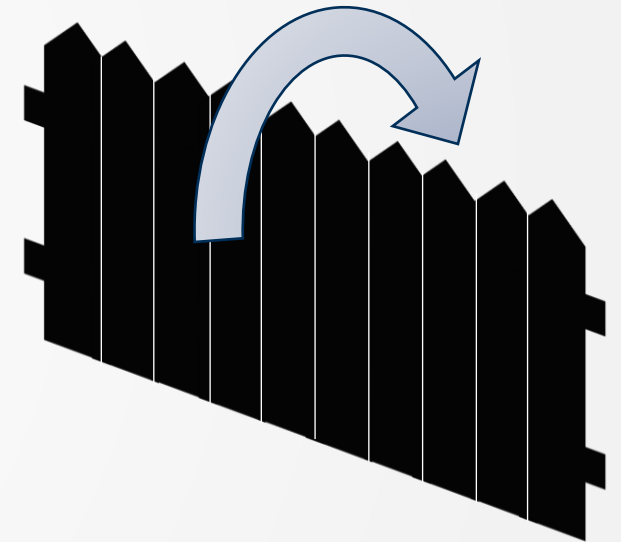
Consolidated action trackers make it simple for stakeholders to do what's expected

- All lessons learned are recorded in one place, regardless of their source.
- Prevent silos – ensure all groups are using the same tracker and can use the system to communicate lessons, actions, and outcomes with each other.
- Reduces redundant actions being implemented in isolation.
- Facilities leadership oversight.

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Common Challenges

- Competing with many other priorities for our resources.
- We do our part, hand-off to the next party involved, and trust they will continue. (Toss over the fence)
- Appreciating that there can be a long way to go before issues are completely corrected, verified and the learning is shared.
- We are often surprised to **learn** after conducting verifications that issues persist and awareness of recent learnings is low.



Lessons Learned: Are We Following Through?

Addressing these challenges has enabled several companies to use their lessons learned as an important driver of continual improvement on their journey to operational excellence.

Thank you.