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ASK THE EXPERTS
HOW TO BUILD AN
RCA PROGRAM
(AND SUSTAIN IT)

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INTRODUCTION

Sheila Johnson was just rounding out her second year as the Corporate EHS Director for Aurora, a global manufacturer of synthetic materials. Over the past year, Aurora experienced record growth. As demand for their products grew and manufacturing scaled up, Sheila noticed an increase in problems and felt that their current RCA program was in dire need of a reboot.

Her global teams were left to their own devices when it came to investigating incidents. Some did 5 Whys or Fishbone, while others used sticky notes, Excel or Visio. Regardless, the process was loose and often ended up with the same tired solutions... "retrain, re-communicate or blame..." With an increase in new employees and with growth expected to continue, Sheila met with site leaders from around the world. They agreed that their goal was to unite their global team around a common problem-solving methodology that would provide them with a scalable and efficient way to investigate incidents at all levels. Sheila was referred to companies that specialized in RCA. Sologic was at the top of the list, so she reached out to set up an initial consultation with her team.

Why Build an
RCA Program?

An RCA program helps to focus your efforts and ensure that you are getting the best return on your investment. The task of building an RCA program or rejuvenating a legacy program will require some forethought and planning, but the effort is worth it and will pay dividends for years.

It is important to first understand and accommodate the needs and goals of the various functions, locations, and business units engaged in the RCA program. This process can seem daunting, but that's where Sologic can help. We have decades of experience working with all types and sizes of organizations around the world. We will partner with you to create an RCA program that will achieve your goals and promote a culture of improvement and learning by defining and integrating the elements critical to success.

Program Benefits

Improve organizational performance

Custom professional support

Share lessons learned

Improve efficiency

Improve ROI

Unite around a common problem-solving method

UNCOVER A DEEPER APPROACH TO PROBLEM SOLVING

One of the biggest pain points for Sheila and her team was that they felt like their investigations didn't dig deep enough. When reviewing previous 5 Why RCA's, instead of "5 Whys" they received "5 Whats". Everyone knew what happened, but the investigation often didn't uncover the "Why". 5 Whys rarely gets you to the systemic causes and does not prompt you to ask more questions. Sheila learned that Sologic could provide a deeper approach to problem solving and help move her people beyond the "5 Whats".

STEP 1
Identify RCA PROGRAM Goals

An RCA program should support the broader goals and objectives of the organization. Leaders need to fully grasp how the program will help achieve those goals. Further, employees need to understand the drivers for RCA so that when the time comes, they understand why their participation is crucial and how their contributions will have a positive impact.
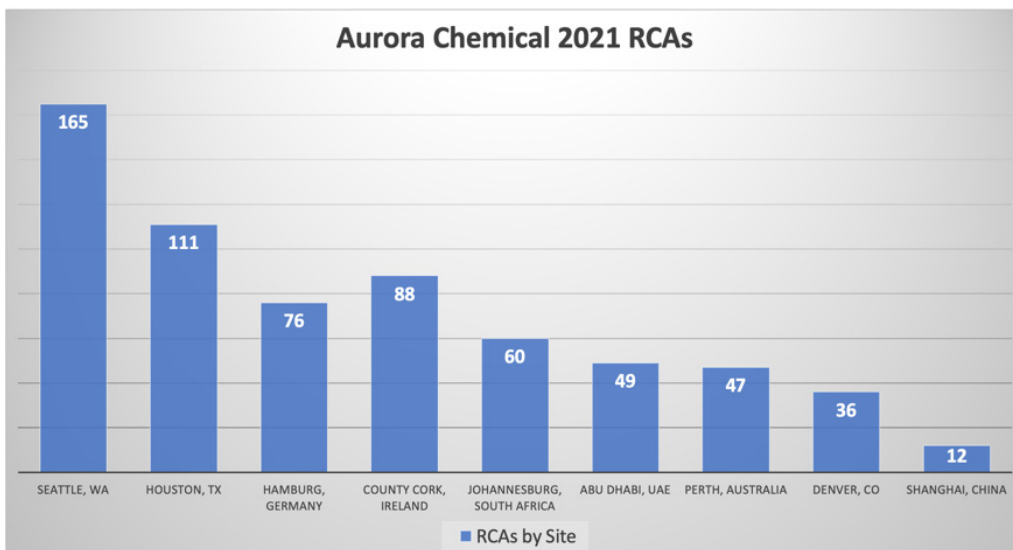
Action Make a list of RCA goals. Global goals will be the same for everyone. Individual businesses will need to define their own specific local goals.

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WHEN TO PERFORM AN RCA?

Sheila learned that one of her sites had done 165 RCA's last year while another had done 12. This was because they did not have well-defined triggers for when to perform an RCA. Some sites reserved them for the "worst of the worst" incidents while others performed them on everything from deviations, near misses, minor injuries, downtime… etc. Sheila knew that without well-defined **threshold criteria,** her teams would end up with too many, or too few RCA's.

Aurora Chemical 2021 RCAs

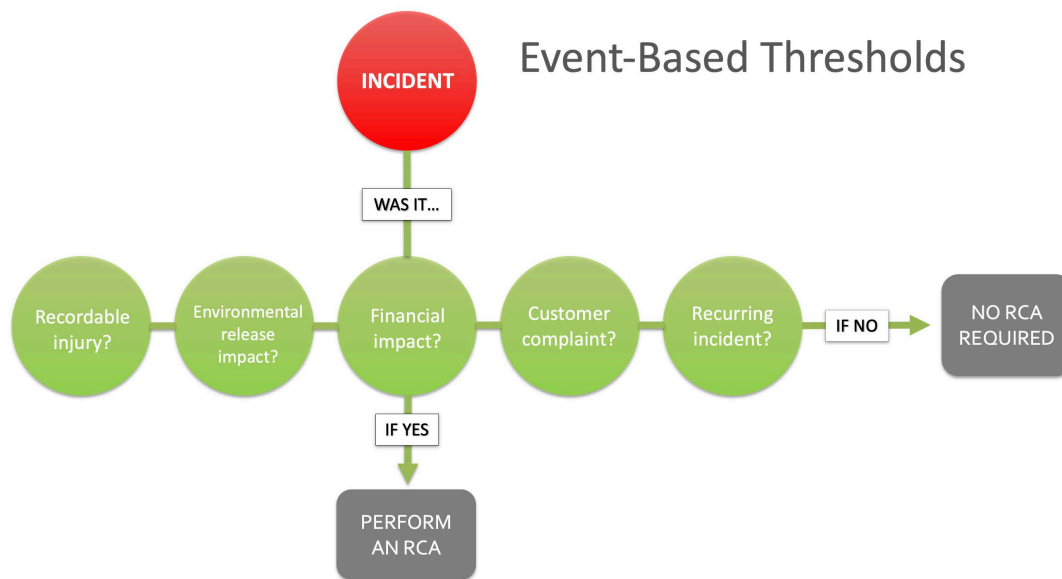| Site	RCAs
SEATTLE, WA	165
HOUSTON, TX	111
HAMBURG, GERMANY	76
COUNTY CORK, IRELAND	88
JOHANNESBURG, SOUTH AFRICA	60
ABU DHABI, UAE	49
PERTH, AUSTRALIA	47
DENVER, CO	36
SHANGHAI, CHINA	12

RCAs by Site

THRESEHOLD CRITERIA clarify when a formal RCA is required. Threshold criteria can be easily derived from the list of goals discussed above. Thresholds can be defined in terms of actual impact or potential impact.

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STEP 2
Define Threshold Criteria

When developing threshold criteria, **Investigation Capacity** needs to be considered. Aggressive thresholds will increase the number of RCAs triggered. It is detrimental to the RCA program to trigger more RCAs than the organization can manage. Thresholds can always be adjusted up or down later. Set what you believe to be achievable initial thresholds and then monitor.

Event-Based Thresholds

INCIDENT

WAS IT...

Recordable injury? — Environmental release impact? — Financial impact? — Customer complaint? — Recurring incident? — IF NO → NO RCA REQUIRED

IF YES → PERFORM AN RCA

If you have high-risk activities or tasks an RCA trigger can also be applied for these.

Action Identify your threshold criteria below

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CAUTION

## Home Grown Programs Typically Fall Short

7 years ago, The Directors of EHS & Quality at Aurora looked into implementing a new RCA program. After speaking to a few vendors, they decided to save money by developing and conducting the training in-house. The EHS Director at the time had been trained in several methodologies and assembled a program that would teach people the basics of problem solving including 5 whys, Fishbone, and cause and effect. He recommended that students use Excel, PowerPoint, or Word to complete their investigation and store it in the company shared drive.

With a fresh wave of momentum, they were able to train around 300 people across the organization in the first two years. However, the EHS Director left the company and other managers moved on, and the program died out. This is often the case when companies implement in-house programs and there is no one to uphold the program after key stakeholders move on. The program then regresses, resulting in the very same challenges that Sheila's team was now experiencing. Sheila is relying on her site leaders to help implement and support the RCA program and was interested in learning more about Sologic's plan for a global roll-out.

STEP 3
Define Your Organizational Culture

Top Down
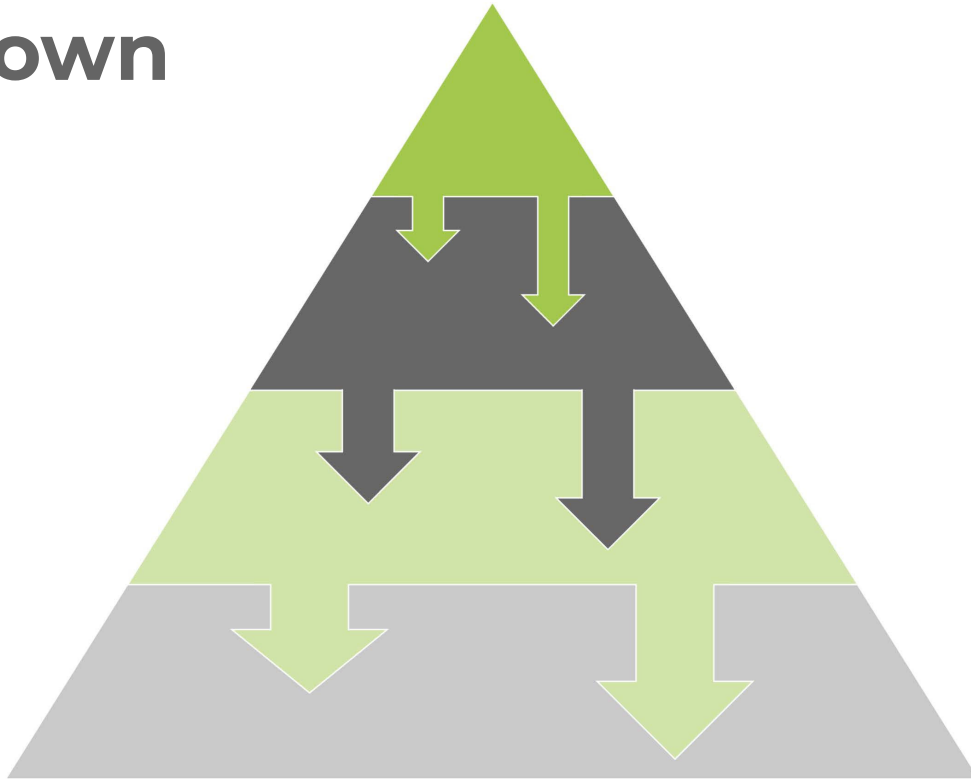
Some organizations roll out new initiatives from the top down. These organizations should plan the RCA initiative from a high level and then complete training in a series of blocks over a defined period of time.
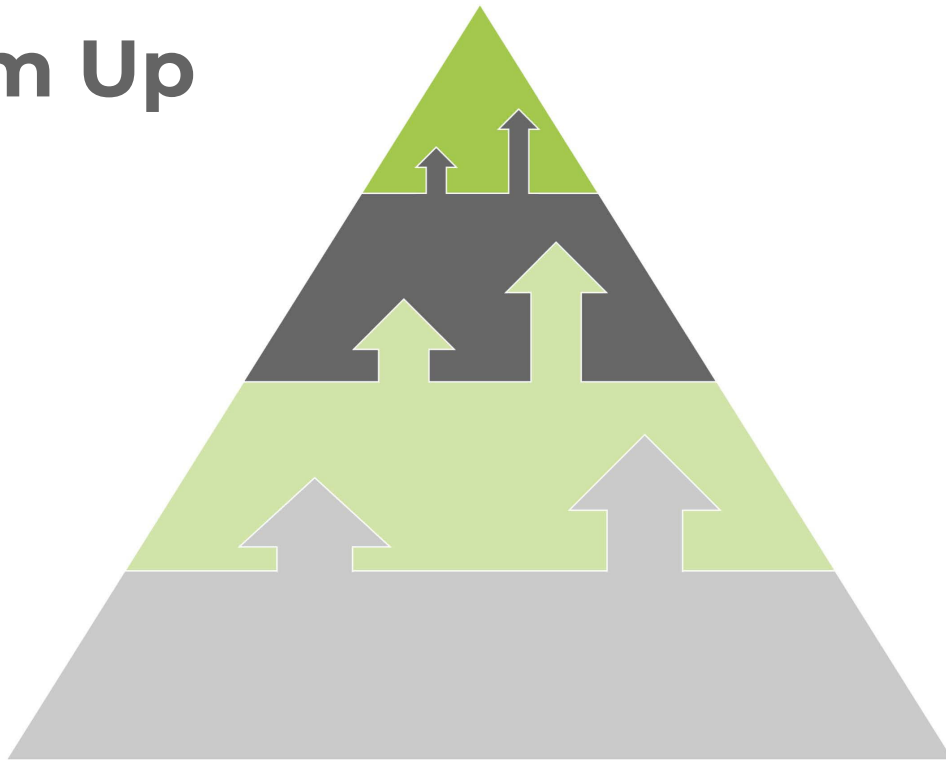
Advantages

- Time to value is shorter, results are achieved faster
- You can globally apply "Lessons Learned" and gather corporate-wide data more quickly

Considerations

- Potential perception as "program-of-the-month"
- Establishing ownership at the site level may be more challenging
- Higher investment in the short term

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Bottom Up

Other organizations work best when initiatives start at the bottom and spread upwards and outwards. These organizations should identify a pilot site or division, train a small group and use initial efforts to prove the concept. Once proof-of-concept has been achieved, the program can be rolled out to additional areas.

Advantages

- Risk (real or perceived) is minimized
- Lower short-term investment and time commitments
- More likely to achieve local ownership

Considerations

- Longer time for implementation and buy-in
- Broad improvements will take longer to materialize
- Individual disrupter's can have a detrimental effect on pilot thus jeopardizing early program success
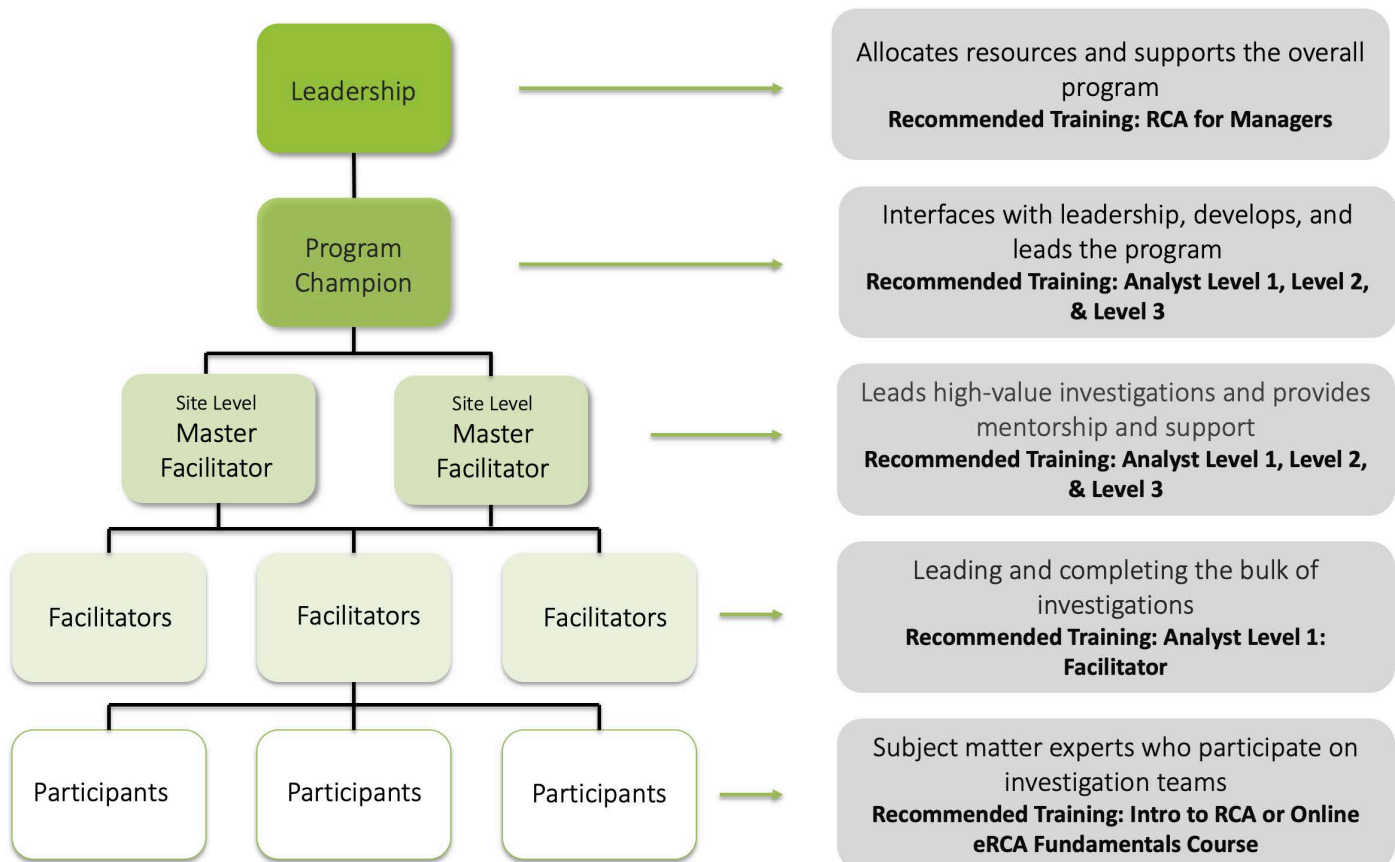
Action What roll-out would work best for your company? Top-down or bottom-up?

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STEP 4
Decide Who Will Be Trained & to What Level

The most important program element to ensuring success is training. Sheila wanted to make sure that the training not only transferred the knowledge and skills needed but was also engaging and enjoyable for the students. This required the instructor to have experience working with many different types of people from various organizations and skill-sets. Sheila liked the flexibility that Sologic offered with their virtual learning opportunities as well as face to face. Sologic presented Sheila with training options that would allow students to progress into more advanced courses as their skills increased and needs changed.

Role	Description
Leadership	Allocates resources and supports the overall program **Recommended Training: RCA for Managers**
Program Champion	Interfaces with leadership, develops, and leads the program **Recommended Training: Analyst Level 1, Level 2, & Level 3**
Site Level Master Facilitator	Leads high-value investigations and provides mentorship and support **Recommended Training: Analyst Level 1, Level 2, & Level 3**
Facilitators	Leading and completing the bulk of investigations **Recommended Training: Analyst Level 1: Facilitator**
Participants	Subject matter experts who participate on investigation teams **Recommended Training: Intro to RCA or Online eRCA Fundamentals Course**

Not all organizations need training at every level. But all will benefit from having a solid foundation around which their RCA program is built.

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RCA PROGRAM
Roles & Responsibilities

How your people contribute to the RCA program will determine the overall success of the program. It's important that everyone has a clear understanding of their role and how best to support the team.


Leadership/Stakeholders

Leaders set the goals and objectives of the organization. Leaders need to be involved at the beginning of the process. They will need to provide visible and vocal support for the RCA program as well as allocate resources. **Recommended Training: RCA for Managers**

Program Champion(s)

A program needs a leader. Program Champions fill this role. They interface with Leaders/Stakeholders and ensure the RCA program is aligned with their goals and objectives. They help determine who needs to be trained and to what level. And they make sure everything stays on track both during roll-out and afterwards. **Recommended Training: Analyst Level 1: Facilitator, Analyst Level 2: Master Facilitator & Analyst Level 3: Lead Investigator**
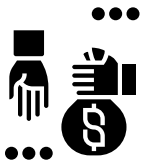
Master Facilitators

Master Facilitators are RCA subject matter experts. They lead high-value, high-complexity investigations. They work together with the program champions to help deploy the initial program roll-out. Long term, they generally lead the program. **Recommended Training: Analyst Level 1: Facilitator, Analyst Level 2: Master Facilitator & Analyst Level 3: Lead Investigator**

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Facilitators

Facilitators lead the majority of the RCA investigations. When a threshold is exceeded, they work independently or they assemble a team of Participants who will then conduct the RCA. The Facilitator leads the RCA, writes the final report, and ensures all actions are completed.
Recommended Training: Analyst Level 1: Facilitator & Focused Facilitator

Participants

Participants provide domain knowledge and subject matter expertise during the RCA. They contribute the most to the RCA since the problem often directly impacts their work areas. They are best positioned to identify the most practical solutions. Also, remember to look beyond your organization for participants. Suppliers, vendors, and contractors often have valuable information and make terrific participants.
Recommended Training: Online eRCA Fundamentals

After Initial Training

You need to set the expectation immediately that those trained need to put their new skills to use.

Training is only the first step toward developing RCA capability. After training, some of your people will need practice and support in order to transform training into capability. (Covered in Step 7)

Action Define targeted groups. (Safety, IT, Reliability, Quality, Operations, etc.)

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Action Determine the people or groups from the levels above who would benefit from some form of RCA training.

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STEP 5
Who Will Conduct Training?

In deciding who does your training, you have two options to consider:

Option 1 — Sologic Conducts Training

Advantages:

- Training is delivered by RCA experts who bring a wealth of knowledge from working with people from various backgrounds, industries and organizations.
- Sologic trainers are experts in RCA application and instruction and can quickly transfer the knowledge to your team via proven instructional design methods.
- We make it simple. Once you decide to roll out training we can begin to train your team in a matter of weeks. With offices all over the world we can support multiple languages and time zones.

Option 2 — Your Certified Instructor (CI) Conducts Training

Advantages:

- Certified Instructors create internal ownership that helps ensure the RCA program grows and thrives while keeping team members engaged.
- Certified Instructors save your organization money when training large numbers of students.

But be sure to factor in

- **Continuity:** If a certified instructor changes position or leaves the company, the process starts over.
- **Time to Deploy:** It will take longer for the program to get up and running while the instructor is going through training.
- **Ongoing Time Commitment:** Certified Instructors may find it difficult to juggle their existing workload with the RCA program demands. Instructors need to teach a minimum of two classes per year to ensure their skills don't erode.

Sheila and her team decided against the Train the Trainer program. Knowing the challenges they previously had with the in-house program, they decided it made the most sense to let training be conducted by the RCA experts. They would also benefit from overall program support and a number of continuous improvement options to keep their people's skills fresh and up to date.

Action Who will conduct your training?

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WHAT ABOUT SOFTWARE?

There are 100's, if not 1,000's of RCA records stored on the Aurora company shared drive, and that was just for EH&S. There was no system for sorting through all this data and making use of it because some of it was stored on individual computers, and the data in the shared drive wasn't in a searchable format. Sheila and her team began to dig into the most recent RCA's and realized that issues were recurring at multiple sites. They were interested in learning more about how Causelink software could help connect their global locations and provide visibility for the entire program.

They also found it frustrating to make changes in Excel, PowerPoint, or with sticky notes - particularly with complex or in-depth investigations. They spent a lot of time reconnecting lines, merging data, sharing files and duplicating efforts because they didn't have an efficient way to capture the investigation output. The team at Sologic provided Aurora with a demo to show them how Causelink will take away those challenges and could integrate with their current EH&S system.

STEP 6
Decide How You Will Capture, Store, & Share Investigations

Conducting an RCA is a uniquely valuable opportunity to learn about an adverse event – how it happened, what caused it, and what will help fix it. But what happens to that valuable information after the RCA is over? How will you ensure that others learn from the team's hard work and don't have to re-learn the same lessons over and over? And how will you ensure consistency of output, particularly if you are training a large number of people?

Causelink software is designed specifically to make conducting RCAs easier, faster, and to provide a common place to share and store RCA output so that those lessons aren't lost over time. It provides just-in-time access to RCA information so leaders can make informed, timely decisions. It's the fastest way to complete an RCA while maximizing quality of output. It allows RCAs and training to be conducted remotely – there is no need to be in the same room, or even the same country. And it easily integrates with other applications to create a seamless user experience and to make sure time isn't being wasted with duplicate data entry in multiple systems. Sologic offers multiple delivery options to fit your specific needs.

CAUSELINK

Individual

**Single User
SaaS**

Access to all RCA tools and templates, no collaboration or configuration features

Team

**2-20 Named Users
SaaS**

All features of individual + Team collaboration, basic reporting and admin access

Enterprise

**Unlimited Users
Concurrent Licenses
SaaS or On-Premise**

All features of Team + full reporting, audit log, configuration and integration capabilities

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Sologic is an ISO/IEC 27001:2013 certified provider whose Information Security Management System (ISMS) has received third-party accreditation from the International Standards Organization.

Action How will you capture, store, share, and make use of all your RCA data? Using RCA software or another application?

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STEP 7
Decide How You Will Sustain the
RCA PROGRAM

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Sometimes sustaining an RCA program can be a challenge once the team is trained and the program is up and running. Programs are at risk of regressing after the bulk of training has been completed. It's important to plan for the long haul. We've compiled a list of ideas below for keeping students engaged.

Continued Engagement from Leadership

Creating a problem-solving culture does not happen overnight. Leaders need to show that they support the process of organizational learning and that the program is generating meaningful and positive change.

Standing Progress Meetings

Reviewing RCA's is a valuable opportunity for people across the organization to learn about incidents taking place and how they'll be prevented in the future. If you have multiple sites facing the same difficulties, occasionally bringing the teams together for brief meetings to share lessons learned and highlight common problems will provide an ongoing boost of support.

Develop Subject Matter Experts

Some people connect with RCA naturally and develop a strong interest in progressing their skills. Train them to the Master Facilitator & Lead Investigator level and challenge them to take on the more complex problems. These people are key to sustaining the program and providing mentorship and support for the rest of the team.

Continuous Learning

Sologic hosts free bi-weekly webinars with a range of skill building topics from RCA walk-throughs, advanced cause and effect analysis, FMEA, addressing human error, and many more. We value a culture of learning and would be happy to host a private webinar for your team.

Additional Training

Also, Sologic offers low-cost refresher sessions, awareness training, RCA workshops, and review sessions to help individuals and teams work through their own RCA's. You may even want to consider adding a Sologic Certified Trainer.

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Conclusion

After consultations and internal discussions, Sheila and her team decided to move forward with a global RCA roll-out with Sologic as their provider. Aurora was assigned a dedicated account manager and premium support to help them at every step of the way.

Ongoing Support

With Sologic, you'll never be on your own. We pride ourselves on our outstanding level of customer service and rapid response. As a Sologic client, you will be assigned an account manager who will provide ongoing support, guidance and recommendations to maximize results of your RCA efforts by best aligning with your needs. Your Account Manager will be your main point of contact to answer questions or address any needs or concerns.

But what about software support? Sologic has that covered as well. Software support is provided by the people who've written the code. Our team of in-house developers can quickly resolve most problems.

Sologic Offices

Ready to book your no-cost consultation with a Sologic representative? Send us an email to the region where your organization is located. We'd be happy to discuss how we can assist with improving or rebuilding your RCA program.

Midland, MI USA (Headqurarters)

Norwich, UK

Mexico City

Hong Kong

Santos (Sao Paulo)

Johannesburg

Newcastle

Buenos Aires

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