Supply Chain Issue Management Best Practices Handbook

Achieving Operational Excellence Through Digitalization and Continuous Process Improvement

tracelink®

NETWORK FOR GREATER GOOD

KEY TAKEAWAYS:

TraceLink is driving Industry 4.0 transformation across global supply chains with an open development platform and a new class of multienterprise supply chain applications.

Companies that digitalize supply chain issue management can resolve issues faster, reduce recurring issues, and dramatically improve supply chain performance.

Using multienterprise software to digitalize the reporting, root cause analysis, and resolution processes for issues that occur across the end-to-end supply chain can drive **a 65% reduction in time to resolve supply chain issues** and **a 35% reduction in the total number of supply chain issues**.

Organizations that use supply chain issue management data to support continuous improvement processes like Six Sigma have achieved **a 50% reduction in repeat deviations** and **a 96% reduction in defects per million**.

By digitalizing supply chain issue management and using the data collected to support continuous improvement processes like Six Sigma DMAIC, organizations have achieved **a 97% reduction in manufacturing disruptions** and **an 82% improvement in delivery performance**.
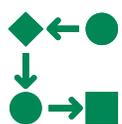
The right collaborative, multienterprise supply chain issue management solution brings speed, structure, visibility, and greater operating efficiency to issue management processes. It also supports continuous improvement processes and helps supply chain teams reduce dependence on unstructured collaboration tools like phone calls, emails, and spreadsheets.

Additional benefits include simple and free partner onboarding, no software to install, no requirements for IT teams to manage the implementation, and organizations can quickly start logging, tracking, and resolving issues.

Get a preview of Agile Process Teams for Supply Chain Issue Management.

TABLE OF CONTENTS

INTRODUCTION:
Driving End-to-End Supply Chain Digitalization with TraceLink

Industry 4.0 initiatives are transforming global supply chains. At the forefront of this transformation is the adoption of a new class of multienterprise supply chain applications. Multienterprise software digitalizes processes between supply network partners and enables data sharing and collaboration across the end-to-end supply chain.

Supply chain issue management is a multienterprise business process that has not been digitalized in most organizations. Dealing with issues like late shipments, material shortages, and damaged goods is often a firefighting exercise managed and resolved using unstructured and decentralized manual tools and processes like phone calls, emails, video conferencing, and spreadsheets. As a result, much of the information required to drive supply chain performance improvement is lost or never collected.

This handbook will explain how digitalizing supply chain issue management can reduce costs and improve cash flows while reducing supply chain risk. Readers will learn how to accelerate the incident resolution process, reduce recurring incidents, and realize dramatic improvements to supply chain performance.

There are three phases in the digital transformation of supply chain issue management:

Phase I:

Utilize multienterprise supply chain issue management software for the reporting, root cause analysis, and resolution of all problems and issues that occur across the end-to-end supply chain. All issues are captured in one multienterprise application, and companies and their supply chain partners have one source of shared truth as they work collaboratively to resolve incidents. Organizations that leverage a multienterprise software solution for supply chain issue management have achieved **a 65% reduction in time to resolve supply chain issues** and **a 35% reduction in the total number of supply chain issues**.

Phase II:

Utilize the data captured in the supply chain issue management software and apply process improvement methodologies like Six Sigma to define, measure, analyze, improve, and control. Applying a process improvement methodology to issue management data empowers supply chain teams to identify root causes and reduce or eliminate recurring business process and product quality defects. Organizations that use data collected in supply chain issue management software to support continuous improvement processes through frameworks like Six Sigma have achieved **a 50% reduction in repeat deviations** and **a 96% reduction in defects per million**.

Phase III:

By both digitalizing supply chain issue management and infusing the data collected into continuous process improvement methodologies like Six Sigma methodology, organizations are able to significantly improve supply chain performance. This has resulted in **a 97% reduction in manufacturing disruptions** and **an 82% improvement in delivery performance**.

> "Adopting a multienterprise work management platform has dramatically improved the overall performance of our value chain. Everyone is on the same page and working from the same digital source of truth to provide transparency. We don't need to search through emails and spreadsheets to see what is going on, what needs to happen next, and why something happened. We've cut our incident resolution times by 5x, and the visibility has helped us prevent issues from recurring."
>
> **Steve Hydzik, Vice President, Global Head of Manufacturing & Supply Chain, EA and New Technologies, The Merck Group KGaA**

Examples of Common Business Process Defects

Supplier delivery delays	Production slowdowns	Schedule changes	Capacity problems at suppliers	Poor planning and forecast changes
Shipping delays	Short shipments	Inventory shortages	Lower-than-expected yield	Supplier material shortages

Examples of Common Product Quality Defects

Material defects	Out of spec products	Damaged products
Packaging errors	Compliance issues	Contamination
Missed change controls	Non-compliant GxP processes	Missing documentation

THE OLD WAY:
A Lack of Visibility and Collaboration Creates Disruptions and Risk

Working with internal teams and supply chain partners to resolve an issue can take five to six weeks or longer. Late shipments, material shortages, out-of-spec products, and other business process and product quality defects often escalate into supply chain disruptions that result in late deliveries to customers. The main reasons why it is difficult to resolve supply chain issues quickly include:

Poor visibility

Most supply chain management teams lack a comprehensive view of all incidents across the organization, the status of their resolution processes, and their potential impact. Leadership teams rely on ad hoc reports from various sources that are managed and escalated via email with no real visibility into past trends or individual steps being taken to resolve issues. As a result, there is no visibility to potential disruptions or risks created as these issues go unresolved.

Unclear incident resolution processes

Due to a lack of organization, prioritization, and centralized management of incidents across functions and enterprises, managers often spend 50% – 80% of their day in issue-related meetings and video conference calls simply trying to understand the scope of supply chain partner issues.

No institutional memory to support continuous improvement

Manufacturing companies often lack a recorded institutional memory of learnings from past incidents and resolution patterns that can support root cause analysis and continuous process improvement. Supply chain teams instead send and receive incident reports via email and spreadsheets that do not keep a historical record of resolutions to similar problems.
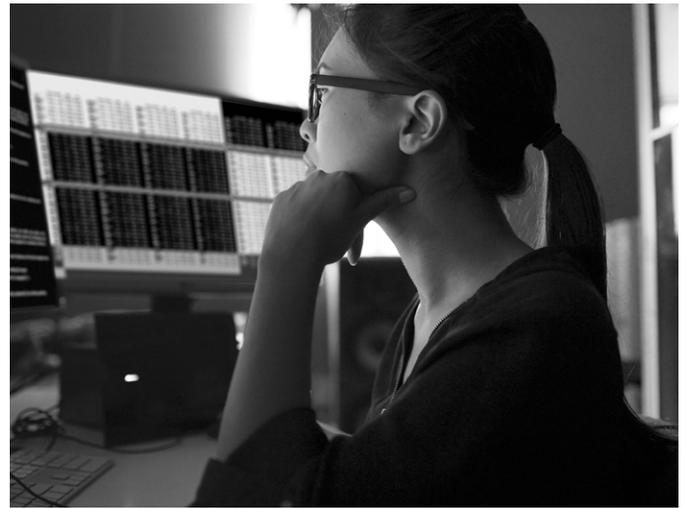
Failure to get the right people involved

It's not always clear which stakeholders should be part of cross-functional and cross-enterprise teams formed to resolve an issue. This lack of clear accountability leads to confusion over roles, responsibilities, and how teams should respond. It also results in reporting delays because team members may not know who needs to be informed when issues are identified.
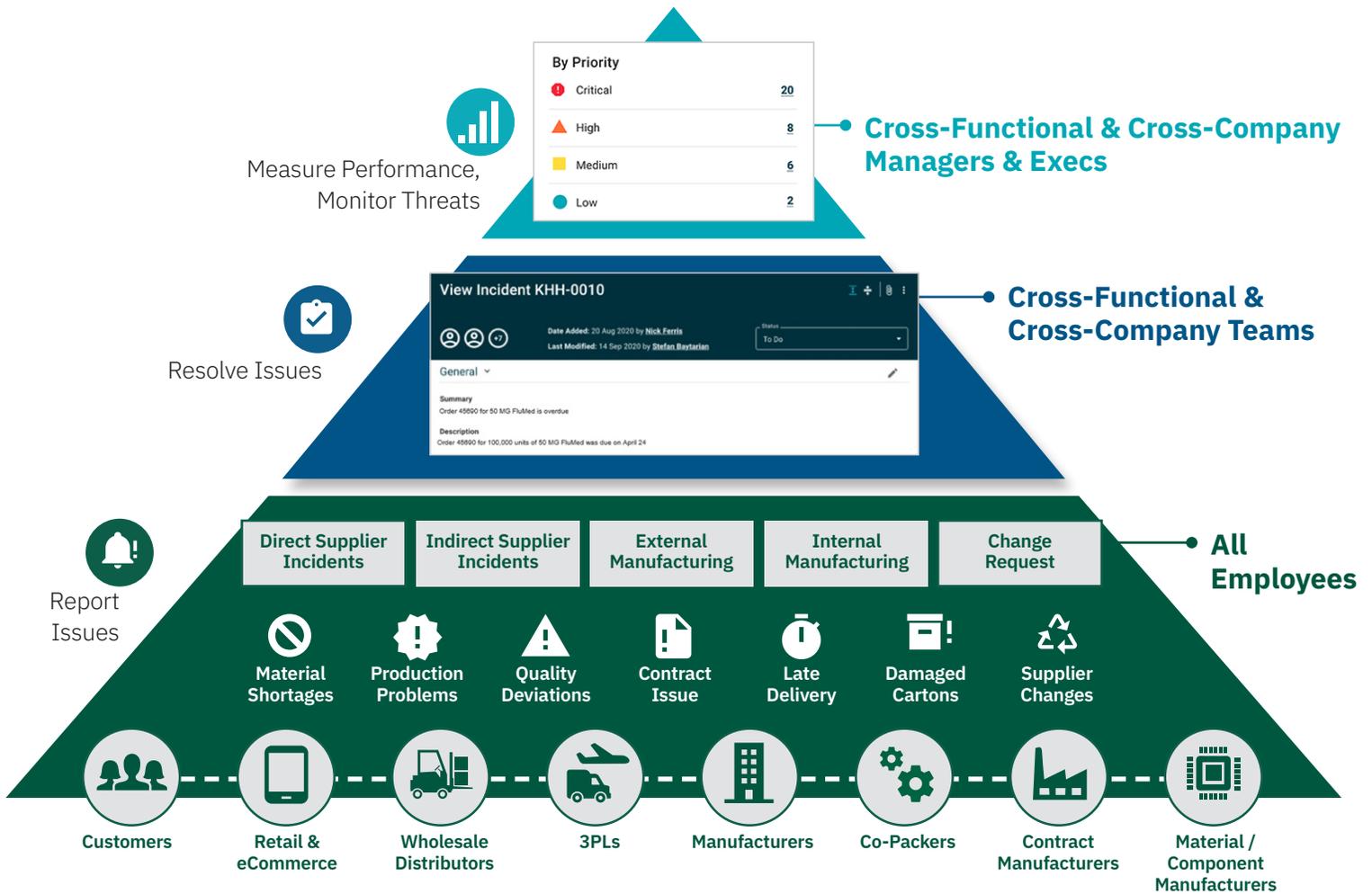
Unstructured collaboration and decentralized information

Cross-functional and cross-enterprise teams typically depend heavily on decentralized and unstructured communication tools like email, phone calls, and virtual meetings to resolve issues and determine the correct course of action when issues arise. As a result, important information is often missing or difficult to find and deadlines are missed.

While supply chain teams make their best efforts to resolve issues as quickly as possible, they have not had a digital system designed specifically to facilitate structured collaboration and workflow management between internal teams and supply chain partners—until now.

A Better Way with Multienterprise Supply Chain Issue Management Software

Measure Performance, Monitor Threats

By Priority
- Critical — 20
- High — 8
- Medium — 6
- Low — 2

Cross-Functional & Cross-Company Managers & Execs

Resolve Issues

View Incident KHH-0010

Date Added: 20 Aug 2020 by Nick Ferris
Last Modified: 14 Sep 2020 by Stefan Baytarian

Status: To Do

General

Summary
Order 45690 for 50 MG FluMed is overdue

Description
Order 45690 for 100,000 units of 50 MG FluMed was due on April 24

Cross-Functional & Cross-Company Teams

Report Issues

Direct Supplier Incidents	Indirect Supplier Incidents	External Manufacturing	Internal Manufacturing	Change Request

All Employees

Material Shortages · Production Problems · Quality Deviations · Contract Issue · Late Delivery · Damaged Cartons · Supplier Changes

Customers · Retail & eCommerce · Wholesale Distributors · 3PLs · Manufacturers · Co-Packers · Contract Manufacturers · Material / Component Manufacturers

Agile Process Teams for Supply Chain Issue Management (APT-SCIM) is a workflow-driven, multienterprise collaboration solution for capturing, analyzing, resolving, correcting, and preventing supply chain issues. Dashboards provide actionable visibility at all levels of the organization and across the end-to-end supply chain. Issues can easily be captured, monitored, and grouped by priority, due dates, issue-resolution status, sites, and partners. And supply chain partners can collaborate more effectively on supply chain issues using a single source of data. This leads to faster issue resolution times and a significant reduction in the total number of incidents.

Here are the main reasons why APT-SCIM provides a better way to resolve supply chain issues:

👁 Gain centralized visibility

Dashboards provide real-time visibility into all supply chain issues across an organization. Quickly identify high-priority issues and gain the visibility needed to make better business decisions and process improvements. Supply chain management teams can easily track resolution processes that are falling behind and monitor underperforming internal processes and partners. Leadership teams have the visibility needed to apply additional resources when the situation demands it.
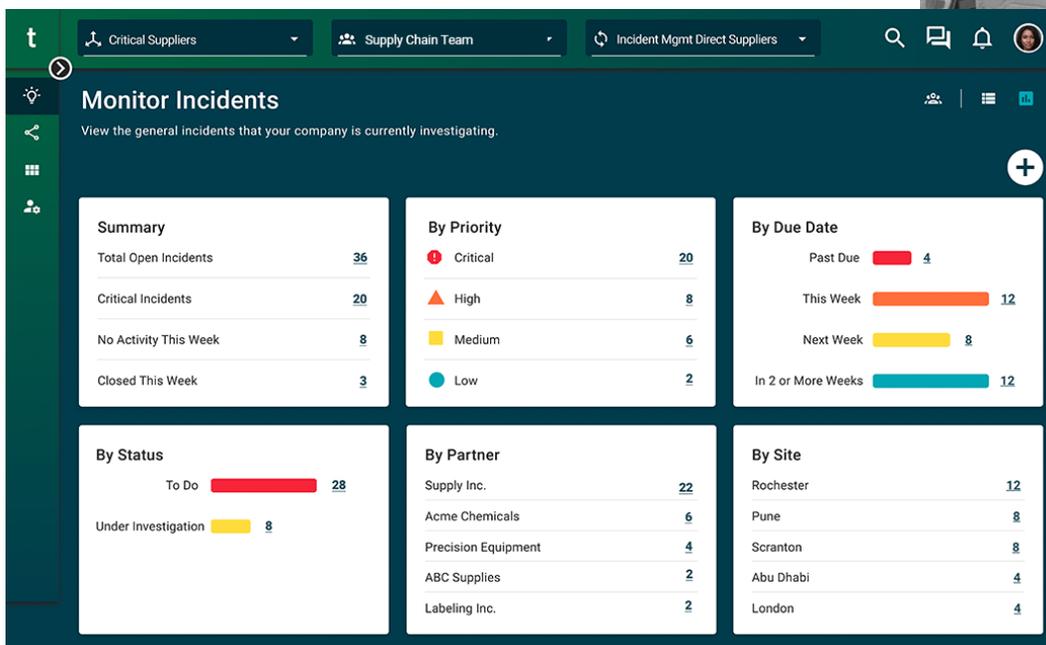

🌳 Perform root cause analysis

Early access to the history of prior incidents supports continuous process improvement methodologies like Six Sigma and speeds up root cause identification so organizations can prevent recurring incidents.
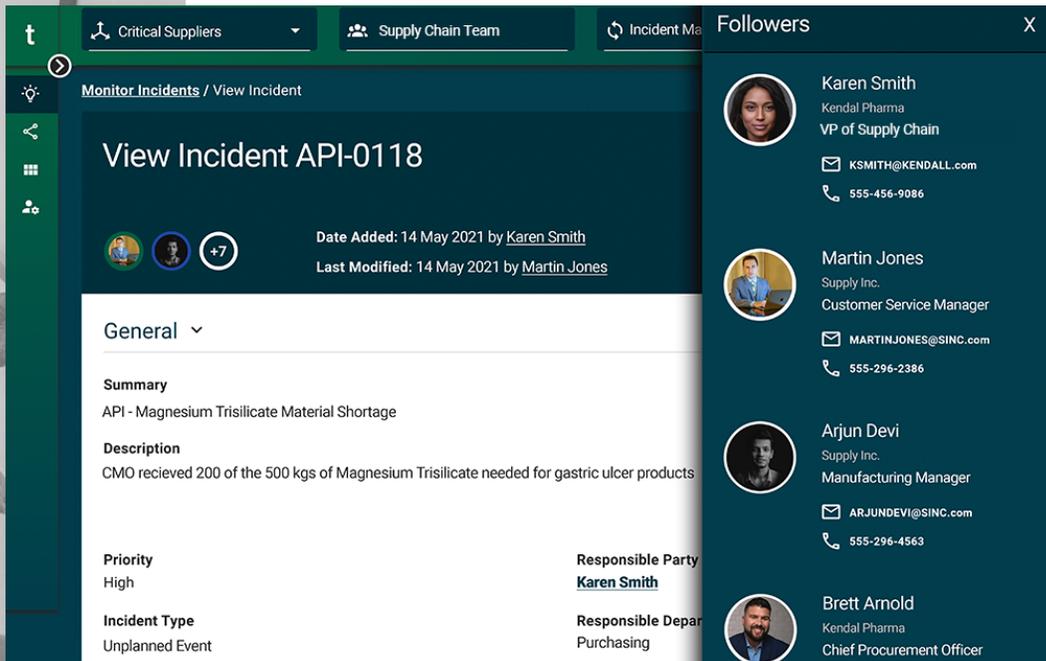
Apply an efficient process

Ensure accountability with workflow-driven multienterprise business processes, clear due dates, and automated notifications. With APT-SCIM, everyone knows who is responsible for the next action. Easily customize workflows and business processes by adding data fields and changing user experiences based on responsibilities.
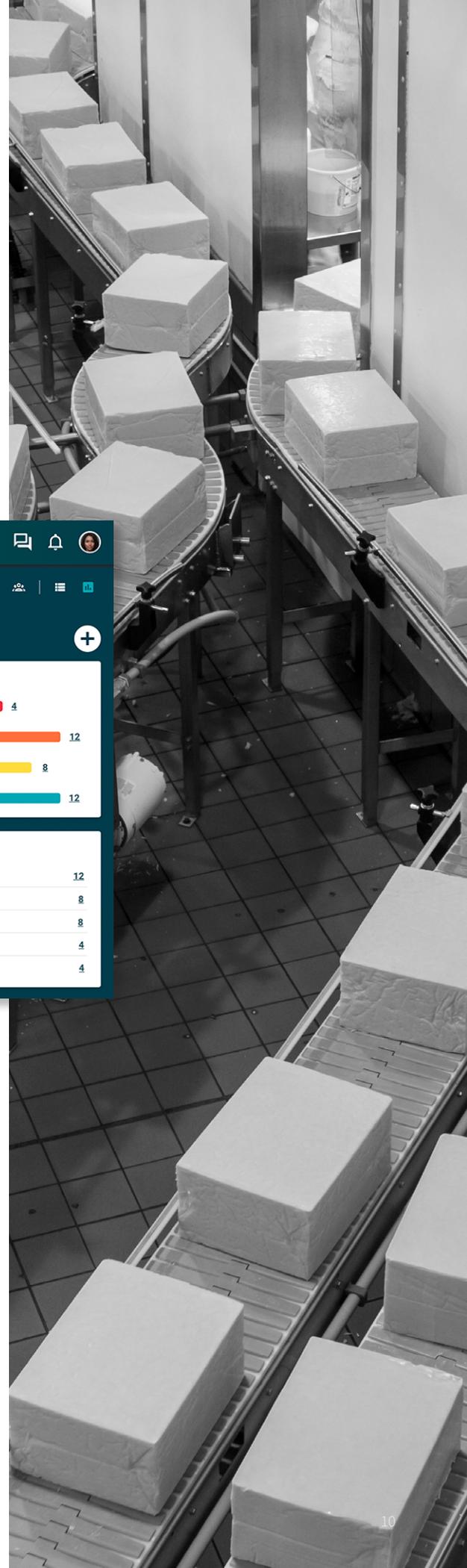
👥 Use the right team

Create "process teams" digitally and dynamically within the solution to make sure issues are routed to the right team members and subject matter experts from inside and outside of the organization. Rapidly engaging with the right subject matter experts leads to faster issue resolution times. The increased clarity on user roles also helps organizations avoid reporting delays and ensure that issues are reported right away.

⬡ Add structure to traditionally unstructured processes

Purpose-built incident management processes bring structure to issue management to ensure that more complete definitions of issues are captured, including data related to quantitative and qualitative impact, analysis of the issue, and collaborative identification of the root cause of the problem by cross-functional internal and external teams. Automated notifications keep the collaboration process moving to ensure follow up and prompt resolution. APT-SCIM supports four unique incident management processes as well as a process for managing change requests:

- Direct Material Supplier Incidents
- Indirect Material Supplier Incidents
- External Manufacturing Incidents
- Internal Manufacturing Incidents
- Change Requests

TraceLink customers that digitalize supply chain issue management processes have delivered significant business performance improvements including **a 65% reduction in the average time it takes to resolve issues** and **a 35% reduction in the total number of supply chain issues**.

# APT-SCIM is the Digital Foundation for Continuous Process Improvements

Agile Process Teams for Supply Chain Issue Management provides a digital foundation for continuous process improvement through methodologies like Six Sigma DMAIC by creating a systematic approach to issue management. APT-SCIM guides users through a progression of easy-to-use, configurable drop-down lists to capture a very complete definition of the issue. A financial impact field enables managers to assign a financial value to the issue in order to measure the consequences of not resolving the issue. With this rigorous definition and quantification of the issue, APT-SCIM supports the first two steps in the Six Sigma methodology—define and measure. The system also builds a history of issues, resolutions, root causes, and recurring problems which enables more measurement and analysis to support the third step of Six Sigma: analyze.

The recurring problems and issues with high financial impact discovered during the analyze step are good targets for process improvement projects. The ability to collaborate with supply chain partners during the resolution processes further enriches the information collected. This information supports corrective and preventive actions (CAPA) developed to improve the process supporting the "improve" step of Six Sigma.

Once processes are improved, APT-SCIM provides dashboards to monitor the improved processes to ensure that same issues do not recur. For process improvements that impact a number of supply chain partners, the process network capability of APT-SCIM enables precise monitoring of a group of supply chain partners. This supports the final step of Six Sigma DMAIC: control.

Organizations using information collected with APT-SCIM to support Six Sigma projects have achieved **a 50% reduction in repeat deviations** and **a 96% reduction in defects per million**.

APT-SCIM Supports a Structured Approach to Product and Process Quality Improvements

Define

Measure

Six Sigma

Control

Improve

Analyze
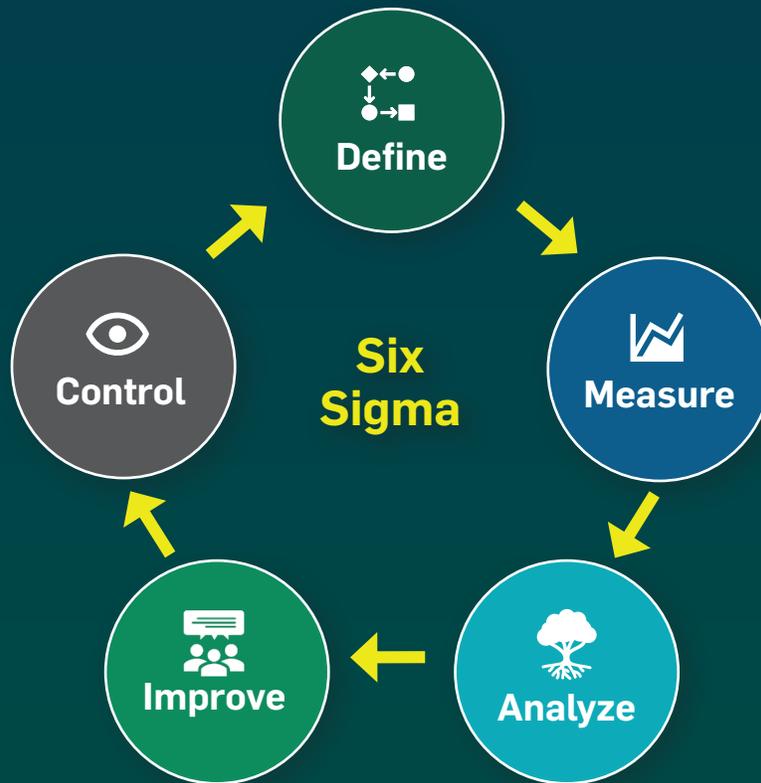
Define
APT-SCIM guides users through a progression of easy-to-use drop-down lists to capture a complete definition of the issue. Easily add custom values to ensure a more complete definition of business process defects.

Measure
APT-SCIM collects quantitative and qualitative values and leverages dashboards to better understand troublesome internal processes, recurring issues, problematic partners, and the severity of issues.

Analyze
Use issue resolution history and root cause assessments collected during the APT-SCIM incident management process to identify recurring and high impact problems.

Improve
APT-SCIM creates comprehensive incident definitions and provides complete visibility into resolution processes, and its collaborative root cause determination capability supports process improvement projects.

Control
Use configurable dashboards to track partner performance and the effectiveness of business processes that have been modified.

APT-SCIM Plus Six Sigma Delivers Business Performance Improvements

Any incident, no matter how small and regardless of whether it's a product defect or business process defect, can paralyze a supply chain. The increased visibility, shared information, and collaboration provided by APT-SCIM ensures that subject matter experts from both sides of the customer/partner relationship have a focus on potential disruptions. Empowering and encouraging suppliers to enter seemingly small issues when they occur increases the chances that one of these subject matter experts will spot and avert a supply chain disruption.

Combining a Six Sigma DMAIC process improvement methodology with APT-SCIM's systematic approach to issue management not only improves the immediate resolution of issues, but also greatly reduces the number of issues and the disruptions that they cause. With this powerful combination, organizations have **reduced supply chain disruptions by as much as 97%**. The result is a more agile and resilient supply chain that suppliers and other trade partners are enthusiastic about participating in. Most importantly, with a more agile supply chain and fewer disruptions, APT-SCIM users were able to **improve customer delivery performance by 82%**.

APT-SCIM Provides Supply Chain Partners with Greater Visibility and Operating Efficiency

Simple start up:

- No cost to partners to participate in the shared multienterprise application.

- Customer and partner users are onboarded and supported by TraceLink.

- Simply accept an email invite to get started.

- No system integrations are required.

- Add as many subject matter experts as needed at no cost.

Path to productivity happens quickly:

- Get immediate notifications and avoid endless emails.

- Gain instant management visibility into customer priorities, due dates, and resolution progress.

- Resolve issues faster and with fewer repeat issues.

- Connect directly to customers' subject matter experts to analyze problems and drive continuous improvements.

- Work together with customers to improve performance and strategic relationships.

APT-SCIM is a critical tool for manufacturing companies and supply chain partners that want to boost performance and quality and build a more resilient supply chain.

The Business Case for a Better Issue Management Process

In addition to faster issue resolution and business process improvements, APT-SCIM provides quantifiable benefits that directly impact the company's financial performance. These include:

Lower cost of goods sold (COGS)

APT-SCIM process improvements enable reduced expediting and express shipping fees, overtime, scrap, rework, and material costs. More time to collaborate with partners on innovative new ideas versus issue resolution can lead to step-change reductions in materials costs.

Improved on-time, in-full (OTIF) delivery performance

Reducing incidents, resolution time, and disruptions decreases order fulfillment cycle times. This improves supply chain agility, and reduces the need for buffer stocks, and can help organizations improve OTIF delivery performance by as much as 82%.

Maximize revenues

Reducing manufacturing and supply chain disruptions means fewer late deliveries and missed shipments which improves customer satisfaction and ultimately maximizes revenue.

Organizations can begin achieving the business benefits of APT-SCIM in less than 30 days. Here is how:

- No software to install.
- No requirements for IT teams to manage the implementation.
- Customer users and partner users are onboarded by TraceLink.
- Begin managing internal processes on day one.

- Start logging, tracking, and resolving supply chain issues and incidents within days.
- Leverage low-code and no-code customization tools to configure pre-built process and solution templates.
- Simple, user-based pricing lets organizations get started quickly and cost-effectively.

Agile Process Teams for Supply Chain Issue Management is Easy to Adopt and Use

- Cloud Software
- No Integration Required
- Pre-Built Solutions
- Low / No-Code Configuration

- Invite Users
- Partner Onboarding by TraceLink
- No Cost to Partners
- Single Network Login

- Intuitive User Experience
- Mobile Responsive
- Automated Notifications
- Structured Process Workflows

Easy to Start → **Easy to Network** → **Easy to Use**

APT-SCIM gives organizations the power to collaborate internally and with supply chain partners in real time—with a single source of shared truth—supporting continuous improvement processes and helping organizations achieve consistent performance outcomes, the highest levels of quality, and faster issue resolution times.

Schedule your live preview of APT-SCIM today.

tracelink.
NETWORK FOR GREATER GOOD