

ML-Powered Investigation Maps™

for

Accelerated Incident Resolution

Our innovative technology helps Operations teams solve problems faster

The Problem

Incident Resolution is often slow and laborious due to inefficient collaboration within and across teams, inadequate knowledge reuse, delays due to ad-hoc and unclear strategy & shortage of subject matter experts.

Our Solution

Collaborative Investigation Maps to visually represent the potential causes for a problem with in-context information per cause, and machine learning on solved problems to generate recommendations for faster & easier resolutions.

Business Benefits



REDUCE MTTR

Business-critical problems cause lost revenue & reputational damage. We reduce MTTR for complex problems by up to 50%.



TRACK RESOLUTION PROGRESS

Provide your customers, IT Managers and key stakeholders with clear visibility into your investigation progress through automatic real-time reporting.



REUSE KNOWLEDGE EASILY

Reduce duplication of work, easily reuse expert knowledge within & outside the enterprise through self-learned solution & root cause recommendations.



COLLABORATE EFFICIENTLY

Boost shared understanding through visual tools. Reduce the burden of out-of-context linear textual communication like notes & emails.



EFFORTLESSLY SOLVE PROBLEMS

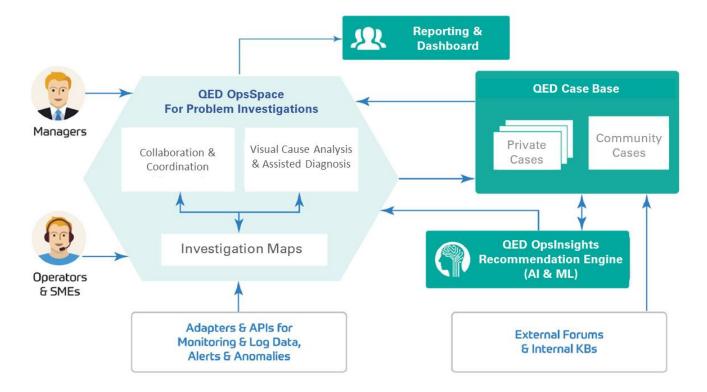
Firefighting of urgent incidents distracts from regular business operations & functions. We reduce person-hours taken to solve a problem by 30%.



INCREASE TEAM PRODUCTIVITY

smartQED helps up-level newer team members, helping them accomplish more in less time and with much less training.

Product



Architecture

QED OpsSpace This is where investigators and supervisors come together to solve incidents and problems using our visual collaborative Investigation Maps. External data such as alerts & log errors can be pulled in through our REST APIs to associate as evidence in the cause analysis.

QED Case Base It is the structured knowledge repository of problems along with their symptoms, context, causes & solutions. The QED Case Base supports continuous learning as knowledge is automatically captured from Investigation Maps as users solve problems within OpsSpace.

QED OpsInsights Recommendation Engine This module utilizes the solved problems present in our QED Case Base to generate likely cause & solution suggestions for new problems, based on their symptoms. These suggestions are computed from problem data with similarity scoring and ranking by our powerful proprietary AI/ML algorithms.

Reporting & Dashboard Automated reports containing summary or detailed information of investigation progress can be easily generated using this module. The dashboard displays aggregate data and KPI trends to help with the decision-making of supervisors & managers.

Use Cases

War Rooms & Fire Fights IT Operations & support teams frequently face strong pressure to resolve incidents faster due to stringent SLA agreements & risk of goodwill loss with customers, especially for business-critical applications.

For urgent incidents, war rooms & fire fights are started with multiple subject matter experts to investigate the problem. The size of the team can range from a dozen people to a few hundred. Collaborating with such large teams can be greatly facilitated by smartQED *OpsSpace*, with Investigation Maps to easily track strategy & progress.

Junior Staff & New Technologies Skilled senior staff often leave the team for newer exciting projects. If the system is then maintained by junior staff who are untrained in the product or technologies used, there are often significant delays and difficulties in getting major issues resolved.

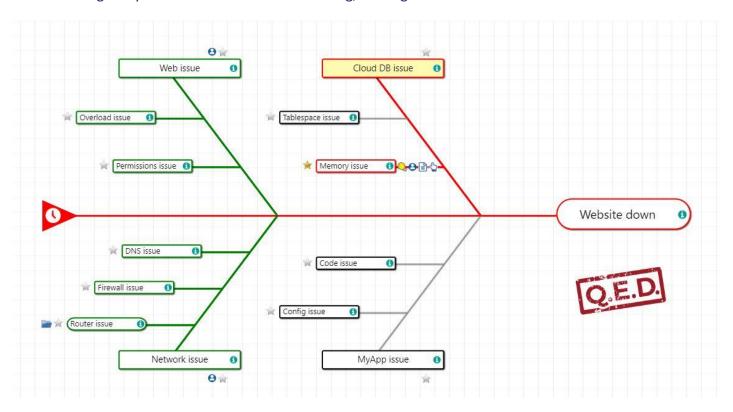
smartQED helps greatly to reduce delays in such scenarios through the suggestions provided for new problems by our *OpsInsights* Recommendation Engine. Junior staff are up-leveled and can easily reuse knowledge without tedious searching and reading of prior incident tickets and knowledge articles.

How smartQED Accelerates Resolution

Our mission at smartQED is to eliminate the delays in IT incident resolution. We do that in 2 major ways: by introducing visual Investigation Maps™ that enable efficient team collaboration, and by augmenting human intelligence with our powerful Machine Learning algorithms that generate useful recommendations from the historical data of prior solved problems.

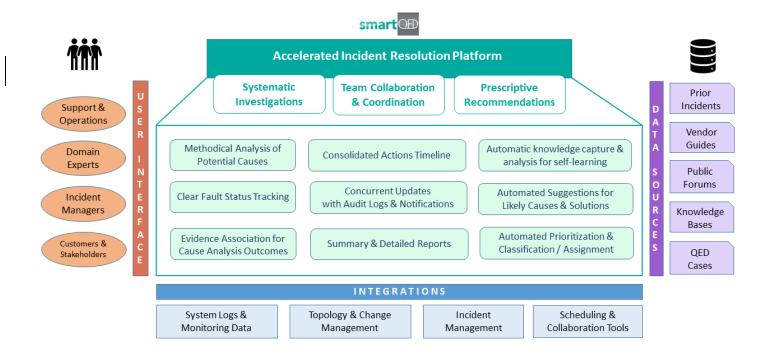
Collaborative Investigation Maps™

Investigation Maps™ are a key innovation in smartQED *OpsSpace*. These maps can be used to visually depict a hierarchy of potential causes for a problem in the form of a cause tree or Fishbone / Ishikawa diagram, an established and popular method of root cause analysis. They additionally provide the capability to associate various artifacts to a cause such as symptoms (evidence), fault status, notes, actions taken etc. Investigation Maps are concurrently updatable by users, with automatic merging & notifications, helping to put everyone on the same page quickly. Investigation strategies are clear to all, and the in-context information reduces confusion and greatly enhances shared understanding, leading to much faster resolution of incidents.



Augmented Intelligence through Automated Recommendations

When a new problem is detected by IT monitoring or alerting systems, the errors and anomalies can be sent to smartQED *OpsInsights* module which invokes its Recommendation Engine to identify and rank similar problems that were resolved earlier. The matching problems are further analyzed to prescribe likely causes and actions. These suggestions provide valuable starting points for a new investigation, helping to keep it focused to causes that are likely to be relevant. This can greatly reduce the time taken to resolve issues, and also the number of domain experts that need to be involved.



smartQED provides a unique self-learning collaborative platform for accelerating incident resolution in business-critical applications. Its users include operations & support teams, subject matter experts (SMEs), managers, customers and other stakeholders. Data sources for the automated recommendations may include prior incident tickets, vendor trouble-shooting guides, internal & external forums and knowledge bases, and problems solved within smartQED OpsSpace.

Integrations are supported (through REST APIs) with various ecosystem tools such as log collectors (e.g., Splunk), monitoring & alerting systems (e.g., New Relic), ITSM products (e.g., ServiceNow), and chat & other collaboration tools (e.g., Slack).

