Panorama Strategies LLC

Managing Critical Events

A Guide to

Enterprise Integrated Operation Centers

EXTERNAL

PARTNERS

INTERNAL

By Jesper Gronvall

Principal & Founder
Panorama Strategies LLC
www.panoramastrategies.com

TABLE OF CONTENTS

Executive Summary

The purpose of this White Paper is to provide knowledge and insights on how to optimize decision-making processes to manage critical events, how to create an organizational culture of information sharing, and a mindset of collaborative decision-making.

A central expression of that purpose is an *Enterprise Integrated Operation Center* (EIOC). An EIOC will connect and engage all functions, processes, and people of an organization to plan for, manage, and learn from critical events. It leads to an awareness of shared identify and connected outcomes across an organization. The result is an environment that supports higher quality decision-making leading to for example, better customer experiences, a safer workplace, stronger financial performance, and bolstered brand reputation.

The past is not the future, but it is a powerful indicator of events and consequences that can affect an organization. Pandemics, natural disasters, terrorism, and cyber breaches will continue to occur. Economic shocks, geo-political events, and societal shifts with unknown consequences must be expected. What matters *now* is how an organization acts to prepare its executives and employees for future challenges.

> **This Paper outlines straightforward steps to optimize decision-making processes and boost organizational performance for critical event management.**

By connecting what already exists within an organization: people, plans, processes, and technology with an EIOC, essentially a 21st century digital enterprise information control tower, it will power real-time situational awareness and enable data-driven decision-making.

An intended consequence of establishing an EIOC is to reach a state of *adaptive resilience*. The familiar term of resilience implies the ability to adapt to and quickly recover from all types of events, incidents, and crises, while maintaining continuous operations. Adaptive resilience is the next level as it enables 'bouncing back, better' accomplished through continuous organizational learning.

> **Technology is important, but what really matters is an organizational culture built on collaboration and information sharing.**

Key Words

DATA-DRIVEN DECISIONS	ADAPTIVE RESILIENCE
BUSINESS OPTMIZATION	SITUATIONAL AWARENESS
INTEGRATED PROCESSES	CRITICAL EVENTS

Setting the Stage

If you own, lead, or work within an organization that features any of the characteristics listed below, you know the complexities of being aware and understanding what is occurring in all corners of the world and pondering how it could have an operational or strategic impact to your operations. Adding to the noise are events and streams of information and data produced by internal systems.

The *National Intelligence Council* (NIC) predicts in its Global Trends 2040 report that the increasingly hyper-connected world will have to deal with multiple simultaneous challenges of societal shifts, climate change and technology disruptions in the coming decades.[i] Many of these events will uncover unknown or currently uncared for dependencies and interdependencies that can potentially create far-reaching and lengthy disruptions.


Have any of these Characteristics?

- Operate multiple types of systems
- Have dispersed operations (facilities, personnel, supply-chains, multi-national)
- Highly regulated operations
- Competitive business environment
- Public brand

According to McKinsey, the growing frequency and depth of various shocks should make companies "...*expect to lose more than 40 percent of a year's profits every decade, based on a model informed by the financials of 325 companies across 13 industries.*"[ii] External forces and events shall be expected to be choppy in the future, making the case to urgently prepare an organization now to reach a state of *adaptive resilience*.

Event Management Continuum

Organizations operate within a spectrum of events. The aim is to manage all events effectively within an optimized "normal operations" zone without reaching an escalation point where resources are overwhelmed, disruptions ensue, organizational performance is reduced, and important values are compromised (e.g., employee and customer safety or brand reputation).

If an event cannot be managed with the "normal operations" zone the objective is to act efficiently to minimize the length and depth of the disruption, as depicted by the arrow.
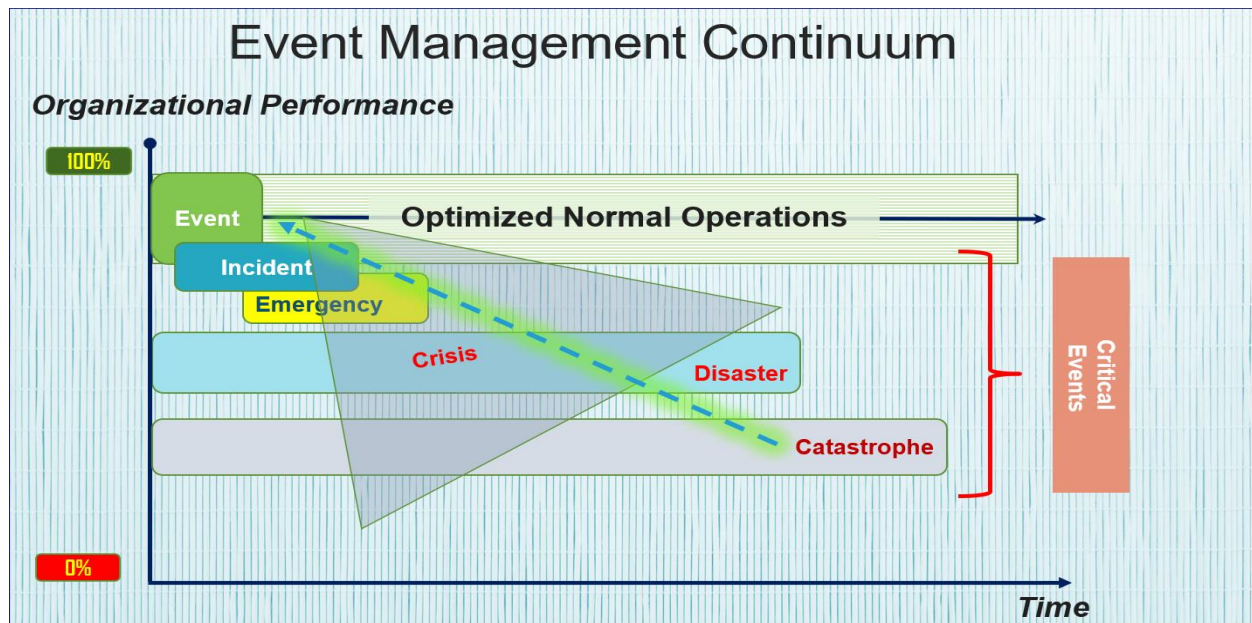
An emergency (local) disaster (regional, national) or catastrophe (global) are examples of event types that will have an increasingly greater impact on organizational performance and the duration will be longer. Disasters and catastrophes are types of events that most often are external to an organization, but where second or third order consequences are difficult to shield itself from.

A final category is the elusive crisis that is a situation characterized by uncertainty, time pressure, surprise, and perceived threats to core values. If a crisis goes undetected or is not managed well it can trigger a long shadow of consequences.

Critical events must be expected, as no plan or preparedness initiative will be able to completely insulate an organization. Rather it is to have processes in place that can identify an anomaly and manage a critical event, from incident to catastrophe, as efficiently as possible and facilitate a return to "normal" as quickly as conditions allow.

A fundamental capability for event management is access to real-time information through information and data fusion for holistic situational awareness and early warning. Fueling the information flow are connected sensors, systems, and humans. Ultimately, to make the best decisions possible events need to be detected, identified, and understood.

Another essential tool are enterprise dashboards with Key Performance Indicators (KPI's) within process and information flows that include pre-determined alert levels to automatically flag events or information that could develop into a critical event.

Use what is Already in Place

Most organizations have invested heavily in systems, people, and processes to mitigate risks and reach desired outcomes. Many organizations have experienced professionals on staff such as, risk managers, business continuity planners, and IT disaster recovery specialists, but their work is often performed in siloes. For larger organizations it is possible that various functions have created their own or use outsourced operation centers, e.g., a Security Operations Center (SOC), an Emergency Operations Center (EOC), or a Network Operation Center (NOC).[iii] Various plans like an IT Disaster Recovery Plan (ITDRP) or a Business Continuity Plan (BCP) likely exists and are kept in a secure place.[iv]
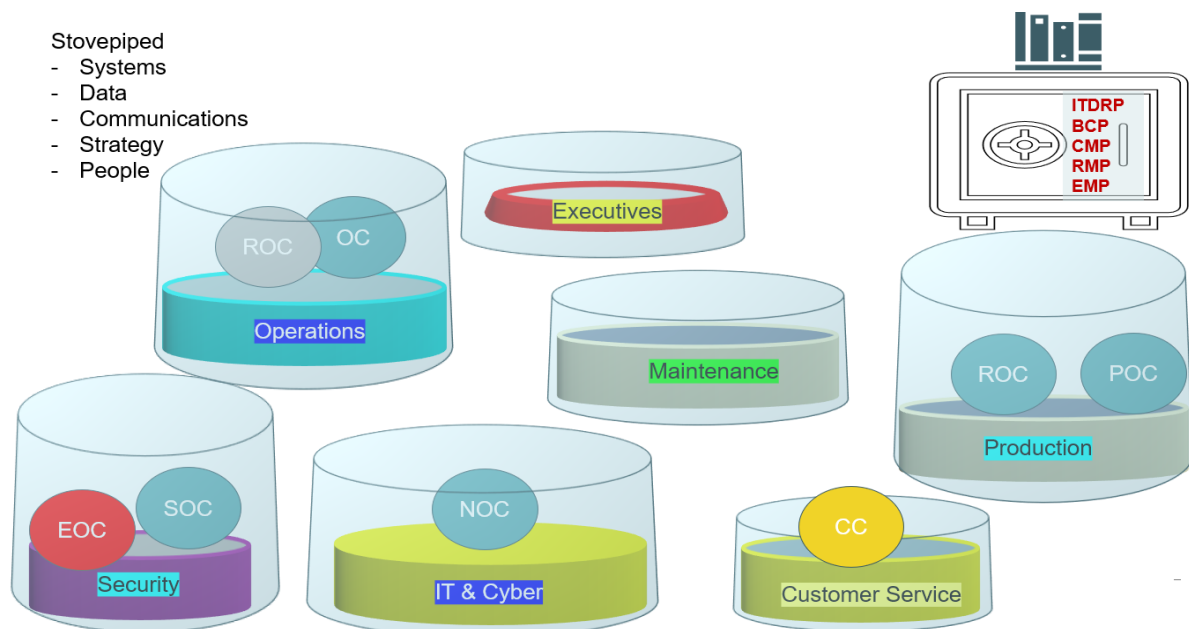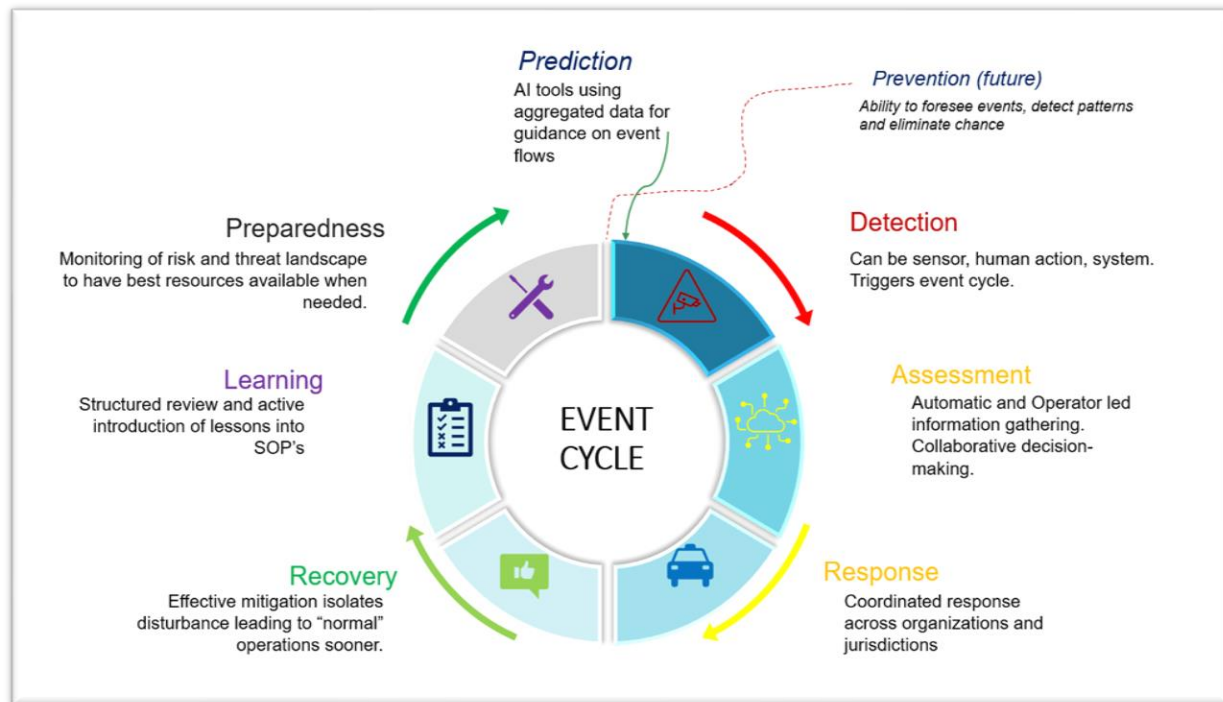

Often the organization has progressed to *vertical siloes of excellence* with real-time knowledge and management *within* that specific function. It is a good step, but it is deceptive as it does not yet constitute a connected enterprise.

21st Century Digital Information Control Tower

The main purpose of establishing an Enterprise Integrated Operation Center (EIOC), best described as a 21st century digital information control tower, is to better capture and utilize the universe of available data internal and external to an organization. It will also support the creation of a culture of information sharing and a mindset of collaborative decision-making.

An EIOC, powered by innovative software, using workflow-based business operations, and populated by all functions of an organization unlocks the promise of real-time situational awareness and coordinated decision-making. It will support improvements in all phases of an event cycle as depicted in the picture below.

Event Cycle diagram:

Prediction — AI tools using aggregated data for guidance on event flows

Prevention (future) — Ability to foresee events, detect patterns and eliminate chance

Detection — Can be sensor, human action, system. Triggers event cycle.

Assessment — Automatic and Operator led information gathering. Collaborative decision-making.

Response — Coordinated response across organizations and jurisdictions

Recovery — Effective mitigation isolates disturbance leading to "normal" operations sooner.

Learning — Structured review and active introduction of lessons into SOP's

Preparedness — Monitoring of risk and threat landscape to have best resources available when needed.

EVENT CYCLE

The main mission of an EIOC is to stay ahead of event curves, automating information flows, and streamlining coordinated and tailored responses leading to better operations in all types of events.

The collection and analysis of comprehensive event data allows for continuous organizational learning and process optimization. Furthermore, as comprehensive data sets are collected, indicators developed, patterns can become discernable by Artificial Intelligence (AI) tools that lead to increasingly predictive and potentially even preventative actions. A recent Accenture study documents and predicts vast operational improvements for those organizations that take advantage of innovative technologies.[v]

An EIOC is not an additional decision-making layer that adds complexity and costs for an organization. Rather it will optimize and streamline operations by connecting already existing systems and process flows leading to data-driven decisions. As functions in an organization by necessity engage in process mapping, stipulating terminology, agreeing on event triggers etc., to populate EIOC processes, it will then, if it has not occurred before, become apparent that success, or failure, of an organization ultimately hinges on collaboration. Most functions will find, for example, having access to information sooner (or at all) will improve their decision-making. Few functions should operate in isolation, organizations are networks that benefit from collaboration.

An EIOC will provide value in day-to-day operations and but, especially during a critical event. Its actual existence will symbolize and represent an organizational culture primed for innovation, collaboration, optimization, and learning.

Connecting the Enterprise

An EIOC facilitates the ability to connect, automate, harmonize, digitize, and standardize business processes, terminology and plans across an organization. An EIOC is built around a single software platform, often called an event management platform, or an integration platform, with its main purpose to integrate existing (and future) systems, sensors, data bases and asset into one unified user-friendly platform.

The platform will drive organizational integration due to the concept of workflows. Workflows involve process tracing and identifying trigger values for actions, alerts, and warnings, responsible stakeholders, standard operating procedures (SOPs), and categories for information generation, business intelligence and analytics for dashboards and reporting. If plans, metrics, and triggers do not exist for relevant organizational workflows, which really should exist, an EIOC is an excellent reason to make sure those are completed.

A big challenge in this type of project is the extent of our own creativity about which information and data is needed, available, and usable. Simultaneously it is vital to establish governance system for data as it must be scrutinized and viewed within specific lenses, e.g., data integrity and security.[vi]

When considering using new innovative technology it should prompt us to ask new types of questions. Data is really the oxygen for a modern organization, a high-yield asset that provides strategic and operational advantages by enabling higher-quality decisions.[vii] Finalizing a project of this type should leave an organization working not only differently, but measurably better.

EIOC Platforms

There are several manufacturers[viii] of capable event management platforms for an EIOC, for example Palantir, Genetec, Everbridge, Saab, and Qognify. These platforms, and others, have different look and feel, and distinct strong points, but have in common that their main purpose is to integrate various systems, data, and sensors into a unified collaborative environment.

Four elements that are central for event management platforms.

Situational Awareness – Real-time fusion of sensors, data feeds and human input for a unified holistic situational awareness. Ability to display various asset classes (e.g., people, vehicles, or aircraft) in location-based applications.

Communications – Ability to collect and instantly distribute, communicate, and visualize information between different platforms and users, internal and external to the organization. The connectivity to permissioned users establishes a common operating picture (COP) facilitating coordinated decisions and actions.

Resource management – Comprehensive asset tracking and precise resource management is accomplished through a Computer Aided Dispatch (CAD) engine. Processes and actions are guided by standard operating procedures (SOPs).

Reporting – collection of real-time data supports executive, strategic and operational KPI driven dashboards. The aggregation of event histories generates best practices to feed ever evolving SOPs and supports the production of rich business intelligence reports. These reports will drive the development of the EIOC, the organization as a whole and can also inform a multitude of strategic decisions far removed from the EIOC.

Best Practices

A vital ingredient to successfully implement an EIOC and embed the mindset of collaboration within an organization is committed executive leadership. Leaders that embrace being proactive and agile will be more successful in an age of constant change.[ix]

With executive blessing comes implementation, where a dedicated team of internal champions are critical to sustaining and developing the vision at all levels and to have the tenacity and persistence to drive the project forward within a multitude of internal and external stakeholders.

A key action early on is to create a Concept-of-Operations (Con-Ops) document that covers all aspects of the EIOC. The Con-Ops document needs to be continuously up-dated, which is a perfect example that an EIOC represents a process, not an end goal. Any EIOC that operates the same way after 1 year, even six months, is not functioning properly. The Con-Ops should always be evolving by incorporating new data sources, finding new consumers of its products, involving new users, new and up-dated SOP's and generating new best practices.

Sustained C-Level engagement (also post-launch!) together with a financial commitment to support the success of the EIOC across the organization.	Identify and nurture internal Champions that can operationalize, sustain enthusiasm through all development cycles and drive the project forward.	Establish and keep a "living" Concept-of-Operations (ConOps) document. Establish governance documents and institutionalize processes for e.g., data discovery and inclusion, data security, and capture of new best practice for perpetual organizational learning.	Establish change management processes, involve end-users early in the design and configuration phases. Develop general and tailored training programs to be provided on a regular basis.

Change management is difficult, but it is a real do or perish task. Employees want their working environment to be familiar and predictable and to focus on their task at hand, rather than on new tools. However, change is inevitable and necessary to stay effective. An advantage with event management platforms is their inherent configurable and modular nature. These platforms are, or should be, configured based on end-user inputs.

Having end-users involved early will also pay off during training and launch where many users will already be proficient as they have worked with the tool for some time. Early involvement also translates into a sense of ownership and pride and will lead to faster adoption.

Summary of EIOC Benefits

An EIOC provides the processes to make the best decisions possible given the situation. The "best" decisions are those made by intended decision-making functions that are informed by the highest quality data- and information available at that time.

Mapping and connecting the EIOC to the vast data universe make it possible to stay in front of event curves and not having to chase cascading consequences. It sets the organization up to shorten and minimize disruptions that could otherwise have seriously de-graded business performance and impacted important values.

A major result of an EIOC is the ability for adaptive resilience. Not only will the organization recover more quickly from disruptions, but it will return to a new level of "normal" by having the capacity to learn and adapt. However, nothing is just served, a governance model with funds to continuously capture, distill and transform organizational learning into best practices for the EIOC is required.
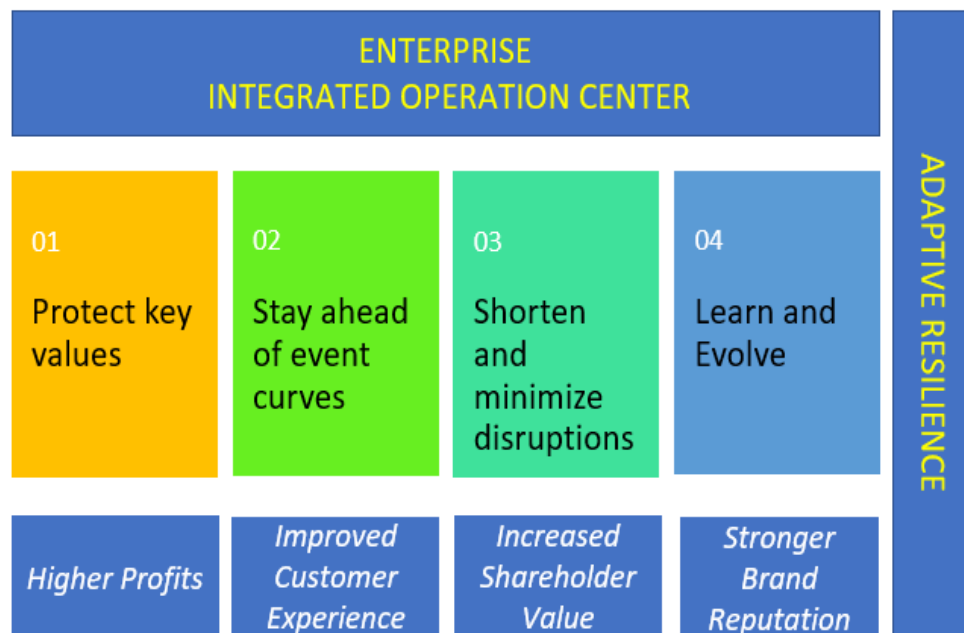
Allocating time, energy, and funds now to create an adaptive resilient enterprise can be the difference of not only surviving a transformational event but thriving post-event. Perhaps it will be your organization that disrupts the market, rather than being disrupted.

Concluding Thoughts: Invest in the Future and Thrive

The goal of an organization should not be to just get by, or merely survive, rather it should be to thrive and offer its customers, owners, shareholders, employees, and business partners growing value and reward through higher quality decisions.

Establishing an EIOC is a relatively small investment to realize substantial rewards by becoming increasingly predictive and potentially preventative. It also squeezes more value out of already made investments by offering a connective platform for available, yet isolated and unused data.

Such a project will result in the physical representation of an EIOC but will also bring a new organizational culture of embracing change, innovation, modernization, and collaboration that will serve the organization well for a long time.

Available Services by Panorama Strategies

Panorama Strategies can guide and support your path to explore, evaluate, ideate, or conceptualize an EIOC that fits your organization's needs. Not every EIOC will, or should, look the same, rather it should be contextualized to the needs and challenges of a specific organization. Furthermore, any initiative should build on what is already in place and make it better.

Title	Content & Key Take-aways	Format
Big Picture **Benefits of an EIOC**	• Benefits of integrated Decision-Making for Critical Event Management • Vision, Mission, and Best Practices of an EIOC • Return-on-Investment (ROI) by establishing a Culture of Collaboration and Adaptive Resilience	Executive Roundtable Format (60 min or 120 min)
A How-to-Guide **Elements of an EIOC**	• Assessing current Capabilities • Gap analysis of Capabilities vs. current and future Challenges • Framing a EIOC Vision and Mission • Concept-of-Operations document: Stakeholders, Workflows, Technologies, Metrics, and Standard Operating Procedures (SOP's) • Data Discovery, Inventory and Governance • Change Management processes	Presentation (60 min or 120 min)
Setting the Baseline **Needs & Gaps Study**	• Review of organizational performance during a past Critical Event Management episode(s) • Review of peer organizations using EIOC's • Assessment of your current Critical Event Management capabilities[x] • Gap analysis: Capabilities vs. current and future Challenges • Baseline and checklist for EIOC project	Workshop(s) + Presentation of Study

About Panorama Strategies LLC

Panorama Strategies LLC was launched in 2020 by Jesper Gronvall and is a Management Consultancy company providing services to organizations desiring to explore, evaluate or establish processes to improve decision-making for critical events.

Jesper has 20+ years of experience from academia, government, and the private sector in the areas of crisis management, homeland security and public safety. He has deep expertise in crisis decision-making, event management software platforms and conceptual planning for Enterprise Integrated Operation Centers (EIOC) within the airport, critical infrastructure, and public safety segments.

He has supported and led several project deployments of IOC software to for example Dallas Forth-Worth International Airport (DFW), John F. Kennedy International Airport (JFK), LaGuardia Airport (LGA), and Newark Liberty International Airport (EWR).

Contact information

Email - jgronvall@panoramastrategies.com

Website - https://www.panoramastrategies.com

Blog - https://www.panoramastrategies.com/blog

Twitter - https://twitter.com/pstratWatch

Endnotes

[i] US National Intelligence Council (March 2021) Global Trends 2040, A More Contested World.

[ii] McKinsey Global Institute (August 2020) Risk, Resilience, and Rebalancing in Global Supply Chains. Page 1.

[iii] CC stands for Call/Contact Center and ROC stands for Remote Operations Center.

[iv] EMP stands for Emergency Management Plan and an CMP is a Crisis Management Plan.

[v] Accenture (2021) Fast-Track to Future-Ready Operations. Elevate Every Decision with Intelligent Operations. https://www.accenture.com/us-en/insights/operations/_acnmedia/Thought-Leadership-Assets/PDF-4/Accenture-Future-Ready-Operations-POV.pdf

[vi] Sound Practices to Strengthen Operational Resilience (2020) Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201030a.htm

[vii] US Department of Defense (2020) DoD Data Strategy, https://media.defense.gov/2020/Oct/08/2002514180/-1/-1/0/DOD-DATA-STRATEGY.PDF

[viii] For full disclosure, Jesper Gronvall has been an employee of Saab Inc. but has no current ties to that company.

[ix] Deloitte Insights (2021) The Journey of Resilient Leadership: Building Organizational Resilience.

[x] One available framework is the NFPA 1600 (2019) Annex B, Self-Assessment for Conformity with NFPA 1600. https://www.nfpa.org/