

The Association of Continuity Professionals'

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# The ACP Book of Best Practices 2nd Edition:

## The Road to Resiliency

**Continuity Professional Best Practices, Real-Life Examples, and Empirical Guidance:**

The individual and collective wisdom of the profession's leading practitioners and academics



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ASSOCIATION OF CONTINUITY PROFESSIONALS

Shaping Careers, Advancing Resilience

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# INTRODUCTION

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About this book, by Dr. Ed Goldberg & Dr. Bernard Jones



Where does one go for the best of best practices in business continuity, disaster recovery, and emergency management? To the brain trust of our profession: The Association of Continuity Professionals, ACP. As a current or future member of ACP, you've demonstrated a commitment to excellence in professional practice and learning through the exchange of knowledge that keeps you at the top of your expertise.

To that same purpose, this is a book of best practices submitted by our members. These experts have used these practices successfully while doing their business, whatever and wherever that may be. The publication is a collection of research and practice-based content that was reviewed through a peer review process. Peer review (also known as refereeing) is having others who are experts in the same field scrutinize an author's ideas, scholarly work, research, etc., before publication.

Our editors are ACPs Dr. Ed Goldberg and Dr. Bernard Jones.

We purposefully chose not to edit for a consistent style. Each author has their style, and for us to apply our style standards to their submission would have the potential to alter their emphasis and the content itself.

The content objectively describes real-life applications of best practices – what worked and how. Some content is based on extensive research, and some is based on experience. We tried hard to exclude unsupported content such as speculation, opinion, etc.

The intent was to make the content useful to all practitioners by making it reliable and attributing it to the individual authors.

Authors have been credited for their work in the publication. They're real people; contact them if you find their work interesting. We thank them for their contribution, of course, but that they did this work for all of us as a community of practice is most gracious. Extend that benefit by talking to them, even if only to say thank you and build your network. Their contact information is included in their respective biographies with each chapter.

We have made a good faith effort to exclude commercial content, i.e., marketing a specific product or service. Sometimes, case studies and examples include that detail. It does not constitute an endorsement of a product, nor does it imply that there aren't similar or even better competitive products readily available.

The content of this publication is the work of each author. It is their work. That said, no one can be the originator of all the ideas and processes used in their practice. That's why it is called "fair use" to cite the ideas of others if they are incorporated into a practice or process, such as when some copyrighted material is included. Where they have used ideas from others, they have paraphrased and given credit. Where they have quoted others, they have cited references. On behalf of the Association of Continuity

Planners, we again thank our author-contributors, and we sincerely hope that you find their insights of great value in your practice.

Dr. Ed Goldberg [goldbem@msn.com](mailto:goldbem@msn.com) & Dr. Bernard A. Jones [jonesb1@stjohns.edu](mailto:jonesb1@stjohns.edu)

Introduction, by Fusion Risk Management, Tracey Forbes Rice, Honorary MBCI - SVP, Customer Engagement



**Please accept this book with our compliments!**

You'll find this Book of Best Practices an excellent resource to learn from today and refer to in the future.

Having worked closely with industry professionals for close to twenty years, ***Fusion Risk Management*** is very proud to partner with the team who created this book—the Association of Continuity Professionals. Like Fusion, ACP supports your journey to resilience with years of experience and expertise. This second edition—The Road to Resiliency—brings clarity to some of the more complex problems facing our industry today, and it is our privilege to be able to share it with ACP's valued members.

The resilience industry is very unique, where we work together both in and out of crisis. Sharing experiences and advice helps our community, our companies, and our whole world, be more resilient.

By sharing this book, and in all that we do, Fusion strives to help professionals like you to create robust programs, maintain a clear overview of your risk landscape, and have everything you need to make the best decisions.

We hope you find the principles outlined in these pages to be useful when designing and expanding your program. If you ever need assistance, remember that Fusion is here to help you on your journey to resilience.

Sincerely,  
Tracey Forbes Rice, Honorary MBCI  
SVP, Customer Engagement  
Fusion Risk Management

## Forward: Navigating the Challenges of Modern Operational Resilience, by Bob Arnold



Bob Arnold is the President and Executive Publisher of Disaster Recovery Journal (DRJ) and serves on the Membership Committee of The BCI. Based in St. Louis, MO, Bob has over 30 years of experience in the Business Continuity/Disaster Recovery niche. Having been involved with the first hot-site development in Missouri in the early '80s, Bob has seen the industry change and develop over the years.

He has channeled this knowledge, experience, and passion into strengthening DRJ's market position as the dominant information source in the BC/DR market. Bob has been instrumental in creating a strong online voice for DRJ - including a website, webinars, social media presence, and virtual conference options.

As well, DRJ is internationally recognized for hosting the top industry conferences: DRJ Spring and DRJ Fall. These two conferences are well-known for connecting leading industry experts with those who are ready and willing to expand their BC/DR knowledge.

Bob has a B.A. in Business Management from Southeast Missouri State, and his hobbies include cycling, camping, and spending time with his wife and kids.

**Navigating the Challenges of Modern Operational Resilience**



In today's highly interconnected world, the importance of operational resilience cannot be overstated. As technology, globalization, and interdependence continue to weave our lives and businesses together, even a minor disruption can send ripples across the entire network, affecting everyone involved. This reality underscores the critical role of disaster recovery, business continuity, and crisis management in maintaining stability. However, these elements alone are no longer sufficient.

Operational resilience must evolve beyond a mere compliance requirement; it should become an integral part of an organization's culture. This shift involves embedding resilience into the very fabric of how an organization operates. This shift will ensure it is prepared for disruptions and capable of adapting and responding swiftly and effectively when challenges arise. By fostering a culture of resilience, organizations can better navigate uncertainties and maintain their equilibrium in an increasingly complex world.

### **The Contemporary Risk Environment**

The current risk landscape is more complex than ever, encompassing both traditional and emerging threats. While natural disasters like hurricanes, floods, and earthquakes continue to pose significant dangers, the digital age has introduced new challenges, such as cyber breaches, ransomware attacks, and the unpredictable influence of artificial intelligence. These risks are not only more intricate but also increasingly interconnected. For example, a cyberattack can disrupt supply chains, halt operations, and severely damage reputations, underscoring the need for a comprehensive approach to resilience.

### **Beyond Compliance: Embedding Resilience into Organizational DNA**

Resilience must be more than a checkbox—it needs to be a core value embedded in every part of an organization. This cultural shift led from the top, fosters an environment where adaptability and preparedness become second nature, ensuring the organization is ready to face whatever challenges come its way.

### **A comprehensive strategy is necessary to embed resilience effectively**

1. **Education and Training:** training sessions and drills are key to ensuring each employee understands their responsibilities in times of crisis. These training initiatives can cover areas like cybersecurity awareness or hands-on disaster recovery exercises. Training should be dynamic and flexible, incorporating insights from recent incidents and emerging risks. Encouraging employees to engage in learning opportunities helps foster a mindset of preparedness and alertness.
2. **Technology and Tools:** Utilizing cutting-edge technologies, such as cybersecurity measures and AI-powered risk evaluation tools, can offer an advantage in identifying and addressing risks before they escalate. Incorporating Internet of Things (IoT) devices, real-time data analysis and cloud-based solutions enhance awareness and decision-making capabilities. Investing in technology demonstrates a commitment to innovation and proactive risk mitigation.
3. **Policies and Procedures:** Establishing clear, actionable policies and procedures creates a framework for navigating disruptions. Regular review and updates are essential to align with the evolving risk landscape.

Regular tests and exercises are essential for pinpointing weaknesses and areas that need improvement. By involving teams from departments in the policy-making process, we can ensure our procedures are feasible, thorough, and in line with the organization's goals.

### **The Importance of Networking in Building Operational Resilience**

Networking stands out as a tool for boosting an organization's resilience. It goes beyond establishing connections; it involves creating a network—a community where ideas, experiences, and solutions are freely exchanged. The benefits of networking are numerous.

**Sharing Knowledge:** Engaging with peers through events, webinars, and articles helps keep you updated on the latest trends and best practices in business continuity and disaster recovery. These platforms provide access to expert opinions and real-world

examples which offer solutions to problems. Actively participating in industry discussions can also help identify emerging trends and technologies that can be harnessed to strengthen resilience.

**Supportive Collaboration:** Networking provides a space to address challenges and brainstorm solutions with individuals who encounter similar risks. This collective wisdom can lead to approaches and strategies that may not surface when working alone. Collaborating with peers can also promote practices and frameworks to foster consistency and dependability across the sector.

**Developing Personal Resilience:** Cultivating relationships within the business resilience community not only bolsters organizational resilience but also fortifies personal resilience. Drawing on the support and insights gleaned from a network can prove invaluable during challenging times. Establishing connections with colleagues can offer reinforcement, inspiration, and focus in the face of adversity.

### **The Journey to Enhancing Resilience**

Fostering resilience within an organization is an ongoing endeavor that demands commitment, continuous education, and a forward-thinking approach. Thankfully, there are resources and communities dedicated to aiding this progression. Comprehensive service providers furnish solutions encompassing risk evaluation and recovery strategies. Engaging in events and conferences presents opportunities for learning and networking on top of all the readily accessible knowledge through industry publications, blogs, and webinars.

One valuable resource is the Association of Continuity Planners (ACP). ACP serves as a platform for professionals to connect, exchange expertise, and bolster one another in enhancing resilience. By participating in the ACP, organizations and individuals can strengthen their capacity to address disruptions effectively, safeguard their operations, and ensure viability.

ACP offers an array of initiatives and materials tailored to support its members, including training programs, resources, mentorship opportunities, and local chapters with regular meetings.

These programs promote a feeling of togetherness and equip members with the tools and knowledge to succeed in their roles. The advocacy work of ACP plays a role in raising awareness about the significance of resilience and shaping policies, both locally and nationally.

### **The Importance of Community in Resilience**

I cannot emphasize the benefits of community enough. In the realm of resilience, the wisdom and support shared by a network can be transformative. Whether it involves drawing lessons from others' experiences, gaining perspectives on strategies, or simply finding solace in shared challenges, having a solid professional network holds value.

Engaging with peers in the continuity planning community fosters a spirit of cooperation and solidarity. It offers opportunities to glean insights from real-world scenarios, appreciate viewpoints, and adopt strategies. What proves successful for one organization may well benefit other organizations.

Creating a community also promotes resource sharing and the exchange of practices. For instance, organizations can team up for training drills, exchange threat intelligence, and establish mutual assistance pacts. These collaborative endeavors serve to bolster resilience within the community while establishing a response network.

In the end, it all comes down to embracing the intricacies of our world and fostering resilience. The inevitability of disruptions underscores the need for organizations to not just survive but thrive through a deeply embedded approach.

Navigating resilience is a journey that demands dedication, ongoing education, and a robust support system. By using resources, be they service providers or reputable

professional groups like ACP, and instilling resilience into the fabric of organizational culture, we can shape organizations that are flexible, responsive, and capable of withstanding any challenge.

Amidst the changing landscape of risks, let's leverage our networks and commit to constructing a future together. We can ensure our organizations are ready for disruptions and empowered to transform obstacles into avenues for progress and innovation.

This book compiles top-tier practices shared by industry leaders to offer guidance and motivation. It emphasizes the significance of resilience, presents approaches, and underscores the strength found in community collaboration. Remember, resilience is not a fixed endpoint but an ongoing learning, adjusting, and enhancing journey. By nurturing a mindset of resilience, we can create flexible organizations with the ability to overcome any obstacle.

# BUSINESS CONTINUITY MANAGEMENT

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## The True Value and ROI of Business Continuity, By Regina Phelps



Regina Phelps is an internationally recognized expert in the field of crisis management, continuity planning and exercise design. She is the founder of EMS Solutions Inc (EMSS), and since 1982, EMSS has provided consultation and speaking services to clients on four continents.

Ms. Phelps is a frequent speaker at international continuity conferences and is consistently rated one of the top-rated speakers in her field. She is known for her approachable and entertaining speaking style and her ability to take complex topics and break them into easily digestible and understandable nuggets.

She is the author of four books:

- Crisis Management: How to Develop a Powerful Program
- Cyberbreach: What if your defenses fail? Designing an exercise to map a ready strategy;
- Emergency Management Exercises: From Response to Recovery
- Emergency Management Exercises: From Response to Recovery Instructors Guide.

All four are available on Amazon.

One of the biggest challenges that someone charged with overseeing a Business Continuity Program has is to prove that the program is worth its cost: “What is your program’s ROI?” I call that the “dreaded question.” I wanted to develop a webinar and white paper on this topic because I am going to propose another way to frame this question. What if continuity planners talked about value on investment versus return on investment?

### **The “Dreaded Question” of Return-On-Investment (ROI)**

So here’s how the questions are often framed:

- “What’s the return on investment (ROI) of your continuity planning efforts?”
- “How much will you save the company?”
- “How much will you make for the company?”
- “What does this do to the company’s bottom line?”

Answering these questions can get really tricky. You might reply with something along the lines of, “Based on our BIA (business impact analysis), we know that our plans will protect us from any *significant* downtime. That downtime is projected to cost us <<fill in the blank>> dollars per second that we are down.” The executives around the table raise their collective eyebrows, and one of them goes in for the kill and asks, “When did that happen last, and how much did it cost us?”

*Gulp.* More than likely, you lose that round.

The traditional definition of “ROI” means – very literally – “return on investment.” That means that you need to prove that the company received the same amount of money back – or more – as it invested in your program. You can always point to your BIA, point to your planning efforts, correlate the two – and pray for the best. If a serious outage occurred, it’s a pretty easy argument. However, if you’re like most BC/DR professionals,

you likely have had no disasters or plan activations, or – worse yet – the situations you faced were easy.

You will never win this one with that kind of response.

But what if you stopped and thought about things differently? What if you changed the entire conversation? In other words, is there another, perhaps more meaningful, way to show value? The questions I'd like to ponder here are:

What is the value-add of business continuity?

Is that value-add only good in a disaster?

Is there a way to show value to the organization on a daily basis?

### **Here's Another Option: Value on Investment (VOI)**

Is it possible to tie dollars invested to desired – and realistic – company outcomes such as:

- Increased resiliency?
- Competitive advantage?
- Effective staff training?
- More thoughtful business processes?

Overwhelmingly, the answer is 'yes,' and to do that, we now need to discuss value and Value on Investment (VOI).

Value on investment was first defined by the Gartner Group, which described it as the intangible assets that contribute heavily to an organization's performance. The keyword there is intangible. These intangible assets include knowledge, processes, organizational structure, and ability to collaborate – which is what BC/DR does! So VOI is the measure of the intangible benefits of a project or an activity. And just by the very nature of things, VOI will include some aspects of ROI – but that's not where you want to end up. You will want to talk about value.



Shifting to a VOI approach instead of an ROI approach provides the necessary forward-thinking framework for scoping, prioritizing, and initiating continuity projects. For example, in response to the executive's question, what if you said this instead: "We use the concept of VOI because we are working to measure the idea of creating company resilience, of tying planning outcomes to increased employee skills and of creating value through collaborative planning and learning at every level of the organization."

Wow, that sounds great!

VOI helps measure the total value of "soft," or intangible, benefits derived from continuity initiatives, in addition to those "hard" benefits measured by ROI. VOI is, of course, subjective and would be difficult to measure with the same precision as ROI. Yet a VOI approach is critical to allow funding for continuity planning efforts that provide the competitive differentiation necessary for the success of the efforts.

And, by the way, BC/DR professionals aren't the only ones who struggle with this. When you research the topic of VOI versus ROI, you will find many groups working through the same questions, including organizations and programs such as higher education, not-for-profits, professional associations, think tanks, and technology initiatives. You are not alone!

### **Start by Changing the Conversation**

The first step begins with changing the conversation – move it away from ROI to VOI. There are many ways to do that; one of my favorite ways is to spend some deep and quality time discussing three basic questions:

1. "What is the company <<fill in the blank>> (business continuity, disaster recovery, etc.) program doing now that provides value to the company?"
2. "What should the <<fill in the blank>> (business continuity, disaster recovery, etc.) program begin doing that would provide additional value to the company?"
3. "What [am I/are we] doing to provide value to the company?"

How do you, as an individual or group, begin to get your arms around these questions? One way to start is to have what we call a “whiteboard activity.” The whole purpose is to expand and deepen your thinking about what the program is doing now and/or could do and identify what everyone is doing to contribute to the success of the program’s mission.

Here are some ways to set up a great brainstorming environment to capture ideas.

These will help make that whiteboard activity really pop!

1. Establish goals for the session.
2. Set a timeline for the session.
3. Give everyone on your team a homework assignment: Bring to the session at least ten ways that the program provides value. They can be silly ones, great ones, boring ones – bring any and all of them!
4. Create the environment for success. Be prepared at the start of the meeting with sketchpads, sticky notes, colored markers, or a large amount of whiteboard space for everyone involved.
5. Write down and/or sketch out every idea. Every idea, good or bad, should be presented.
6. Don’t judge. Embrace the ridiculous! At the end of the day, it might be the best idea in the room.
7. Start with general topics and then move toward the specific.
8. Look for synergy among the ideas. There is often potential for creating synergy among originally separate suggestions.
9. Don’t fall in love with your ideas. Shop them around and see how they hold up.

Viola! You are making progress!

**Eight Ideas on VOI**

To jump-start your thinking, here are eight different ways that your program might provide VOI. Don't pull these out until your team has finished doing your own brainstorming first!

1. Regulatory compliance.
2. Competitive advantage.
3. Brand and reputation protection.
4. Risk identification.
5. Operational improvement.
6. Knowledge capture.
7. Increased robustness.
8. Deeper knowledge.

### **Idea #1: Regulatory or Contractual Compliance**

An obvious value-add is one that is required by your profession, such as the FFIEC guidelines for the banking industry. That's an easy one. However, you may not be in an industry or profession that is subject to requirements from external regulators. If that's the case, you might think to yourself that this idea doesn't apply.

Hold on, though – let's think about this more deeply. Regulatory compliance might not be a requirement for your company, but it could be a requirement for one of your big customers. For example, take the FFIEC Appendix J requirement, "Strengthening the Resilience of Outsourced Technology Services." This requires that third-party vendors meet certain requirements for planning and testing. Are you one of those third-party vendors that need to meet certain requirements? Or there could be a contractual requirement from a customer in order for them to do business with you. Your excellent program meets their requirements, and therefore, your company can do business with them.

### **Idea #2: Competitive Advantage**

It might go without saying, but most organizations and companies prefer to do business with those businesses which have a higher ability to deliver products and services on

time. “Delivering products and services on time” includes when a disaster has happened at your facility. Your customers may “feel for you,” but they still want their widget and/or service on time. “Aw, poor company, sorry about the flood; where’s my part?”

In addition, having a comprehensive and tested Business Continuity program (one that includes IT recovery, business continuity, and supply-chain resiliency planning) assures customers of your ability to deliver on the mutually-agreed-upon SLAs and thereby demonstrates value to them.

And lastly, your competitors may not have a program, or as robust a program as yours, and you can highlight that in sales presentations and contract pitches.

### **Idea #3: Brand and Reputation Protection**

Think about it: Having comprehensive Business Continuity and Crisis Management programs helps protect your organization from the negative publicity that could result from a disruption to your operations. It’s a great thing for your business to be known for reliability in spite of a serious outage.

And if – or more likely, when – the “Bad Thing” happens, your communications and executive teams will have a great story of resilience to tell instead of an “Oops!” story.

### **Idea #4: Risk Identification**

While performing hazard risk and business impact analyses across all physical locations and within each process or function, threats and vulnerabilities will always be discovered. This critical risk identification, then, allows the organization to mitigate the risk where possible and prepare for the risk by developing plans and conducting exercises and training to improve performance.

Every time you discover a risk, you have the opportunity to make operational changes or physical enhancements that will reduce or eliminate the possibility of some or most of

the organizational risks. This saves money at the time of a disaster but may also contribute to insurance savings on an annual basis.

#### **Idea #5: Operational Improvement**

When you perform risk assessments and develop continuity plans to recover from those risks, you may discover that the greatest value of a comprehensive Business Continuity planning process is awareness. This is awareness that is gained from examining the details of one's own business process, not just how to plan for a disruption.

The planning process can create increased awareness that results in opportunities to make operational improvements, often in areas that had not previously been explored. These improvements can result in more efficiencies and increased productivity. During a recent exercise, I was surprised when the team failed a particular mission-critical business process with a 60- minute RTO and the client said it wasn't a big deal. I replied, "how could missing an Recovery Time Objective (RTO) of 60 minutes not be a big deal?" The clients then sheepishly said that they had stopped doing that particular process at the end of the previous year and had never updated the Business Impact Analysis. So, they had many plans and expensive technology requirements in place to meet an RTO that was no longer needed; money that could now be released for other things, resulting in a big cost savings.

#### **Idea #6: Knowledge Capture**

How effective are your training materials? Do they cover everything that someone would need to know to perform that function? What is the condition of your Standard Operating Procedures (SOPs)? A tremendous amount of critical day-to-day business information is often scattered among spreadsheets, original documents or in the heads of a few subject matter experts. What happens when the SME is on vacation or – yikes – if they retire? This is increasingly an issue in many companies as baby boomers leave the workforce, often taking a headful of knowledge with them.

Business Continuity planning is a perfect avenue to collect and organize that information for future use (including process improvements), and to prevent the information from being lost forever. It is a great way to build a training program or to enhance the skills of more junior staff.

### **Idea #7: Increased Robustness**

The Business Continuity planning process can strengthen the organization, not just by preparing for major disruptions, but also by giving employees the skills and knowledge to react more effectively to mitigate smaller everyday problems as they arise – and before they can become major disruptions.

Everyone knows what it's like when the most senior person with everything in their head goes on vacation. People scramble frantically to make sure they know what to do if something goes wrong. Just think of the amount of increased resiliency you could create by transferring information through plans, documents, training and exercises. Everyone's knowledge will increase, along with the company's ability to recover.

### **Idea #8: Deeper Knowledge**

This last idea came up recently when we completed an engagement with a client, who shared this story with us: We had completed a major cyber exercise with them the year before. One of the initiatives from that exercise was to develop manual work-arounds for critical business processes whenever possible. Originally, the staff said that many things could not be done manually at all – but something interesting happened when they really started to peel apart the work. They discovered that there were, indeed, work-arounds for some of the most critical activities. To be sure, those work-arounds weren't easy and they were time consuming, but they could be done. The person who shared the story with us said the manual process had given the team a much deeper knowledge about the system than they had ever had before, and a much greater understanding of how it all worked together. That kind of learning is invaluable.

Even in routine planning, when engaged in the planning process, we have had clients say that they actually learned even more about their current processes and how to do them more effectively and efficiently. And even for a veteran employee, this process can lead to a deeper knowledge, which can help the day-to-day work.

### **Communicating Value**

So this brings us to the question of communicating the value that you are creating in your program, plans and exercises. You need to start thinking of business continuity as a product that needs to be marketed strategically within your organization. Really.

We divide these marketing efforts into two categories: overt and covert. Overt marketing efforts are just as the word describes: they're done or shown in the open and are plainly or readily apparent to everyone. For example, you could encourage employee home preparedness during the month of September, which happens to be "National Preparedness Month." To build resiliency, you need employees to show up at time of disaster, and they will only show up if their families and homes are OK. One way to make that more possible is to encourage home preparedness, thus your National Preparedness Month activities feed into a win-win for your program and the company.

Covert marketing, on the other hand, is not openly acknowledged or displayed. There are ways you can share information and knowledge, thus informing others, but can also demonstrate the value you provide. For example, if your manager is keenly interested in cyberattacks and cyber preparation, it would be very appropriate (and help build your program's value) if you kept him or her informed of key attacks or responses by other similar companies or competitors. Keep them in the loop on things that they might not likely see themselves, which can reinforce the value you bring to the organization. And when appropriate, do analysis of contemporary events and share that with key individuals.

And whenever key events occur, find ways to bring the information to the right people in your organization:

- Write after-action reports for real activations or exercises. Be sure to outline the ways that the continuity process helped, the key lessons learned and next steps
- Refer back to your internal marketing plan. Whether you had a real activation or held a great exercise, tell your story by internal communications vehicles, such as company articles, whitepapers and/or presentations.

### **Where Do You Go From Here?**

Now that you are, perhaps, thinking about things a bit differently, you have work to do:

1. Get your team together to “whiteboard” the value question.
2. Have your elevator speech ready.
  - a. Be ready to share the top five (at least) values on investment that your continuity program provides to your company.
3. Start spreading the word.
  - a. Start today!



## The Importance of Storytelling with BC Metrics, by Dr. Bernard Jones



Dr. Bernard A Jones, MBCI, CBCP, CORP, ITILv.3, sits on the ACP National Board of Directors as the Information Committee Chairman. Dr. Jones recently completed doctoral research on organizational resilience at New Jersey City University. His research benchmarked organizational resilience in New Jersey and enhanced a tool that allows organizations to determine their organizational resilience score.

*“Visualizations should strive to tell a story and convey meaning to the viewer,”  
encapsulates the fundamental purpose of data visualization.”*

*Dr. Edward Tufte*

Many of us have memories of storytime as a kid, and we all likely have a favorite story that still conjures up fond memories. While the story behind your metrics may not seem like it will be a bestseller, never underestimate the power of the narrative behind your numbers.

I have spent time studying Dr. Tufte, a pioneer in data visualization, and are big fans. Indeed, we applied several of his theories in this book. Tufte emphasizes the importance of storytelling in metric reporting for several reasons:

Clarity and Comprehension: Storytelling helps to make complex data more understandable. By framing metrics within a narrative, it becomes easier for the audience to grasp the significance and context of the data.

**Engagement:** A well-crafted story captures the audience's attention. By presenting metrics in a narrative format, you can make the information more engaging and relatable, thereby maintaining the interest of stakeholders.

**Retention:** People are more likely to remember information presented as part of a story. Storytelling aids in the retention of critical insights and data points, making it more likely that the audience will recall and act on the information.

**Contextualization:** Stories provide context, which is crucial for interpreting metrics correctly. They help to explain why the metrics matter, what trends they reveal, and how they impact the organization.

**Persuasion:** A compelling narrative can be persuasive. By aligning metrics with a story, you can more effectively argue for specific actions or changes, as the data is presented in a way that resonates with the audience's experiences and emotions.

**Connection:** Stories can bridge the gap between data and real-world outcomes. They illustrate how metrics are connected to broader organizational goals, customer experiences, or operational processes, making the data more relevant and actionable.

By integrating storytelling into metric reporting, Tufte argues, and we both readily agree, that you convey data and its meaning and implications, leading to better-informed decisions and more substantial buy-in from stakeholders.

Storytelling for organizational resilience metrics is essential because it helps articulate the value and impact of organizational resilience programs. Often, there is a disconnect between top management's perceptions of organizational resilience objectives and how they measure their value. We've seen this gap persist from our experience and conversations with others. Crafting a narrative that aligns with your metrics can bridge this gap by demonstrating how a well-run resilience process contributes to an

organization's growth, innovation, customer satisfaction, and overall mission-critical process quality. This approach will help practitioners communicate the significance of maintaining sound, comprehensive, and actionable resilience metrics within their programs.

### **Best Practices for Storytelling with Metrics**

Gathering the most effective organizational metrics is step one, but telling the story behind the metrics is just as important. Enhancing your ability to tell a story around your organizational resilience data can be summed up in these crucial best practices:

#### **Understand Your Data:**

**Deep Dive:** Investigate your data to uncover patterns, trends, and critical insights. Ensure you understand where your data comes from and how often it is updated.

#### **Articulate the Correct Context:**

**Clarify Goals:** Determine what you want to achieve with your metrics. Is it to inform, persuade, or motivate action?

#### **Know Your Audience:**

Understand who will receive the information and their interests, needs, and levels of understanding. Tailor your story to resonate with your audience, ensuring relevance and engagement.

#### **Craft the Narrative:**

**Structure:** Organize your data coherently with a clear beginning, middle, and end.

#### **Story Elements:**

Incorporate elements such as conflict, resolution, and key takeaways to make the story compelling.

#### **Data Integration:**

Seamlessly weave your data into the narrative to support and enhance your story.

**Visualize Effectively:**

Clear Visuals: Use clear, concise, and well-designed visualizations that make complex data understandable.

**Consistency:**

Ensure that the visual style is consistent and supports the overall narrative.

**Selecting the Visuals:**

Stay aligned with your company culture for presentations, dashboards, and metric presentations. Start simple with text tables, heat maps, line graphs, or bar graphs, and avoid pie and doughnut charts.

**Highlight Key Data:**

Emphasize the most critical data points that drive your story forward.

**Simplify and Clarify - Eliminate Clutter:**

Remove any unnecessary information or distractions from your visualizations.

**Focus on Clarity:**

Strive for simplicity and clarity when presenting your data.

**Iterate and Refine:**

Feedback Loop: Gather feedback from stakeholders to ensure that the story resonates and achieves its purpose.

**Continuous Improvement:**

Refine and iterate your story and visualizations based on feedback and new data.

**Provide Context:**

**Background Information:**

Offer necessary information to help the audience understand the data.

**Comparative Data:**

Include benchmarks or comparative data to provide a frame of reference.

**Ensure Credibility - Data Integrity:**

Ensure your data is accurate, reliable, and up-to-date.

**Transparent Sources:**

Cite your data sources to maintain transparency and trust.

Following these steps, you can create a compelling and effective story behind your metrics that conveys data and its meaning and implications, leading to better-informed decisions and more robust stakeholder engagement.

**Other best practices include:****Reducing the Noise:**

Less is sometimes more. Every element you add takes a cognitive load on the part of the audience. Take a discerning eye to the elements on your screen and identify those that unnecessarily take up brainpower. When presenting your metrics, the last thing you want is an overwhelmed audience missing the story you are trying to share. Eliminate the clutter.

**Using Your Creative Side as a Visual Designer:**

Unleash your inner artist, remembering that form follows function. Consider what your audience wants to do with the data when creating visualizations. A helpful trick is to draw out what you want your metrics to look like on the screen. Always follow corporate culture and engage your stakeholders.

**Putting it All Together to “Tell the Story”:**

- So, how do we tell this story?
- How do we clearly articulate the story around organizational resilience metrics?
- Draw your audience's attention to where you want them to focus.

When crafting the story, consider the gaps in your program, the obstacles, and what you wish stakeholders and leadership to walk away with. Think like a designer and tell the story of organizational resilience to aid in critical decision-making.

### **Practice:**

If you are uncomfortable about this topic, practice speaking in front of others. Grab some peer team members to get feedback, and if possible, practice with your Executive Sponsor.

### **Storytelling Using Organizational Resilience Metrics**

By now, we are sure you're thinking, 'This is all fine and well; however, examples would be nice.'

Here are some examples where metrics tell stories illustrating how an organization withstands and adapts to challenges.

#### **Revenue Recovery Post-Crisis:**

Metrics: Revenue trends before, during, and after a crisis.

Example: "Our company faced a significant revenue drop during the 2020 pandemic, plummeting 30% in Q2. However, due to our swift digital transformation and diversification of product offerings, we saw a 20% revenue increase by Q4, surpassing pre-crisis levels."

#### **Supply Chain Stability:**

Metrics: Supplier lead times, inventory levels, number of supply chain disruptions.

Example: "In the wake of the natural disaster 2019, our average supplier lead time increased from 2 weeks to 6 weeks. By implementing a dual-sourcing strategy and increasing inventory buffers, we reduced lead times to 2.5 weeks within six months, ensuring steady product availability."

### **Employee Retention and Engagement:**

Metrics: Employee turnover rates, engagement survey scores, training completion rates.

Example: "During the merger in 2018, our employee turnover rate spiked to 25%. By introducing comprehensive onboarding programs and enhancing internal communication, we improved engagement scores by 40% and reduced turnover to 15% within a year."

### **Customer Satisfaction and Loyalty:**

Metrics: Net Promoter Score (NPS), customer retention rates, customer feedback scores.

Example: "Our NPS dropped to 40 during the cybersecurity breach in 2017. We regained customer trust through transparent communication and rapid service restoration, increasing our NPS to 65 within six months."

### **Innovation and Adaptation:**

Metrics: Number of new product launches, percentage of revenue from new products, R&D expenditure.

Example: "Facing market saturation in 2016, we shifted 20% of our budget to R&D. This led to the launch of five new products within two years, contributing to 30% of our total revenue and reviving our competitive edge."

### **Operational Efficiency:**

Metrics: Operational downtime, process cycle times, cost savings from efficiency improvements.

Example: "Following the implementation of lean methodologies in 2015, we reduced our process cycle time by 35% and decreased operational downtime by 50%, resulting in annual cost savings of \$2 million."

### **Financial Health and Sustainability:**

Metrics: Debt-to-equity ratio, cash flow, emergency funds/reserve levels.

Example: "During the economic downturn in 2008, our debt-to-equity ratio was a worrying 1.5. Through strategic debt management and building emergency reserves, we reduced this ratio to 0.8 by 2011, ensuring financial stability and sustainability."

### **Cybersecurity and IT Resilience:**

Metrics: The number of cyber incidents means time to recovery (MTTR) and investment in cybersecurity.

Example: "In 2019, we experienced a major cyber attack that took 72 hours to mitigate fully. By increasing our cybersecurity investment by 50% and enhancing our response protocols, we reduced our MTTR to 12 hours and have had zero major incidents since."

### **Crisis Management Effectiveness:**

Metrics: Response time to crises, recovery time, impact on operations.

Example: "When the flood hit our main warehouse in 2014, it took us two weeks to resume full operations. After refining our crisis management plan, we cut our response and recovery time by 70% during the 2017 hurricane, ensuring minimal impact on our supply chain."

### **Sustainability and Social Responsibility:**

Metrics: Carbon footprint, waste reduction, community impact metrics.

Example: "In 2015, our carbon footprint was 100,000 tons annually. Investing in green technologies and waste reduction programs reduced our footprint by 40% over five years, aligning with our commitment to sustainability and enhancing our reputation in the community."



These stories, backed by resilience metrics, provide a compelling narrative demonstrating an organization's ability to navigate challenges and emerge stronger.

### **Storytelling Using Case Studies on Organizational Resilience**

Here are some real-life case studies that effectively convey organizational resilience:

#### **Johnson & Johnson's Tylenol Crisis (1982):**

Context: In 1982, Johnson & Johnson faced a significant crisis when cyanide-laced Tylenol capsules resulted in several deaths.

Response: The company quickly pulled millions of bottles from shelves, communicated transparently with the public, and introduced tamper-proof packaging.

Key Takeaways: This example highlights the importance of swift action, transparent communication, and innovation in packaging to restore consumer trust and demonstrate resilience.

#### **Toyota's Lean Manufacturing and Kaizen:**

Context: After Japan's 2011 earthquake and tsunami, Toyota's flexible supply chain and adaptive practices helped it recover faster than many competitors.

Response: Toyota's adoption of lean manufacturing and the Kaizen philosophy (continuous improvement) built a culture of resilience.

Key Takeaways: Continuous improvement and flexible systems can enable an organization to adapt and recover swiftly from unforeseen disruptions.

#### **Southwest Airlines' Response to the COVID-19 Pandemic:**

Context: During the COVID-19 pandemic, Southwest Airlines faced a massive booking drop.

Response: The company introduced safety measures and flexible booking policies and engaged with employees to keep morale high.

Key Takeaways: Maintaining a robust organizational culture and prioritizing employee engagement during crises can enhance resilience and ensure a quicker recovery.

### **IBM's Reinvention from Hardware to Services:**

Context: In the 1990s, IBM faced declining profits and market share due to technological industry shifts.

Response: Under CEO Lou Gerstner, IBM reinvented itself from a hardware-focused company to a services and software provider.

Key Takeaways: Strategic reinvention and adaptation to market changes can lead to organizational resilience and long-term success.

### **The Chilean Miners' Rescue (2010):**

Context: When 33 miners were trapped underground for 69 days in a collapsed mine in Chile, the government, rescue teams, and experts from around the world collaborated on a successful rescue mission.

Response: Their resilience, optimism, and teamwork were critical.

Key Takeaways: Collaboration, leadership, and morale are essential to resilience in extreme adversity.

### **Netflix's Shift from DVD Rental to Streaming:**

Context: Netflix started as a DVD rental service but pivoted to a streaming model as the market evolved.

Response: The strategic shift allowed Netflix to become a dominant player in the entertainment industry.

Key Takeaways: Adapting to technological advancements and changing consumer preferences can enhance organizational resilience and drive growth.

### **Starbucks' Response to the 2008 Financial Crisis:**

Context: During the 2008 financial crisis, Starbucks faced declining sales and store closures.

Response: CEO Howard Schultz refocused on core values, improved customer experience, and innovated with new products and store formats.

Key Takeaways: Returning to core values and prioritizing customer experience can help an organization navigate economic downturns and emerge stronger.

### **Airbnb's Adaptation During the Pandemic:**

Context: Airbnb faced a massive booking drop due to the COVID-19 pandemic.

Response: The company introduced virtual experiences, long-term stays, and stringent cleaning protocols to ensure guest safety.

Key Takeaways: Agility and innovation in response to changing market conditions can help an organization stay resilient and relevant.

### **Zappos' Customer Service Philosophy:**

Context: Zappos built its reputation on exceptional customer service.

Response: Even during economic downturns, the company maintained its commitment to customer satisfaction, which helped it build a loyal customer base.

Key Takeaways: Prioritizing customer satisfaction and building a solid service-oriented culture can enhance organizational resilience.

### **The Lego Group's Turnaround:**

Context: In the early 2000s, Lego faced significant financial difficulties.

Response: The company refocused on its core product, innovated with new lines like Lego Friends and Lego Ninjago, and collaborated with movie franchises.

Key Takeaways: Focusing on core strengths and innovating within the brand can lead to a successful turnaround and long-term resilience.

We all can use data visualization to tell stories of organizational resilience, articulating the value and impact of organizational resilience programs. Visualizations should strive to tell a story and convey meaning to the viewer, encapsulating the fundamental purpose of data visualization. Storytelling helps illustrate the principles of organizational resilience, making the concept more tangible and actionable for practitioners and stakeholders.

### **Questions to Ponder:**

Who is the audience?

What is the information you want to get across?

Are your stakeholders/steering committee aligned?

Will those in the room be surprised? If yes, how will you respond to their questions?

## Design the Perfect Exercise, by Regina Phelps



Regina Phelps is an internationally recognized expert in the field of crisis management, continuity planning and exercise design. She is the founder of EMS Solutions Inc, (EMSS) and since 1982, EMSS has provided consultation and speaking services to clients in four continents.

Ms. Phelps is a frequent speaker at international continuity conferences and is consistently rated one of the top-rated speakers in her field. She is known for her approachable and entertaining speaking style and her ability to take complex topics and break them into easily digestible and understandable nuggets.

She is the author of four books:

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## Introduction

When you go about designing the perfect exercise, there is a lot more going on “behind the scenes” than just finding a great narrative. In fact, the narrative is often the last thing I talk about in the design process. The goal of this white paper is to peel back the amazing “Golden Opportunity” that every exercise provides you and to hopefully encourage you to see your role in a new light.

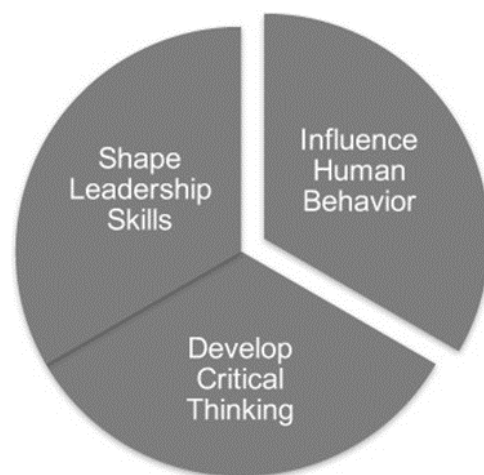
## Your “Golden Opportunity”

I look at designing and facilitating exercises as one big golden opportunity. I firmly believe that exercises give you an amazing opportunity to:

- Promote your program.
- Educate your teams.
- Validate your plans.
- Engage your senior leadership.

In fact, I would even go one step further by saying that developing and conducting exercises are one of **the** most important aspects of your job. Think about it: When you take someone from just talking about an issue or problem and move them into actively engaging in a process to manage and resolve it, you have made it come alive. After all, the only way to know if plans work is if you:

1. Have a disaster.
2. Run an exercise.



I personally always vote for the latter rather than the former. It is certainly a lot less stressful and the consequences are not as great.

There are many things you can do with the golden opportunity you have been given; three things come immediately to mind:

- Influence human behavior.
- Develop critical thinking.
- Shape leadership skills.

## **Human Behavior**

So to set the stage, what is human behavior? 'Human behavior' refers to the full range of exhibited actions and behaviors. These behaviors are influenced by culture, attitudes, emotions, values, ethics, authority, rapport, hypnosis, persuasion, coercion and genetics.

One of the primary goals of any exercise is to influence human behavior. You want the participants to have an experience that will help do the following things:

- Clarify roles and responsibilities. People often read their plans or checklists and think they understand their job. But it is only when they really have to perform those tasks that they understand it fully. After all, plans are written in a vacuum. The plan or idea sounds good when you are writing it, sitting at your office with all of your utilities working, and life is great. It is quite another thing to launch that plan after a major earthquake, fire, or cyberattack when nothing is available.
- Improve individual performance. There is nothing like real practice to improve performance. Any athlete knows that. Humans have to practice to achieve any level of proficiency.
- Motivate employees. It is a great motivator when you know that you are going to have to "perform" in front of your peers. We find that in the weeks leading up to an exercise, staff really engage with their plans, read them, revise them,

and schedule walk-throughs and plan reviews to make sure everyone is up to speed. This is great news!

- Instill confidence. One of the best ways to be confident is to be prepared. Learn everything you need to know to be successful. If someone is prepared, and has the knowledge to back it up, self-confidence will soar.
- Teach leadership and decision-making skills. Good decision-making is an essential life skill most people acquire through trial and error and practice. People's ability to lead during a stressful situation might vary greatly from their day-to-day abilities. An exercise provides the perfect environment for your team to practice these critical skills in more realistic conditions.
- Continue to build support for your program. A well-designed exercise can be inspiring to all who participate. It can light a fire under someone to improve their plan, their team and the overall program. When people experience what it really might be like during a crisis, it is a great incentive to be prepared. Executives who engage in an exercise understand their role, the value of a program, and the importance of dedicating time and resources to make the program responsive to the potential risks.

## **Critical Thinking**

Critical thinking is the art of analyzing and evaluating thinking with a view to improving it. This is thinking that does not blindly accept arguments and conclusions. Boy, do we need some of that at a time of crisis! When under stress, people's ability to think clearly and analyze problems often becomes muddled and decisions can be flawed. Critical thinking can help at time of crisis to:

- Clarify goals. What are you trying to accomplish and achieve? Does it make sense in this current situation? Is it achievable?
- Examine assumptions. Do you have assumptions that are silently influencing your thinking and process?



- Discern hidden values. These can be values that are unstated and yet can be the underlying purpose that really drives behavior. You need to bring these to the surface.
- Evaluate evidence. Weigh the evidence that is brought forward and assess the pros and cons.
- Accomplish actions. What is required to accomplish the actions decided?
- Assess conclusions. Step back and assess the results objectively.

All good! And isn't that what you want in an exercise – and even more during a real incident?

### **Leadership Skills**

Leadership skills and behaviors that can be developed in an exercise include the ability to:

- Manage change in stressful situations. Many people are good managers in the calm of day, but in the heat of battle, they may unravel. Practicing in an exercise can help develop this skill.
- Solve problems and make “real-time” decisions. Many times in an emergency, decisions are made with incomplete data. Very often, that's because there is no other choice. All of the information may not be available for hours or days, and actions need to be taken now with the information that's available. This can make people very uncomfortable. An exercise provides the rare opportunity to practice this skill.
- Manage group politics and influence others. Group dynamics can be difficult on a good day; in a crisis they can become unwieldy. A leader can practice how to manage conflicting ideas and teams at time of crisis during an exercise. They can then learn from that experience and apply it to the non-crisis world.
- Create useful communications of all kinds and to all parties. Communication is often limited and confusing in an emergency. Above all, an exercise can allow teams to practice clear, direct and timely communication.

## **Understand YOUR Role in an Exercise**

As the exercise designer, you must understand these factors if you want to design an exercise that will improve performance, mature a team and a plan and empower the organization. If you don't, you will waste this golden opportunity!

## **The Power of a Story**

Telling stories is the best way to teach, persuade and understand. When you tell a story, you can transfer experiences directly to someone's brain. They feel what you feel, they understand, they empathize. It has been proven in research that when communicating most effectively, you can get a group of people's brains to synchronize their activity. As you relate someone's desires through a story, they become the desires of the audience. When trouble develops, they gasp in unison, and when desires are fulfilled they smile together. We all inherently know this; when you hear a good story, you develop empathy with the teller because you experience the events for yourself. Stories are powerful. They have been the primary source of information before the written word – and even before the internet and Google! Consider the following:

- Stories spark emotions. People are intuitive and emotional, as well as deliberate and rational beings. People may understand what you want them to do, but if they aren't emotionally engaged, they just won't do it or won't do it well. That is a powerful thing to stop and reflect on. At time of crisis, if they don't get it or aren't engaged, they aren't doing it or they aren't doing it well.
- People use stories to make sense of things. Leaders with a shared strategic narrative can engage people in the wider context of the journey by giving others a framework to understand the changes and the actions required. A story has a core message, but can be interpreted in different ways, depending on the lens through which it's being heard.
- People learn from stories. Stories are a great way of learning from others, and can help shape cultures within an organization. Storytelling is a great tool for leaders seeking new behaviors in their teams. Sharing stories can help teams learn more quickly, and can help organizations to become more agile.

So think of an exercise like a story. Stories = exercises, exercises = stories. Exercises are nothing more than dropping your team into a story (i.e., an exercise narrative or scenario). And this story helps your team to put a more realistic context around the theory of their roles and responsibilities. Just reading a plan or a checklist does not “make it real” for your team members. They need a story – an experience – to truly get it.

When I do a speech or write an article, I know that people won’t necessarily remember the seven points of this or that or the rationale for a particular action. They will, however, remember the story that goes with it. When your exercise is over, you want the participants to have a visceral response to the training, and therefore retain the knowledge and skills they just developed. This “muscle memory” will be there at the time of a crisis, where the “book learning” they got from reading a plan likely will not.

### **The “Silly Little Question”**

When we first sit down to design an exercise, I have one question that I want to talk about. I call it the “silly little question” because it sounds so simple and basic. The answer to this simple question holds incredible value because it holds the answers to all your design questions. The question? “Why are we doing this (exercise)?”

I often start with that basic question and then ask it again and again in different ways. “What do you want to get out of this?” or “At the end of the day, what do you want to have accomplished?” or “What do you want to learn?”

The next step is the hardest thing of all. Listen. Don’t talk, just listen. Let them tell you the answer to the question in their own words and ask additional clarifying questions. Usually they will want to immediately jump to the narrative. DON’T start discussing the narrative yet, as we have found that only muddles the conversation. First you need to deeply understand why you are doing this. Once you know that, it will lead you to everything you need and want to know. It will tell you:

- What type of exercise will likely deliver the best results. It might be an orientation exercise, drill, tabletop (basic or advanced), functional, or full-scale.
- The exercise goal, scope and objectives.
- The narrative that best will yield those results.
- What you need to know to keep you, the design team and the entire process on track.

That may sound a bit crazy but if you are not clear you could end up anywhere in the design process, or worse yet, the exercise itself. Remember that you are the vision holder of the exercise – you drive the design and then the experience. You must deeply understand what management wants so you can deliver it to them. If you aren't clear, the exercise could end up anywhere, maybe even have Martians landing in the middle of your exercise. (This is shorthand for saying that if you really don't know where you need to go, things will happen that can take you deeply and wildly off course.)

### **Three Key Concepts in Exercise Design**

There are many aspects to discuss in exercise design; you could write a whole book about it (and I have!). Here, though, we are just going to focus on three:

- Decide what you are exercising.
- Clarify terminology.
- Craft the exercise plan.

### **Decide What You are Exercising**

It is critically important that you are clear on what you are exercising. Are you exercising emergency response? Business continuity? Disaster recovery? Crisis communications? Something else? Asking that question might sound very silly, but I have observed exercises where the planner didn't understand this question and immediately took off on the wrong foot.

Let's say you are focused on the narrative of the exercise (more than the question "why are we doing this?") and you decided on a tornado scenario. The exercise clock starts moments after the tornado has hit the building. What kind of exercise are you designing? This is easy; you're designing an emergency response exercise. I know this because no one is going to think about business continuity or disaster recovery when life safety should be the paramount concern.

I have sat through exercises that fell into this trap. They were supposed to be about business continuity, but since the exercise clock started at the wrong time, the focus was, appropriately, on life safety, not business continuity. If you want to do a business continuity exercise, start the exercise clock a few hours after the tornado incident. In the background material, you carefully describe the emergency response activities that led you up to where you are now, which is the start of business continuity.

When you understand the answers to the "silly little question" you will know what kind of exercise you will be holding, and you will not make this mistake.

### **Clarify Terminology**

What do you call the experience you are designing? Many designers still call them "tests." I don't know about you, but when I hear the word "test," I think about grades, or passing, or worse yet, failure. Words have power. Think of the implications of what you call what you're doing. Are you holding an "exercise" or a "test"?

When we hold exercises, we want people to fully participate. I want every participant to find out what works and what needs improvement. I applaud failure in every one of my exercises. I would rather have them "fail" with me during an exercise and then change their approach, than have them "fail" in the real-world event. Choose your words carefully and act accordingly.

### **Craft the Exercise Plan**

A well-crafted exercise plan includes all of the information the exercise player needs to get started and be successful. This document prepares them for the experience, gives them the rules for the road and everything they need to get started. Even for a simple exercise, you need some basic data points, including all of the following components:

- Exercise type.
- Scope.
- Goal.
- Agenda.
- Objectives.
- Communications.
- Evaluation.
- Participant instructions.
- Artificialities.
- Assumptions.
- Narrative/scenario.

### **After-action Reports (AAR)**

After the exercise, you have one more great opportunity to influence behavior and enhance your program. Your observations in the After-action Report (AAR) can and will influence behavior. It will also assist in developing critical thinking and guiding leadership development.

After every exercise, you should clearly answer the question of “why we did this” in your AAR. The AAR is the summary of your great work and will be fundamental in helping to build and mold your program. Always develop an after-action report and do it in a timely manner. We issue reports no later than ten days after an exercise.

You have a window of opportunity after an exercise, and that window is not open for long. You need to get an AAR out and circulating while it is still fresh on people’s minds. The AAR should be presented to key stakeholders, including senior management, corporate sponsors and the business continuity steering, audit and risk committees. And lastly, use it as a tool to improve the team, the plan and the program. It is one of the best feedback loops that you have.

## **Seeing Your Role in a New Light**

You have the power to influence your program, plans and teams through creating powerful experiences. Exercises are your golden opportunity to do just that. Creating a compelling experience will ensure that you influence human behavior, develop critical thinking and help to shape leadership skills and abilities in your teams. You have the power to make that happen.

# EMERGENCY MANAGEMENT

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## Plans and Exercises to Build Timely Communications, by Regina Phelps



Regina Phelps is an internationally recognized expert in the field of crisis management, continuity planning and exercise design. She is the founder of EMS Solutions Inc, (EMSS) and since 1982, EMSS has provided consultation and speaking services to clients in four continents.

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When asked what areas need to be improved after any crisis or emergency, respondents will inevitably list “communications” as one of the most important areas for improvement. “Communications” is, of course, a broad topic; however, there is one comment that is universal: “Communication needs to be more timely.”

Is that your experience? When surveying our client population, we often find that the timeliness of communications is one of their biggest issues. Over the years, we have developed plans and exercises specifically to help companies develop a timelier response. The goal of this white paper is to share some of the ideas that clients tell us have been the most successful.

Our strategy is simple and straightforward: Develop and use simple communication tools, and then exercise them.

## **COMMUNICATION TOOLS**

Communications teams usually have some type of “crisis communications” plan in place, but it is often limited. We find that there are often three things missing:

1. Effective use of an emergency notification system (ENS).
2. Identification of key stakeholders in a communication matrix.
3. Pre-approved message templates.

### **Effective Use of an Emergency Notifications System**

Many of our clients have an Emergency Notification System (ENS), but in our view, the defined use during an event is too limited. Many companies only use it to reach employees, and even then, the idea of “reaching employees” can be too limited. Often we find that the people who are authorized to deploy an ENS are limited to a small number of individuals, and the ENS itself is used only for broad employee communication. Most ENS software is robust enough to allow creation of sub-groups. Why not set up call groups for individual teams? We recommend call groups for the Initial Assessment Team, the Incident/Crisis Management Team, Executives, individual

Business Units, media contacts, vendors and other key stakeholders. You can probably think of other groups that make sense in your company.

Many ENS products are able to send messages via multiple communications paths. Can't reach someone via a phone call? The system can send a text message. The text message doesn't get a response either? The system can send an email. The more options the ENS provides to reach someone regardless of device or location, the better your chances are of providing key information to the stakeholders. Another benefit of an ENS is that the pre-approved message templates can be built out in the system, where the Communications team can easily find them in an emergency.

When used widely and effectively, an ENS can be a great way to remove all of that contact information from your other plans, and use the ENS as the storage tool for all communication data. And, as you might think, it is always a good idea to have paper back-ups in case the ENS fails.

Rethink how you use an ENS and use it more widely to improve timely communications.  
The Communications Matrix

A communications matrix is a valuable tool; you need to create one. The process is simple:

1. Identify all of the stakeholders (internal and external) to whom you will need to communicate after any incident.
2. Name the internal "owner" of that communication relationship.
3. Specify what tools will be used to communicate with each stakeholder.
4. Create the initial message (to be modified at the time of the incident).

This simple matrix is very powerful, helping to immediately speed up communications because it shows who is talking to whom at a glance. This is a great task to do as a "whiteboard activity." Simply get your team into a room with a large whiteboard or flip chart set up with three large columns. In the first column, have the team list every possible stakeholder who you are likely to communicate with after an incident. In the

second column, note the communication owner. In the third, list the tools that are likely to be used to reach each stakeholder. And don't forget – you can use your ENS to deploy all of your approved talking points to the identified key stakeholders.

Your communications matrix might look something like this:

Stakeholder Name	Relationship Owner – Name and Dept.	Communication Tool	Message
Employees	Human Resources	Employee hotline ENS Website Notification system Company email Facebook/Twitter	
Clients	Individual Business Units	Website ENS Client email Facebook/Twitter	
Board of Directors	CEO/Comm. Team	Phone ENS Email	
Regulators	Individual Business Units	Email ENS Phone	
Investor Community	Investor Relations	Website Email ENS Facebook/Twitter	
Suppliers	Purchasing	Email ENS Phone	

**Communication Templates**

The third critical planning activity to achieve timely communications is to develop initial communication templates for all of your stakeholders. These initial templates are pre-written “scripts” that contain the basic outline of the information that might be needed. It can then be quickly modified with current and pertinent information during an incident.

To determine what should be in each pre-written script, have a good read of your hazard risk assessment. Once you see what likely events could occur, you can prepare the initial communication messages accordingly.

Another strategy to take in developing initial communication messages is the one that we most often recommend: Write basic theme messages for two types, or “styles,” of events:

1. The event happened only to you. The incident only happened to you, and the “rest of the world” is fine. Imagine such events as a fire, workplace violence situation, water pipe break, etc.
2. The event happened to everybody. The event is widespread or regional in nature, and many people are affected. This could include earthquakes, hurricanes, severe winter storms, etc.

Once the templates have been written, get all of the formal approvals now, before an event occurs. Pre-approval may need to include legal counsel, senior management, and/or investor relations; your company may require other approvers. As part of this process, decide in advance who will have the authority to approve the modified messages at time of disaster. Because the basic templates will have been pre-approved, the list of those who can modify the message when an event happens should be a short one. Then, at time of disaster, modify the appropriate initial message, have the agreed-upon individuals approve the message, and send it out. This should significantly decrease the time to develop the messages and get them out the door.

And, as mentioned before, the pre-approved templates can be built out in your Emergency Notification System so it will be quick and easy for the Communications team to find them during an emergency.

## **EXERCISE THE PLAN AND THE TEAM**

Communications exercises can be done for just the Communications team or as part of a larger Incident Management Team exercise. Begin by sitting down with the team to determine what they want to get out of the exercise experience. This conversation will help you to develop the specific exercise objectives for the team, which will allow you to design the exercise around those objectives. For example, if the team is interested in validating their communication matrix and new templates, your objectives might look something like this:

1. Assess the ability of the Communications team to develop timely communications:
  - a.) Validate the communication matrix: stakeholders, owners, and tools.
  - b.) Utilize the new communication templates. Assess tools and processes for timeliness.
  - c.) Assess the ability of the team to monitor and respond to social media sites such as Facebook, Twitter, Digg.
  - d.) Utilize the company ENS to deploy approved talking points to all identified internal stakeholders.

Once you have designed the communications objectives, you can select an exercise narrative. Create a realistic scenario that will deliver the kind of results you are looking for in the objectives. To best exercise the Communications team, the event should be a “public enough” event to create issues that may impact the company reputation and brand (both internally and externally), and create media interest in the story.

One important aspect of the exercise is the actual simulation. To achieve these objectives, the exercise will need to be fully simulated in order to really push the team to

respond in real time and make the exercise feel realistic to the team. Two things will help achieve this:

- Use a Simulation team with whom the Communication team will interact. The Simulation team can act as the media, the investor community and other key stakeholders. This gives the Communication team someone they have to talk to.
- Use live media injects to force the team to respond to these “media” inputs. This can include radio broadcasts, video clips, newspaper or web articles, Facebook and Twitter posts and blogs or chat rooms.

### **Exercise Deliverables**

There are a variety of specific exercise deliverables you might want to have your team develop. This list would, of course, be developed as part of creating the exercise objectives. At a minimum, I would suggest the following activities as part of your communication exercise:

1. Create an employee hotline message.
2. Create an employee text message (SMS).
3. Create a company website message.
4. Prepare a press release.
5. Create a social media response(s).
6. Create a customer/client message.
7. Create an investor relations message.
8. Prepare for a press conference.

### **Employee Hotline Message**

A very reliable form of employee communication is the use of a hotline. These phone numbers are usually toll-free and are ideally hosted out of state (especially for areas prone to regional disasters, such as earthquakes). Employees would call this number to

find out simple information (such as if the office is open or closed) and basic employee instructions.

A great way to exercise this is to have a dummy voice mailbox set up to act as the hotline during the exercise. The message is developed and then recorded, so everyone in the exercise can then dial in and hear what has been recorded. It is great practice for the team to actually record the message as well as prepare it. The advantage of using a dummy voice mailbox is that you aren't changing the real number, thereby avoiding a potential "War of the Worlds" situation if someone who wasn't in the exercise accidentally heard the message.

### **Employee Text Message (SMS)**

If you're using your ENS, SMS might be the best and most reliable way of communication after a regional disaster. However, it takes practice to provide enough useful information in 280 characters or less, the length of a standard SMS message. Although these should already be in the pre-approved templates, significant modification may be required for a specific event. A goal in any exercise would be to have the Communications team develop SMS messages for employees participating in the exercise, and then send them.

### **Company Website Message**

How are updates posted on the company website? Which team makes those changes? If a dummy webpage can be set up for the exercise, it is great practice to change that page to reflect the company's status during the exercise. If that isn't possible, ask the team to develop the message and then post it on a status board in the Emergency Operations Center (EOC).

### **Press Release**

A formal press release should be developed for the exercise, either in response to media inquiries or just as a matter of course. This release should be developed, approved through the agreed-upon channels, and distributed to the Incident

Management Team during the exercise. Having pre-approved press release templates will speed up the process.

### **Social Media Responses**

Social media has exploded as a means of communication. Often, your employees are tweeting and sending Facebook posts before the Communications team knows what hit them. Being skilled at getting on top of the information flowing from these sites is critical. Although many media outlets now scan employees' Facebook pages and tweets (and other similar sites) for information, ideally, you want those media sources to be looking to your Communications team for the "inside scoop."

Develop Twitter messages and Facebook postings (or other forums that you find) during the exercise. Post these messages on the communications status board in the exercise so everyone can see what you are developing in real time.

### **Customer/Client Message**

What are the main messages to clients? What are the talking points for sales staff and all client-facing call centers? Develop several customer/client messages during the exercise and deploy them to the business units that would be using them to ensure that they (both the business units and the customers/clients) are getting what they need. If you don't provide talking points, employees will likely make them up themselves – not an ideal solution for customer communication. Post all client messages on the communications status board in the EOC.

### **Investor Relations Message**

If you are a publicly-traded company, sometimes you need to get a message out to "the Street" rapidly. This is usually an integrated response between Investor Relations, Legal and your senior management. Timeliness is important. Use the pre-designed templates and modify them in the exercise. Assess their effectiveness and post in the EOC.

### **Press Conference**



This is a great conclusion to any exercise. The pre-identified company spokesperson gets up before a group of “reporters” to read the company release and take questions. Of course, there wouldn’t be any real reporters in the exercise, so the Simulation team – the people the players have been interacting with – can step in; they make great reporters. Ask each of them to have two or three questions ready about different aspects of the exercise. After the spokesperson delivers the company statement, the “reporters” can spring into action, asking all types of questions. Speaking off the cuff like this is good practice for the spokesperson. If it’s possible, videotape the session so the spokesperson can see their performance for their own personal development.

### **Qualities of Effective Communication**

The qualities of effective communications during an emergency can be summed up in four simple points:

1. Show concern and demonstrate compassion.
2. Be transparent and forthright in all communications.
3. Cooperate with all responders.
4. Demonstrate resolve to overcome the situation and get back to some semblance of normal.

Keep in mind however, that if these four points are not done in a **timely** manner, they will not achieve the type of results that the company is looking for after a major incident. Work with your team in advance to develop the plans and tools, then exercise them regularly to produce the communication results that you desire.

## PEOPLE

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“In The Unlikely Event...” by Tracy Gkonos and Dr. Roberta LaRocca



Tracy Gkonos, M.S, ABCP, AMBCI



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Sadly, as our world becomes more and more complex, beginning an announcement with “In the unlikely event...” is no longer a reassuring phrase. Polycrisis<sup>1</sup> and Permaccrisis<sup>2</sup> are words that have come to define events that affect our world, our organizations, our communities and our most valued asset: our people. This is certainly true in every business, but unfortunately the critical importance of our people is often underestimated. Economic realities also continue to influence businesses to make decisions that ignore the importance of the human factor, and they often discover this too late, severely affecting their ability to recover from an unexpected disruption.

Good organizational resilience practices are often diametrically opposed to good business practices in our just-in-time world. It is not reasonable to expect businesses to have a duplicate manufacturing site for all products, hot sites for all technology, or a backup clone for every employee. And yet, our customers expect continuous superior service, no excuses.

So, what can we do? While scenario planning is best left to emergency response, the program approach we have found to be most successful is one that focuses on all hazards planning for the loss of people, technology, infrastructure, and loss of key third party suppliers. Even with the advent of AI and technology based solutions, without your people you won't be able to recover your business. People are, indeed, our most important asset and should have first priority in the planning process.

First, finding a strong champion is essential. Responsibility of the program should rest at the highest possible level of the organization. The importance of a strong executive sponsor cannot be overemphasized and yes, easier said than done! Once your sponsor is in place, draft a plan that assigns responsibilities for development and implementation of the plan with inclusive participation across the entire organization. That way when the initial resilience program is presented to your workforce, you can involve the entire organization by defining the objectives of the program for both the organization and the individuals who support it.

Second, the people first approach has several benefits, the most obvious being that it helps mitigate one of the universal difficulties in sustaining your organization's continuity of operations. Include the active involvement of your key employees in every step of planning, from program initiation to coordination with external agencies. Approach each step with that in mind and add accountability and rewards to ensure you build resilience into your organization's culture. This is the best way to create a sustainable program. Here are several initiatives a company can take to create a company culture that will help ensure success:

Onboarding processes can, and should, be used to ensure attention and dedication to resilience initiatives. Construct an onboarding program that includes personal safety, and resources to ensure safety measures for their families. This sends a strong message and doesn't cost a thing.

Reward the behavior you want from your employees! Ensure that any organizational resilience related responsibilities assigned to an individual are part of their job description and performance objectives. We know of one company that has incorporated their Disaster Recovery Director's participation on the national board of his professional organization into his job description. This takes the pressure off of him as a volunteer to attend meetings and make contributions. **We do what we are paid to do!** Adding program objectives for each employee sends the message that management recognizes resilience as an important part of the organization's overall culture.

Training is an employee oriented benefit that adds value to the company and to the employee, whether it is skills training to enhance their ability to be promoted and remain employed, or safety training to help the individual be better prepared. Anyone with law enforcement, military or first responder knows this for a fact: **we do what we are trained to do!** Ensure your employees know what to do during an emergency and practice it regularly. For example, would your employees know what to do in the event of an active shooter situation? Shelter in place? Run, hide, fight? Schools provide drills for these situations on a regular basis. If our employees ever face a similar situation they should know how to take personal responsibility to help keep themselves safe. Make sure training is updated regularly as new guidance is given. In addition, exercise your plans on a regular basis. In fact, beginning your program with an exercise is a great way to demonstrate where to place the emphasis on planning.

Flexible work arrangements have become a reality, driven by the global crisis caused the Covid-19 pandemic, and it remains a hot topic with many conflicting views. Work from home options often influence the ability to hire the best talent. If a company decides to offer this option, it is first necessary to identify employees who realistically can work at an alternate location. Make it part of their routine so there are no surprises when a crisis arises. It is imperative that a clear communication process is implemented for all circumstances if an employee is located off site. One organization has their Customer Service employees work remotely. It continuously rotates them in a hybrid

model alternately coming to the office and working remotely to demonstrate their ability to continue to function anytime and anywhere.

In order to ensure you do not lose key employees, key skills, or the institutional knowledge necessary for your organization to remain functioning and resilient consider cross training and make cooperative agreements with universities, vendors and even competitors. Proactive vetting of temporary agencies that can provide individuals with the skills you may need, bringing back retirees to fill empty positions, and mining internal talent are ways to fill your organization's needs. An example of a strategy used by an organization we worked with that experienced a major fire that shut down a site for several months was to transfer employees from one location to another to work on a temporary basis. Some employees transferred to the damaged site to help with recovery, and employees from the damaged site with appropriate skills transferred to other sites to help fill those gaps. Pay policies, compensation and benefits, expatriate programs and many other traditional Human Resources responsibilities are areas that touch your people. Utilize them to help you develop, maintain, and continuously improve your organization's resilience program. The importance of resilient oriented Human Resources policies cannot be overemphasized. Employees involved in implementing these policies should be trained and these policies should be continuously reviewed and updated.

Third, implement a sound succession plan for key employees. Best practice recommends planning for 3 back ups for each key employee. In the words of the late great "Bud" Evans, "If one is good, two is better and three is better yet" (Retired Colonel "Bud" Evans, USAF). Train and groom them in the event they are not available for any reason.

The organization that puts measures in place to assist employees in a disaster recovers faster and gains the invaluable loyalty of its people. Emotional support, financial assistance, paid time off to deal are all options that can be offered by the employer to assist in the aftermath of a disaster that can engender long term loyalty and increase

the chances of recovery for the business. We are familiar with some businesses that offered a place to sleep, eat, shower and re-charge their phones post hurricane damage. During the Japan earthquake, tsunami and nuclear disaster, one company offered not only food and shelter but transportation to access those resources even for extended family members and pets. Based on actionable intelligence, this company's decision to support its employees and continue doing business turned into a competitive advantage as many companies just simply left the area. Make it clear that every employee must take personal responsibility and when you can, help them along the way. With that kind of support, people are much more likely to return sooner and help recover the business.

Finally, as Bob Arnold<sup>3</sup> so eloquently stated it in the Forward to this book, "Operational resilience must evolve beyond a mere compliance requirement; it should become an integral part of an organization's culture." Creating a culture of resilience starts by showing your employees from the beginning of their employment what is in it for them and engaging your workforce on a personal level. Build resilience into your culture by putting your people first and create an environment that will allow your organization to survive unexpected disruptions.

People first. Use your imagination!

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<sup>2</sup>Brown, G., El-Erian, M., Spence, M., Lidow, R. (2023). Permacrisis: A plan to fix a fractured world (Prologue). New York: Simon & Shuster.

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## Leadership at Time of Crisis, by Regina Phelps



Regina Phelps is an internationally recognized expert in the field of crisis management, continuity planning and exercise design. She is the founder of EMS Solutions Inc, (EMSS) and since 1982, EMSS has provided consultation and speaking services to clients in four continents.

Ms. Phelps is a frequent speaker at international continuity conferences and is consistently rated one of the top-rated speakers in her field. She is known for her approachable and entertaining speaking style and her ability to take complex topics and break them into easily digestible and understandable nuggets.

She is the author of four books:

- Crisis Management: How to Develop a Powerful Program
- Cyberbreach: What is your defenses fail? Designing an exercise to map a ready strategy;
- Emergency Management Exercises: From Response to Recovery
- Emergency Management Exercises: From Response to Recovery Instructors Guide.

All four are available on Amazon.

### **Introduction**

To be successful in a crisis requires preparation. And being prepared requires two things from each and every one responding:

1. They must be in a constant state of readiness. Since we usually don't know the **precise nature** (timing, location, specifics required at the time) of the crisis, we always have to be in a **constant** state of readiness, as near to instantaneous as possible. Think in terms of "instant-on."
2. They must have a **wide range of contingencies** at their disposal to be prepared for many possibilities.

And in some cases, despite prior training, plans, experience and exercises, what we have and what we do may still not be enough.

### **Do You Plan for the "Worst Case?"**

One of the things I often hear continuity and emergency professionals say is that they "plan for the worst-case scenario." Whenever I hear that come out of someone's mouth, I immediately stop them; this is simply not true. Continuity professionals don't plan for the worst-case scenario, they plan for what they think will happen, what is called a "routine" emergency. What they plan for may be a really bad situation, but there is not enough time, money or risk appetite to plan for the truly worst-case scenario.

### **"Routine" Emergency**

To be clear, routine emergency<sup>1</sup> does not mean "easy." A routine emergency can still be difficult and challenging. In this context, "routine" refers to the relative predictability of the situation that permits advanced preparation. This risk is in the company's risk profile and the company is likely to have been able to take advantage of lessons learned from prior experiences. Continuity professionals are likely to have thought about what to plan for and what is needed, and they have probably trained for them and done exercises for them. Incident management, crisis communications, business continuity and disaster recovery plans are filled with strategies to manage routine emergencies.



## **“Crisis” Emergency**

A crisis emergency<sup>2</sup> is a much different animal. These types of events are distinguished by significant elements of novelty. This novelty makes the problem much more difficult to diagnose and then handle. This type of emergency can have the following characteristics:

- The threats have never been encountered before, therefore, there are no plans to manage it.
- It may be a familiar event, however, it is occurring at unprecedented speed, therefore developing an appropriate response is severely challenging.

There may be a confluence of forces, which, while not new individually, in combination, pose unique challenges to the response.

The novel nature of a crisis emergency becomes a game-changer. Plans, processes, training and exercises that may work well in routine emergency situations are frequently grossly inadequate in a crisis emergency, and may even be counterproductive. You realize that you have to start from scratch.

The crisis emergency also requires different capabilities; in other words, the plans and behaviors used for routine emergencies just won't work. The first thing that must be done is to identify the elements of the novelty; determine what makes this situation so different from others. In a cyber attack or breach, this novelty can often be surprising. You might begin the process thinking it is one thing, and then over time, realize it turned out to be something quite different. For example, you may think you are dealing with a routine IT problem or outage; over time, you see it is something more significant and sinister.

Once you identify the real problem and understand that the routine plans won't work, you have to improvise response measures that will be suitable to cope with the unanticipated aspects of the incident. In other words, you're in new territory; this hasn't been done before. Created out of necessity, these responses may be actions quite

different than those ever done before. Handling a crisis emergency may feel like you're building an airplane while flying it at the same time. It's not pretty, but it may be necessary.

Lastly, in a crisis emergency, you must respond in creative ways and, at the same time, be extremely adaptable executing these new and improvised solutions. You have to be on "full alert" at all times, as you don't know if or how the situation will change, and you must be prepared to shift or dart at a moment's notice. All of this makes people quite anxious, and during an exercise, this anxiety often manifests itself in varying degrees of excessively loud voices or hushed voices, frantic activities and nervous laughter.

### **"Emergent Crisis"**

An emergent crisis is a bit of a different animal. An emergent crisis poses special challenges in terms of recognizing its novelty as the situation begins to unfold because it may look a lot like a "routine" emergency in its early stages. It is only later when it reveals its unusual characteristics. Part of the problem is that leaders may be slow to see the new features or aspects of the emergency. They keep telling themselves that they know what they are seeing ("I know how to manage that...") and they fail to see the differences and don't realize that the situation requires a different response. They become "wed" to their original solution and don't discover that it is really something quite different until it is too late.

### **Seven Essentials Required to Manage a Crisis**

Leaders need many skills to manage a crisis. We believe it is essential that they are able to do these seven actions during the crisis:

1. Gain situational awareness.
2. Improvise.
3. Are creative and adaptable.
4. Be decisive
5. Communicate.
6. Take action.

7. Re-evaluate.

### **Situational Awareness**

Situational awareness is perhaps one of the most critical skills in a crisis. Situational awareness is the ability to identify, process and comprehend the critical elements of information about what is happening to you and your organization in relation to the crisis. More simply, it's knowing what is going on around you.

First, begin by gathering and assembling the key facts of the incident. This is often under conditions of great confusion and uncertainty. Information may be confusing or conflict with other sources. You need to obtain situational awareness from multiple sources. Some of those sources might be:

- Media – traditional and social.
- Emergency responders.
- Employees and contractors.
- Vendors.
- Customers.
- Government agencies.
- Other people you may have at your disposal.

You need to then carefully decide:

- How you will gather the information and who does it.
- How you will validate the information.
- How you will process the information.
- How you will display and communicate that information to the key players.

These are great things to work out in advance, and then practice in an exercise.

In addition to obtaining the information, decision-makers must take in the data and “project forward” the implications of the information they acquire and anticipate possible consequences of a fast-changing and still-moving incident. That means that as part of

this skill, they must generate possible alternative courses of action and assess which of them holds the most promise of dealing with the situation.

### **Improvise**

In a crisis, often after leaders review the new-found situational awareness and then review their routine plans and checklists, they find that their response is not adequate. They determine that customization is required. The presence of significant novelty calls into question whether routine plans will work. The situation may require unplanned and unrehearsed actions.

In a true crisis, leaders, often under extreme pressure and with high stakes and compressed timelines, must formulate a new approach to the situation. They then execute new responses or a combination of responses to manage the crisis. In other words, leaders must improvise in order to develop an adequate response.

### **Creativity and Adaptability**

A crisis requires approaching new problems with new thinking – creative and adaptable responses. Leaders must find ways to see and appreciate the novel elements in a crisis. While this may be difficult to do in the heat of battle, hopefully you have practiced this in your exercises. Some of the ways to foster creativity and adaptability include:

- Focus attention on the novelties - think about what is new about this particular situation. People are drawn to the familiar. Don't just ask "What about this is the same?" ask "What is different?"
- Ensure that diverse viewpoints are heard. Have a mixed team with a variety of backgrounds and experiences. Homogenous teams may not deliver the best results.
- Systematically require additional thought. Is the set of possibilities large enough at the beginning? Look for one or more of the best alternative explanations. Consider a "Team B" approach. ("Team B" is a separate team of highly skilled individuals looking over the shoulder of the primary team, and looking at their plans from multiple angles. They act as a secondary planning

team but without the pressures of the crisis. This team can often spot issues that the primary team can't and can bring new thinking to an old problem.)

A leader/team must adapt rapidly to a fast-changing crisis. By its nature, a crisis changes quickly and the first response will likely not be the final response. A critical thing to remember is that in a crisis situation, the leader cannot be wedded to a single strategy. They must continue to take in new information, listen carefully and consult with frontline experts who know what's happening. In other words, "don't fall in love with your own solutions and ideas."

### **Decisiveness**

This is the moment of truth. Someone must make a decision. We have all known leaders who struggle to make a decision. That situation is a disaster in the middle of the crisis.

Once situational awareness has been reviewed, AND the response has been improvised, AND creativity and adaptability have been exercised, THEN the leader must **make a decision**. If, after a while, it becomes apparent the wrong decision was made, make another one. The role of the leader is to keep the team and the company moving forward.

Sometimes leaders are reluctant to make the decision because they don't have complete information. Unfortunately, all of the information may not be available until the incident is long over. When things are happening quickly, no one can have actual control of the situation, but a leader can assume control. In other words, the disaster can't be controlled, but the response can be. The leader's job is to assume the mantle of leadership and, well, lead!

### **Communication**

I don't think I have ever heard anyone say in a major crisis, "my company communicated too often with me." That will never happen! What is needed in any crisis is clear, crisp, concise and timely communication. This is absolutely essential.

Set realistic expectations for communication, and then communicate early and often. Of course, you don't want to alarm people, but don't be afraid to speak to the magnitude of the situation. People need to hear what is going on, even if the news is not good. And be sure to remember to use all forms of communication, including social media. In our current age, a *Twitter* or *Facebook* post is often picked up and seen by millions, often instantaneously. Remember the United Airlines fiasco in April 2017? Ouch!

When reviewing your communications plan, be sure it includes:

- Who are the stakeholders?
- What tools are used to communicate?
- Who communicates with the stakeholders (i.e., who owns the relationship)?
- What is the message?

If you put this information into a communications matrix, it will clearly tell you **who** needs to be communicated to, the **tools** that will be used, **who does** that communicating, and **what** will be said in the first message.

## **Action**

This is the moment of truth: Do what you have committed to doing! You have made the decision, now do it. At this point it's time enact the plans and observe the response.

One critical aspect of taking action is to ensure that there are sufficient feedback loops to assess response to the new plan and adjust accordingly. You need to keep checking in and determine how you are doing. At the same time, take in new situational awareness information, and adjust accordingly.

A word of warning: Be aware of the dangers of cognitive bias. Cognitive bias is always present but can raise its ugly head at time of crisis. It represents the deviation from

rational thinking or good judgment. These are some of the cognitive biases that tend to appear in crisis situations:

- **“Know-It-All.”** Overweighing one’s experience. (“Been there, done that.”)
- **Illusion of experience.** A tendency for individuals to think that they have more experience than they actually do.
- **Overconfidence.** In one’s abilities and in one’s ability to predict the future. Belief that can control the future.
- **Failure to observe** or believe disconfirming evidence.
- **Escalation of commitment.** Once it’s noticed that it is not working, people recommit to the solution.
- **Bandwagon effect.** The tendency to do or believe things because many other people do or believe the same.

We have all seen people in a command center with these traits, perhaps we even see ourselves on that list at some time. If you start hearing people say, “don’t worry, I know how to manage an earthquake,” start to worry and keep your eyes on them.

### **Reevaluate**

Lastly, be prepared to do regular assessments at set intervals to re-evaluate and reassess progress. This gives you the ability to tweak (or do a major overhaul of) the plan. Ask these questions over and over (this is a good place for "Team B" to chime in):

- "How are we doing?"
- "What are we missing?"

As you are assessing progress, be sure that you are always aware of and check for cognitive bias in yourself and your team and measure performance against your objectives. Once you know how you are doing, then you need to recommit to your plan, tweak it, or redesign it. The key thing is to keep the group moving forward.

### **Going Forward**

Take time now to review these key elements with your leadership and crisis management teams. Design exercises that allow them to practice these skills and to build muscle memory. Remember the famous quote from Thomas Edison when asked to speak about creativity: "If we all did the things we are capable of doing, we would literally astound ourselves." This simple statement recognizes a primary law of human creativity, namely, the great potential hidden in each of us.

Work with your team now to develop these skills, so in that next crisis, they will astound themselves.



## Leveraging Procrastination for Greater Resiliency, by Stephanie Orlando, CBCP



Procrastination can have catastrophic consequences for business continuity professionals. Simply put, it is one of our biggest jobs to help our business partners not procrastinate thinking about their worst-case scenario. We need to ask the hard questions and get to the bottom of what keeps our business partners up at night? What do they worry about? What do they want to avoid? What's the thing that gives them nightmares? What should they be doing, but they aren't?

The Merriam-Webster dictionary defines procrastination as intentionally putting off doing something that should be done. It is intentional. It may look like declining a meeting to talk about something we don't want to face or pushing aside a document that needs to be reviewed. Even though you can successfully procrastinate doing that for the present time, what happens when you run out of time?

As a self-proclaimed master at procrastination, this chapter came together quite speedily, once I realized that I knew exactly what to write about. Two dozen years ago, I wrote another paper about procrastination. During my first semester of under-grad, I took a class about journalism and politics. It was the fall of 2000, and on election night, I was tasked with writing a paper for this class. While I wracked my brain about a topic to write about, we watched the hours roll by and the election night coverage continued into the early morning hours. Sometime in the early hours of that Wednesday morning, I

realized that I could write about exactly what I was doing – procrastinating! My professor loved my paper and published it in the college newspaper. He also asked me for a follow-up piece. I procrastinated writing that follow-up piece for the rest of my college career. Who knows, if I hadn't put off that follow-up piece, where that would have led my career? Would you be reading this in the Wall Street Journal?

Who wants to think about the what-if's? Who wants to think about worst case scenarios? What happens when your single point of failure gives their 2-week notice? Mitigation and solid planning can help avoid these types of nightmare situations. We need to help our business partners craft a business continuity plan that tells all the ins-and-outs of doing their jobs. They need to think about this: if they were off on a tech-free, fabulous vacation, and there was a crisis, what would their colleagues need to know to keep their business alive until they returned? Who would they need to contact if things went sideways and what steps would need to be taken to restore their systems?

A couple of years after I procrastinated that college paper, I got my first lesson in the importance of redundancy and adequate back-up. I was fresh out of college, working in sales, managing customers and projects. My teammates and I provided coverage for each other, as needed. The first time my counterpart was going to be out of the office on vacation, I thought he was just going to give me a couple of folders with some active projects he was working on. I expected confusion and chaos to ensue when I had to work on his projects. Instead, in addition to folders of current projects, he handed me a 3" thick binder that contained detailed screen shots, diagrams and lists showing the ins-and-outs of how he conducted his business. It was complete with a color-coded table of contents to help the reader find what they were looking for and a phone directory of his most used phone numbers.

Procrastination during time of crisis could yield big, unexpected consequences. When the decision is unclear, isn't it easy to delay making that decision? Saying "no, not yet" too many times can cause completely avoidable consequences. We need to help create a "Choose your own adventure" type of guide for these different situations. Do you

remember those books by R.A. Montgomery? You would read a couple of pages of story and then you would come to a question that would determine how you proceeded within your adventure. If you chose option A, you would continue the story on the next page.

If you chose option B, you would move ahead 20 pages. Later answers in the book might prompt you to move back 20 pages. Depending on your answers, you would choose how to move and what to do. In these books, if you read the pages in order, without committing to a choice at each of the decision points, the story didn't make sense. The reader needed to commit to decisions at each of those decision points to keep moving forward. We need to create step-by-step checklists to guide and prompt the user at key times for swift decisions.

Have you ever had to type out a long message with someone looking over your shoulder? Add in a time crunch and you are inviting errors and issues. As business continuity and crisis management professionals, we frequently need to send out messages quickly. We need to create decisive, clear messages before they are needed that help steer the business around obstacles and pitfalls.

You might think, how is a self-proclaimed master at procrastination able to succeed in the business continuity world? Because I know how to procrastinate, I take that negative attribute and turn it around to a positive attribute. By looking at a potential situation from different angles and perspectives, you can trouble shoot potential issues and uncovering hidden consequences. By doing this, we can have the necessary tools at our disposal to quickly utilize them at a moment's notice. Now that you have spent the last five minutes reading this chapter, it's time to stop procrastinating and get back to work.

## The Wave of the Future – Special Interest Groups (SIGs) and Why They Matter!, by Dr. Bernard Jones



Dr. Bernard A Jones, MBCI, CBCP, CORP, ITILv.3, sits on the ACP National Board of Directors as the Information Committee Chairman. Dr. Jones recently completed doctoral research on organizational resilience at New Jersey City University. His research benchmarked organizational resilience in New Jersey and enhanced a tool that allows organizations to determine their organizational resilience score.

### **Introduction**

Special Interest Groups (SIGs) are pivotal in professional associations that focus on resilience. Resilience, broadly defined as the ability to withstand, adapt, and recover from adversity, requires interdisciplinary approaches and sector-specific knowledge. SIGs provide a platform where professionals with shared interests can collaborate, learn, and innovate within a focused area. This document highlights the reasons why SIGs are crucial within such associations.

#### **1. Facilitating Focused Collaboration and Networking**

Resilience-related topics span a wide range of sectors, including emergency management, cybersecurity, supply chain continuity, climate adaptation, and more. SIGs enable members to:

**Collaborate with like-minded professionals:** Members can work together to address challenges specific to their field, region, or discipline.

**Develop meaningful networks:** SIGs create opportunities for long-lasting professional connections within a smaller, more focused group, which can be more manageable than engaging with a large association as a whole.

## **2. Advancing Knowledge and Expertise**

By focusing on specific aspects of resilience, SIGs help members dive deeper into complex topics. They:

**Share cutting-edge research:** Members can share their findings, which contributes to advancing the collective knowledge of resilience strategies in a targeted domain.

**Identify and respond to emerging trends:** SIGs allow members to stay ahead of the curve by identifying new threats and opportunities specific to their sector.

**Support professional development:** Members can gain new skills and certifications relevant to their interest area through SIG-led workshops, seminars, and training programs.

## **3. Driving Innovation and Best Practices**

Innovation is key to developing resilient systems, and SIGs can be innovation incubators. They help:

**Foster creative solutions:** Small, focused groups often generate innovative ideas for tackling the challenges of resilience in a specific context.

Document and share best practices: Members of SIGs can work together to establish industry-specific standards and best practices, which are then disseminated across the broader professional association.

#### **4. Policy Influence and Advocacy**

Resilience often requires supportive policies, and SIGs play an influential role in shaping them. SIGs:

Advocate for sector-specific policy: SIGs provide a collective voice for members to advocate for policies and regulations that support resilience in their areas of interest.

Engage with key stakeholders: By working together, SIG members can engage with policymakers, industry leaders, and other stakeholders to promote resilience initiatives that have real-world impact.

#### **5. Tailoring Solutions to Sector-Specific Needs**

Different industries and sectors face unique challenges when it comes to resilience. SIGs allow for tailored solutions by:

Addressing sector-specific challenges: A SIG devoted to, for instance, supply chain resilience would focus on problems unique to that field, such as global disruptions, material shortages, and logistics.

Providing relevant tools and resources: Members can develop tools, frameworks, and resources that are specific to their needs and can be customized for their professional practice.

#### **6. Building a Stronger, More Resilient Community**

SIGs foster a sense of community among professionals with common goals and challenges. This helps in:

Building support networks: Professionals can rely on their SIG community during times of crisis, leveraging the collective expertise of the group.

Mentoring and peer support: SIGs provide opportunities for mentorship, where seasoned professionals can help guide those newer to the field or sector.

## **Conclusion**

Special Interest Groups are essential to any professional association focused on resilience. They provide targeted collaboration, facilitate deep learning, drive innovation, and advocate for meaningful change within specific sectors. By participating in SIGs, professionals can not only advance their own careers but also contribute to building a more resilient future for their industries and communities.

ACP endeavors to cultivate a pipeline of future leaders and grow our network.

Are you an early careerist new to Business Continuity and the Organizational/Risk and Resilience industry?

By joining the ACP Early Careerists SIG (EC-SIG), you will open the door to a network of other professionals who can help you learn the skills and provide information to help you on your career journey.

We are looking for members who are young in their careers and want to engage with other Business Continuity and Organizational/Risk and Resilience professionals. Our EC-SIG is a supportive and collaborative community where everyone's voice is valued. Initial activities include networking opportunities, access to ACP resources and members, and more. For a nominal fee, you can join and choose your level of involvement—seek a mentor, become a mentor, or simply network at your own pace!

The EC-SIG core group of volunteer leaders:

- Dr. Bernard A. Jones, CBCP (ACP, National Board, ACP Metro Chapter, Associate Professor St. John's University)
- Dan Poucher, CBCP (ACP Greater Boston Chapter, Director of Membership) Business Continuity Services Practice Lead, Wolf & Company, P.C.
- Paul McGonigal, CBCP (ACP National Board, ACP Liberty Valley), B.C. Administrator, Ephrata National Bank
- Kyle Shinn, ABCP (Central AZ, BC Consultant, MHA Consulting, DRJ Spring 2024 ACP Scholarship winner)
- Senorajoy Weddington, ABCP (ACP DC, Director of Leadership Engagement, Office of Resilience, Maryland Department of Emergency Management, DRJ Spring 2024 ACP Scholarship winner)
- Lisa Maurer, ABCP (ACP Metro Events Co-Chair), Senior Account Executive, Manex USA, DRJ 2023 ACP Scholarship winner)

## **Charter**

### **Purpose:**

The ACP Early Careerists Special Interest Group (EC-SIG) provides a platform for ACP early careerists interested in the business continuity & organizational/risk and resilience industry to collaborate, learn, and share knowledge and best practices. This EC-SIG aims to foster a community where members can discuss emerging trends, challenges, and innovative solutions in organizational/risk and resilience.

### **Scope:**

The EC-SIG will focus on various aspects of business continuity and organizational/risk and resilience. It will explore artificial intelligence, metrics, cybersecurity, and organizational resilience strategies.

### **Membership:**

Membership in the EC-SIG is open to early careerists interested in advancing their knowledge and skills in business continuity and organizational/risk and resilience. This



includes individuals new to the field and those with some experience seeking to expand their expertise. Membership is also open to students studying relevant disciplines.

**Activities:**

**Knowledge Sharing:**

The EC-SIG will organize regular meetings, webinars, and workshops where members can share their experiences, insights, and lessons learned in business continuity and organizational/risk and resilience.

**Educational Resources:**

The EC-SIG will curate and share resources such as articles, whitepapers, case studies, and toolkits to support members' professional development.

**Networking Events:**

When feasible, The EC-SIG will host virtual and in-person networking events to facilitate connections among members and with industry professionals.

**Research and Innovation:**

The EC-SIG may undertake research projects or collaborate with academic institutions to explore new approaches, technologies, and trends in business continuity and organizational/risk and resilience.

**Mentoring Program:**

The EC-SIG will leverage and engage in the ACP mentoring program to guide and support early careerists new to business continuity.

**Leadership:**

The EC-SIG will be led by Dr. Bernard Jones, with assistance from the Steering Committee of volunteer members passionate about advancing the group's objectives. The Steering Committee will organize activities, facilitate discussions, and ensure the EC-SIG's effectiveness.

**Governance:**

The EC-SIG will operate in accordance with its charter and any additional bylaws or guidelines established by the Steering Committee. The steering committee will collectively make decisions regarding activities, membership, and resource allocation, with input from the wider ACP membership as appropriate.

**Communication:**

The EC-SIG will maintain communication channels, such as email lists, online forums, and social media groups, to facilitate ongoing engagement and collaboration among members. Regular updates and announcements will be shared to inform members about upcoming events and opportunities.

**Evaluation and Continuous Improvement:**

The EC-SIG will periodically evaluate its activities and solicit feedback from members to identify areas for improvement and ensure that it continues to meet the needs of its stakeholders. Based on these evaluations, adjustments to the EC-SIG's objectives, activities, or structure may be made.

## Is your organization including childcare issues in the continuity planning and plans? by Howard Pierpont CBCP, MBCI, CRP, Board Chair, BLOCKS



The field of continuity planning has expanded over the years. It has now been realized that it is not just one machine, system or application that needs to be restored, but the entire organization and the people and their families that comprise it.

In the early years, during the conversion from paper to electronic methods, the emphasis was on the recovery of the current systems to pre-issue status.

As manufacturing matured from belt driven to electronically controlled to highly automated systems, again the recovery task centered on returning systems to full functionality.

The concept of integrating all the organizations departments together led to added functionality and streamlining but often created systems at cross purposes.

Maintenance of the physical plant was also a concern as many organizations would now have operations located in diverse, separate locations. This led to a consideration of infrastructure issues: access, location of critical support, diverse external support offerings, etc.

The early concepts of continuity planning dealt solely with natural disasters. Today, there are many other things to be considered: civil unrest [on and off premises], lockdowns, along with any number of human caused disasters.

For a considerable amount of time, only senior organization members were considered critical. Soon, it was determined that employees and contractors were actually the force that made the organization function.

To this point, employees, although necessary for the organization to function, were only considered in their role supporting the organization.

The pandemic, as one of the drivers, demonstrated that the employees were actually key to the functioning of the organization. These people were selected because their talents met the need. Now we have to consider home life situations.

Preschool and school age children account for 22% of the population but 100% of our future. Of this number 19 million are considered preschool [age 0-4]. [StatsAmerica [www.statsamerica.org](http://www.statsamerica.org) ] Over the years we have become better at preparing for and responding to issues and disasters in our schools and colleges. The area yet to be widely considered is childcare centers.

The population has now migrated to diverse locations from their families. At one time, in many communities, families lived near to parents and relatives. After school and daytime needs were often met by their family and friends. While there are no firm numbers it is felt that, on average, a preschool child will spend about 6.5 hours per workday [32.5 hours per week] in non-parental care.

If a parent has a change in work schedule, especially due to a disaster, the transition may be complicated by the need for childcare. This complication may take any number

of forms and directly impact the employee availability, attendance, and psychological well-being.

Every organization is different and has differing needs. Some may be able to have staff work from home in case of a disaster. In other cases, there may be a need to utilize multiple smaller locations.

As part of the concept of continuity planning, preplanning for alternative locations by the real estate acquisition group may be in order. Consider, though, working with talent acquisition and retention on obtaining a data extract for the zip code of employee homes by department and the number of dependents [with no personally identifiable information]. This way the planning for the relocation can minimize disruption. Then do the same for the health insurance with zip code, department, and age demographics.

This will not be perfect but will get a reasonable baseline for planning on the impact on the workforce. In some cases, non-custodial parties or grandparents providing full time care but working will not be counted. Open requests for self-identification for those that want to assure themselves they are included in the planning can be solicited.

Building Links between Offices of emergency management, Childcare, and the community for Kids Safety [BLOCKS] is a 501(c)3 based in Washington state with a reach across the states. Blocks does not charge for Business Continuity consulting.

Childcare centers are not only smaller businesses facing the same threats and issues, but they are a significant part of the human capital supply chain. Your organization can reach out and offer to assist in the creation of plans and gain an understanding of how prepared they are. The same way that your organization is doing continuity planning, childcare centers should too.

The Federal Emergency Management Agency (FEMA) recommends that childcare organizations plan for natural and human-caused disasters. In addition, BLOCKS

recommends that specific planning be done to counter medical and threatening child safety situations.

BLOCKS defines "threatening child safety situations" as situations that could include but are not limited to: abducted or missing children, active shooter or hostile intruders, bomb threats, suspicious packages, disgruntled/impaired employees, parent/guardians or representatives, or a hostage situation.

In addition to planning for specific (and individually applicable) hazards, it is important that Emergency Operations Plans (EOPs) include functional annexes that provide and standardize clear and easily executable procedures for evacuations, family reunification, lock down and shelter in place situations. There are many available EOPs that can fit the need. In some cases, the licensing board may have a requirement for an EOP. BLOCKS has created an EOP template for customization and use.

My design, most childcare centers maintain a low physical presence in the community. Many are called things like "Pumpkins Patch" or "Little Peoples" or "Handprints Academy." Nice comforting names but not standouts for Emergency Managers. The number of calls for medical, police and fire response are typically limited in number. With your existing organizations' connections to emergency management, they can be encouraged to interact with the centers before there is a need.

It has been found through studies that the younger an individual learns about something they more likely they are to practice it and have others follow along. Training in area appropriate situations is encouraged: Hurricane Preparedness, or Tornado, Fire, Earthquake and Thunderstorm Safety, among others. Blocks encourages centers to have exercises, drills and readings in a non-threatening way before an incident. Children often take home what they have learned while teaching and reminding other members of the family. There are a considerable number of resources: books, videos, websites, and handouts available through the resource section.

Your organization can participate in Public Awareness & Business / Emergency Management Sector Engagement events and campaigns. Inclusion of the whole family including the youngsters will enhance the organization's presence in the community.

Including your workforce and their children in your planning and plans could greatly enhance your ability to recover.

### **Quick Case Study**

In Waterbury, VT the State Hospital Complex had been converted to a multi-use state business facility along with some new construction. On the property was an existing house that was leased by a day care center. Many of the children at the center had parents on property. The facility was located between two interstate highway exits. Easy to get to work and childcare.

The property flooded and all local functions had to be moved to other diverse locations. Some buildings were 'up' the interstate while others were 'down' the interstate. The daycare center had to relocate also.

The nearest available space was 5 miles off the interstate one exit up from the last one. Not all parents could avail themselves of that location. Enrollment dropped and there was a possibility that the center would have to close. The need to find childcare capability and capacity was disruptive to the daily workflow.

The Complex reopened after an extended period of time. The state decided that they no longer wanted to lease the pre-existing building. The childcare center offered to buy it. A new and somewhat unanticipated issue arose. The building that had been suitable before the flood now had to be rehabilitated and brought up to code. This increased the cost and extended the time to reoccupy the site. This disruption was almost 5 years in duration.

## Resources

Building Links between Offices of emergency management, Childcare, and the community for Kids Safety – BLOCKS

<https://blocksusa.org/>

BLOCKS Resources (Videos and Training)

<https://blocksusa.org/resources-1>

CDC Early Care and Education Portal

Emergency Preparedness

<https://www.cdc.gov/early-care/emergency-preparedness/index.htm>

Safety, Health, and Injury Prevention Recommendations

<https://www.cdc.gov/early-care/safety/index.html>

The American Academy of Pediatrics (AAP) Pediatric Disaster Preparedness and Response

<https://www.aap.org/en/patient-care/disasters-and-children/professional-resources-for-disaster-preparedness/pediatric-disaster-preparedness-and-response-topical-collection>

Topical Collection resource endeavors to inform and guide pediatricians as well as planners, responders, care providers, and volunteers to be better prepared to meet the unique needs of children in times of crises and disasters.

Children have many unique anatomic, physiologic, immunologic, developmental, and psychological considerations that potentially affect their vulnerability to injury and response in a disaster. The underlying principle of pediatric disaster preparedness is to ensure that the medical and psychological needs of children are met during and after disaster events.



Federal Emergency Management Agency [FEMA]

[IS0100, Introduction to the Incident Command System](#)

[IS0200, Basic Incident Command System for Initial Response](#)

[IS0700, National Incident Management System, An Introduction](#)

[IS0800, National Response Framework, An Introduction](#)

Consumer Product Safety Commission

Childproofing Your Home - Several Safety Devices to Help Protect Your Children from Home Hazards

<https://www.cpsc.gov/safety-education/safety-guides/kids-and-babies/Childproofing-Your-Home>

### **BLOCKS Leadership**

Howard Pierpont

Chairperson of the Board. The Disaster Preparedness and Emergency Response Association (DERA) Board Chair and Solutionist - DERA Institute for Preparedness and Resilience, Mineola, TX; Member since March 2016.

Heather Beal

Board Member. BLOCKS President and Chief Executive Officer, Seabeck WA; Member since April 2015

After graduating college, she served our country with 23 years of dedicated Naval service. She is married to an equally dedicated Navy Officer. While in the military she earned graduate degrees in Asian studies, conflict resolution, cyber security policy and emergency management. She is a Certified Emergency Manager (CEM) and has her

PhD in Public Policy & Administration. Her specialization is emergency management and her dissertation focused on childcare recovery.

As a working parent of two, she became aware of just how much of a gap existed in childcare emergency preparedness training & resources and vowed to use her experiences, education, and more importantly, motivation, to fill the gap. Her desire to bridge the emergency management and childcare communities culminated in the founding of BLOCKS.

## Your Journey To Becoming A Resilience Professional, by Michael Gifford, Chairman of the Association of Continuity Professionals (ACP) National Board of Directors



Michael has a very broad range of business continuity, disaster recovery, and crisis management experience. His professional experience includes leadership roles in Information Technology, having worked in the financial, retail, and energy sectors. As an experienced senior leader and practitioner, Michael has served as BCM Program “Champion”, coach, and mentor. He’s an accomplished storyteller who can help business teams understand the “why” through sharing real event experiences.

Michael currently serves as the Chairman of the Association of Continuity Professionals (ACP) National Board of Directors. He has served on the ACP National Board of Directors for a total of 8 years. He was one of the founding members of the ACP Alamo Chapter – San Antonio, TX, and served as its first Chapter President.

Michael has a passion for helping others that can be seen through his involvement with numerous Non-Profit Organizations, including ACP. Michael believes there is no greater reward than giving back and making a difference in your community. Have you ever found yourself in an unexpected conversation where you were asked “What do you do for a living?” And your answer was ... “I am a Resilience Professional.” Of course,

the follow-up questions are “What’s that?” and “How did you choose that career?” Resilience Professionals are specialized problem solvers who help individuals, organizations, and communities prepare for the unexpected.

## **Choosing A Career As A Resilience Professional**



Unlike a doctor who attended medical school, or an electrician and plumber who went to trade school, or a lawyer who went to law school, there is simply no clear single path to becoming a Resilience Professional.

If you ask any Resilience Professional, you’ll learn that their individual career path was likely totally different than anyone else. In this Chapter you’ll find some of the potential roads you can take on your journey to becoming a Resilience Professional.

The journey for the Resilience Early Careerist (or novice) often begins without the intention of pursuing this career. Instead, you might be introduced to Resilience through your employer, or through a webinar, or even by talking with a college career counselor and it sparks your interest.

### **Getting Started**

Imagine you have decided to learn Spanish and so you decide to invest in some of the learning tools that are available. The same is true for developing your knowledge, skills, and understanding of Resiliency.

There are a variety of courses available to start your professional development. For example, the DRJ Academy powered by Lambert Learning offers the following course: “The Academy’s BC Primer Course is a skill-focused, self-paced online course that will help you master the key fundamentals of business continuity, using a methodology of planning like no other in the world.” Another option is to participate in the education programs offered by The International Consortium for Organizational Resilience (ICOR).

Many universities are now offering undergraduate and graduate degrees related to Resilience such Enterprise Risk Management and Emergency Management. Plus, there may be an opportunity to secure an internship through the university placement office.

### **The Role of Conferences**

As you begin to learn more about the Resilience Profession, you will quickly learn that it is a very small community of dedicated professionals who often gather at industry conferences. As an attendee, you get a chance to network with other professionals, attend general sessions and workshops, and learn about the latest tools available to support Resilience Programs. You might consider one of the following conferences offered by DRJ, DRII, and Continuity Insights.

### **Industry Certifications**

Like many other professions, there are several certifications that are available. They are offered by such organizations as The Business Continuity Institute (BCI), Disaster Recovery Institute International (DRII), and The International Institute for Organizational Resilience (ICOR).

### **Why Should You Pursue A Certification?**

The certification represents that you have met the minimum requirements, which typically involve several years of experience, and a demonstrated competency level involving 10 Good Practice Guidelines (BCI).

Although it is a significant accomplishment to earn a certification, there are some very important considerations to remember. First, completing the certification requirements does not mean you are a high Resilience performer. It does mean you have completed the basics and in tandem with experience, you are a professional. Instead, it is one component in your portfolio that should also include soft skills, strong oral and written communication skills, attention to detail, problem solving skills, and the ability to build and maintain relationships.

Another reason why you should pursue a certification is because when searching for your next job, the hiring manager and/or talent acquisition will often use certifications as one way of deciding if you will move forward in the interview process. It is a career competitive advantage!

Lastly, it is important to remember that by earning a certification or taking training classes, you have only just built the foundation of your knowledge and understanding of Resiliency. The reality is that most organizations have implemented their own version of Resilience, and they may or may not follow industry best practices. In fact, it is not uncommon to find yourself in a situation where your employer will teach you their definition of Resilience versus what you have learned through outside education.

### **How Do I Build My Professional Network?**

One of the most important steps you can take on your career journey is to find ways to build your professional network.

The Association of Continuity Professionals (ACP) was founded in March 1983 and offers its members the opportunity to build their network through local Chapter meetings, hybrid meetings and webinars, and 1-day regional conferences. Recognizing the need to offer networking opportunities to professionals in the same industry sector, ACP has focused its attention on establishing Special Interest Groups (SIGs) including one specifically for Early Careerists. Other SIGs in the pipeline include Healthcare, Banking/Finance and many more.

For more information: [www.acp-International.com](http://www.acp-International.com)

### **Building Your Brand**

In addition to your Professional Development through education and training, it is critically important to establish your personal Brand. The best way to build your Brand

is through LinkedIn which is now recognized as the leading resource used by hiring managers and recruiters when they are reviewing potential candidates.



If you want to enhance your Brand through LinkedIn, then you should consider investing in Carol Kaemmerer’s book “LinkedIn for the Savvy Executive, Second Edition: Promote Your Brand With Authenticity, Tact, and Power” which is filled with tips you can use to maximize your LinkedIn Profile.

<https://m.media-amazon.com/images/I/41bkYA1IRML. SY466 .jpg>

## Finding The Next Job

Although your personal network is a resource for career advice and finding that next job, you can enhance your chances by becoming a client of a professional recruiter. They have better insight into the current job market and can set you up for success through career advice, coaching, mentoring, resume and interviewing. One option is to partner with Cheyene Marling, BC Management, powered by Witt O’Brien’s / Ambipar Response, who is recognized as one of the premier recruiting experts in the field of business continuity and disaster recovery.

[www.bcmanagement.com](http://www.bcmanagement.com)

## Where Will The Journey Take You?



The individuals who have chosen to become a Resiliency Professional have much in common. They are dedicated to saving lives, implementing steps to prevent or reduce the impact of a catastrophic loss, ensuring the resilience of their organizations, and serving their communities. Although your destination may not be known, it will require a commitment to life-long learning ensuring you can always re-invent yourself and continuing to build your network.

Michael J Gifford

# RESILIENCE

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Excerpts from “*Preparing Your Business Operations for Disruption*” by Fusion Risk Management



In this chapter, ***Fusion Risk Management*** provides excerpts from a paper entitled “Preparing Your Business Operations for Disruption.” The paper dives into the topic of stress testing and resilience. As noted in the article, the main theme is “modernizing stress testing to enhance operational resilience and regulatory compliance.”

***Predictability Drives Business Value. Preparedness Ensures It Thrives.***

If businesses can’t prevent surprises, they must at least prepare for them.

Most organizations rely on some combination of scenario testing, stress testing and/or exercise management to test for failures and determine whether their business is ready. Even regulators are starting to put frameworks in place that require businesses to demonstrate their readiness to deal with “severe but plausible” disruption scenarios.

These tabletop stress tests can be prohibitive – costing as much as \$30,000-\$50,000 to run a single disruption scenario. They are also decreasing in the value they offer in today’s environment. In too many cases, these processes are focused on historical scenarios and limited to the experience of small teams. They are unable to account for downstream dependencies that impact an organization’s ability to respond.

As a result, these exercises tend to confirm what the business already knows when the focus should be on discovering what the business does not know and may not be ready



for. Where are the gaps in their operational readiness? And what do they need to do to address those vulnerabilities when they are discovered?

This paper looks at the evolving role of scenario and stress testing in effective operational resilience and lays out important considerations for businesses looking to modernize and improve their risk management posture for what's to come.

### ***Aligning Scenario Testing with Current Business Dynamics***

Scenario testing, stress testing, exercise management—different organizations use different approaches—are the most common ways to prepare for potential disruptions to their business. They are designed to examine issues around business processes, policy, decision-making, and other factors that might impact the business's response – whether it be a supply chain disruption, an IT-related outage, a pandemic, or a natural disaster.

Every business needs to have these processes in place at some level, but generally speaking, the bigger the organization, the more at stake and the greater the need. For some organizations, the effort is more focused on meeting time-based objectives such as process recovery or performance time. More commonly today, it also includes anticipating potential threats, evaluating response options and strategies, identifying potential business impact, and improving organizational response to optimize operational resilience and agility.

***There are three core problems with the existing approaches of most organizations:***

#### ***1. Tabletop exercises alone don't scale for operational resilience.***

Today, most scenario and stress testing is done via “tabletop” exercises—bringing together key stakeholders and team members to discuss and hypothesize potential

disruption scenarios and how the organization can respond to those disruptions. These sessions aim to identify the most realistic scenarios to test for, and then build out exercises to simulate responses to them. The problem is that these exercises are too static, time-consuming, resource-intensive, and limited for today's business environment:

- ***It's expensive—\$30,000-\$50,000 to run a single tabletop exercise.*** This doesn't even include the cost of having a third-party provider participate. As a result, organizations run fewer of them, limiting their breadth and scope, and overlooking the real operational risks organizations face.
- ***They take place in highly-controlled environments that don't reflect the unpredictability, complexity and dependencies of real-world situations.*** Scenarios have to be diluted to make them manageable, making it more difficult to replicate real operational issues. Downstream dependencies can't be incorporated to understand how business disruptions and potential responses to them may actually play out.
- ***Stakeholder participation is limited by necessity.*** This reinforces existing biases and assumptions and minimizes the opportunity for new perspectives and insights. Hybrid and remote work only exacerbate these limitations.
- ***There is too much emphasis on scenario planning and discussion.*** Instead of focusing on identifying the potential areas of risk and how to address them.
- ***They rely too much on subjective qualitative data.*** This makes it difficult to develop and apply quantitative metrics to objectively measure the effectiveness of the exercises.
- ***The better an organization "grades," the better they believe they are prepared.*** In a business environment with so many unknowns, that principle just doesn't apply. You need to find out what you don't know, aren't prepared for, and where the business is most likely to break.

## ***2. The rise of third-party risk multiplies the problem.***

Third-party providers (e.g., software vendors, supply chain partners, service providers) play a growing role in most organizations' ability to operate their business. The July 2024 CrowdStrike outage highlighted just how dependent organizations can be on third-party providers, and how a disruption can leave organizations entirely unprepared.

Effective stress testing must take into account dependencies and risks related to those third-party providers. Organizations need to have a full understanding of the downstream impact a potential third-party disruption—IT or otherwise—can have on important business services and ensure continuity plans and response capabilities are airtight. Ultimately, organizations need to understand the risks a third-party incident can have to their own ability to deliver their product or services.

It's not feasible to manage the risk of every vendor a business has at the same level. They need to be prioritized based on the role they play in the business and how critically they tie to different business functions.

## ***3. Adding people/resources is not a sustainable solution.***

While business has gotten more complex, the way people and organizations work has changed too, vastly multiplying the sheer number of scenarios and dependencies businesses are susceptible to. This is no longer a problem that can be solved with more people. Aside from the cost, there are only so many different scenarios which can be identified, planned and tested in a reasonable amount of time. Different groups need to coordinate to minimize wasted duplication and understand different integration points between business groups.

Organizations overwhelmed by the number of potential events and disruptions they are susceptible to should be concerned. This distributed way we work, buy, sell and service has fundamentally changed the way we must plan for and experience disruption.

Technology, automation and data are the only practical way for businesses to improve their readiness to respond to operational disruption.

### ***Modern Scenario Testing Powered by Data and Automation.***

In today's business environment, customers are no longer willing to accept disruption in service or product delivery. Every business understands this and wants to know where they are at risk so they can prevent that possibility. But it's no longer a matter of if, but when. It's no longer one, but more often it's several. And the complexity of most businesses and the manual, human-led nature of scenario testing, make it almost impossible to identify every vulnerability, let alone plan and test effective responses to them.

To move forward, organizations must change the way they view disruption and evaluate their resilience posture. This means looking beyond traditional tabletop exercises to uncover what they don't know instead of confirming what they already do. It means eliminating human bias and looking beyond points of success. Modern technologies are making this all possible.

Harnessing AI and a businesses' own data, organizations can stress test their operations against a multitude of scenarios, uncover hidden vulnerabilities, and make data-driven decisions at scale.

These modern approaches use data simulations and modern modeling capabilities to identify all the different pathways that might impact the business services an organization provides to its customers. Taking advantage requires a robust and data-driven scenario testing capability that includes:

- ***Significantly expanding the ability to identify and design*** severe but plausible scenarios and learn more about your organization's true resilience posture with less effort.

- **Shifting the focus of scenario testing** from design and heuristic reviews to risk prioritized exercises with the goal of testing for vulnerabilities and uncovering breaking points earlier.
- **Risk-tiering third-party vendors** and establishing redundancies in service offerings where needed in case of an outage. Organizations are only as strong as their weakest vendor. They must recognize the role that third parties play in risk beyond SLAs. No disruption to a single vendor should halt critical business services.
- **Engaging third-party vendors** in the scenario testing process where possible and practical.
- **Using automation to run thousands of variations to a single scenario** to identify major vulnerabilities, assess potential impact, why they occur, and how to mitigate. Running two tests a year is not enough. Organizations need to run a large volume of different scenarios, requiring automation and data.
- **Leveraging technology that automatically incorporates critical dependencies** to help organizations truly understand how everything impacts their important business services.
- **Improving cross-functional response capabilities** to mitigate the financial and reputational risks involved.

**The end goal here is not to do more tabletop exercises. It is to change the way businesses experience disruption so that there are no surprises.** Modern technologies enable organizations to move beyond traditional tabletop exercises to identify and test many more “severe but plausible” scenarios with less effort, and be more efficient and accurate in planning effective organizational responses to those scenarios.

## Organizational Resilience – Observations from the Field, by Dr Bernard Jones



Dr. Bernard A Jones, MBCI, CBCP, CORP, ITILv.3, sits on the ACP National Board of Directors as the Information Committee Chairman. Dr. Jones recently completed doctoral research on organizational resilience at New Jersey City University. His research benchmarked organizational resilience in New Jersey and enhanced a tool that allows organizations to determine their organizational resilience score.

*"Science is beautiful when it makes simple explanations of phenomena or connections between different observations."*

*Stephen Hawking*

In this chapter, we would like to share observations from the field regarding organizational resilience. Over the past several years, we have been privileged to conduct webinars & workshops, write articles, present at industry conferences, and converse with industry practitioners on organizational resilience. Our passion for the topic brought us to write this book and fueled our eagerness to continue to educate ourselves and others. We feel it is fitting to share these observations here to inform our readers and continue to elevate those involved with organizational resilience, which, in our view, benefits everyone.

We have several critical points that have surfaced and are worth mentioning. From the vast array of literature on the subject of operational resilience metrics/KPIs/KRIs/OKRs, here are key points that should be considered in the development of resilience metrics:

Research suggests a disconnect between top management's perceptions of organizational resilience plan objectives and how they measure their value still exists.

While financial measurements (e.g., backup sites and redundant telecommunications capabilities weighed against the expense for these capabilities) constitute one measure of the organizational resilience plan process, others should measure the organizational resilience plan's contribution to the organization in terms of quality and effectiveness, which are not strictly weighed in monetary terms.

A well-run organizational resilience planning process can make contributions to an organization that includes:

- Sustaining growth and innovation
- Enhancing customer satisfaction
- Providing for people's needs
- Improving overall mission-critical process quality
- Providing practical financial metrics

The focus of an organization's organizational resilience plan process should contribute to the organization's overall goals. This focus helps to:

- Identify agreed-upon organizational resilience plan development milestones
- Establish a baseline for execution
- Validate organizational resilience plan process delivery
- Establish a foundation for management satisfaction to manage expectations successfully

**Objectives regarding metrics maturity:**

- Align and certify to the most relevant or beneficial standard for business continuity
- Deliver the Retail and Generation organizational resilience within the agreed and allocated budget
- Fully understand the organization and develop a robust and enduring continuity response in critical areas and activities
- Exercise and test continuity arrangements and plans to ensure suitability
- Work with our internal IT providers to ensure IT disaster recovery arrangements are appropriate for the Retail and Generation businesses.
- Provide appropriate training and organizational resilience awareness to develop a continuity culture within retail and generation businesses.
- Maintain and continually improve the organizational resilience to remain current, appropriate, effective, and aligned to industry standards and best practices.
- Develop and maintain relationships with the national government, devolved government, and local emergency planning groups.
- Manage existing and emerging external continuity considerations (in essence, understanding customers and suppliers)
- Review and maintain continuity-related risks and threats to the Retail and Generation businesses.

**The purpose of conducting a literature review included the following:**

- To identify examples of business continuity metrics/KPIs/KRIs utilized within the industry.
- Understand the elements that can help assess/quantify the maturity of a business continuity program.
- To provide reference and alignment to business continuity standards and organizations.



- To expose ACP members and business continuity practitioners to a comprehensive list of business continuity metrics/KPIs/KRIs as a reference guide.
- To establish a collection of content on business continuity metrics/KPIs/KRIs for use in possible future journal article publications to benefit industry practitioners.
- To establish a collection of content on business continuity metrics/KPIs/KRIs for use in future business continuity conferences or symposiums.
- To explore Operational Resilience metrics/KPIs/KRIs covering various areas (e.g., operational, BCM program governance, organizational risk, organizational resilience, alignment with industry standards, etc.)

As business continuity practitioners, can we identify comprehensive, meaningful, and effective metrics/KPIs/KRIs?

Can we identify and articulate comprehensive and effective business continuity metrics/KPIs/KRIs regarding the program we currently manage?

Suppose we cannot measure and articulate how we are doing as an Operational Resilience program.

- Could we be risking our organization and allowing us to become less resilient?
- Could leveraging the various business continuity standards (e.g., ISO 22301, BS 25999, NFPA 1600, DRI Professional Practices, NIST 800-34, etc.) help us better understand what to measure?
- What tools can assist business continuity practitioners in adequately and comprehensively measuring and articulating business continuity-related metrics and KPIs/KRIs?
- Should consideration be made regarding the size and maturity of an organization in the discussion on metrics and KPIs/KRIs?
- Is the current business continuity metrics only addressing standard operational measures, and should practitioners go beyond those to achieve an accurate measure of program maturity and performance?

## **Organizational Resilience Metrics**

### Literature Review – Findings, Types of Business Continuity Metrics

The literature review revealed that there are three categorizations of metrics:

- Regulations / Program Metrics
  - These metrics (the schedule/number of program activities planned or the qualitative metrics) help to drive compliance with regulatory standards and best practices. Having a well-run program is the first step on your journey.
  
- Readiness
  - You can have a well-run program and still not be able to document your "readiness" to deal with an event. Organizations that are "ready" demonstrate their ability to execute plans and invoke different response and recovery strategies through exercising. These exercises include a wide range of participants, ensuring that there are no single points of failure or tribal knowledge that is inaccessible to the teams if specific individuals are not available during an event.
  
- Resilience
  - Organizational Resilience metrics are almost entirely missing from the literature review. Gartner defines it as People, Process, Technology, Leadership, and Culture. Traditional Business Continuity focuses on Processes and Technology and listing out the People. A broader view of resilience in People, Leadership, and Culture requires a partnership with Human Resources to look at employee engagement.

## **Risk-Threat Monitoring**

Organizational resilience metrics, which focus on risk-threat monitoring, center on assessing the ability to anticipate, prepare for, respond to, and recover from potential threats and disruptions. As mentioned in this book, starting with “readiness” metrics is

essential. Within readiness metrics, risk assessments must be conducted and completed periodically. Additionally, how often are new threats identified within a given period? We advocate that organizations quantify a threat identification rate as a metric.

Along with readiness comes the vital aspect of employee training and awareness programs. What is the percentage of employees trained in risk management? How often are awareness campaigns conducted at the organization? These are essential metrics to capture regarding readiness.

Furthermore, what is your organization's adherence rate to regulatory and policy requirements related to risk management? This critical metric relates to compliance readiness.

Another area within risk-threat monitoring is capturing detection and monitoring metrics.

These metrics include the average time taken to detect an incident, the extent of processes and systems covered by threat monitoring tools, and the accuracy of threat detection mechanisms regarding false positives.

Lastly, as in any effective organizational resilience program, capturing process improvement and adaptation metrics is vital. These metrics center on the post-incident review completion rate and the percentage of incidents, followed by a thorough review and analysis. Also, have the lessons learned from an exercise or actual incident been addressed or implemented? We define this metric as the effectiveness of integrating lessons learned from past incidents into current practices.

### **Organizational Resilience Framework - Resilient Organisations Research Group\***

During Dr. Jones doctoral studies at New Jersey City University (NJCU), he had the opportunity to collaborate with the preeminent research group focusing on organizational resilience. The research group, Resilient Organisations, is based out of Christchurch, New Zealand, and continues to conduct exceptional and seminal research on organizational resilience. Engaging with the group enhanced my research for his

doctorate, and the collaboration truly helped during his doctoral journey. So, should we include a reference to resilient organisations in our book? Resilient Organisations' work has established the ability to “measure” organizational resilience with what they define as resilience indicators. This revolutionary capability resonated with me during my doctoral studies and was central to helping address my research questions. As noted in our book, what gets measured can be analyzed, addressed, and corrected. Depicted below is a chart that identifies the 13 organizational resilience indicators that will be defined. To provide context, a 10-year longitudinal study across many domains was conducted before Resilient Organisations finalized the tool/capability to measure resilience using the indicators below.

A few definitions that provide a framework and context to the resilience indicators are provided here to aid in comprehension of this topic:

The two overarching dimensions under which the 13 organizational resilience indicators fall are Adaptive Capacity & Planning.

**Adaptive Capacity:**

An organization’s ability to adapt is at the heart of its ability to display resilient characteristics. Resilience as adaptive behavior is increasingly being applied to the business environment to help explain how organizations manage the balance between stability and change.

**Planning:**

The development and evaluation of plans and strategies to manage vulnerabilities concerning the business environment and its stakeholders as well as to engage in overall crisis/disaster planning & preparedness (i.e., creation of plans, training, and awareness and conducting exercises and simulations)

**Organizational Resilience (OR) Indicators:**

**Leadership\***

Strong crisis leadership to provide good management and decision making during times of crisis, as well as continuous evaluation of strategies and work programs against organisational goals. \*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

### **Staff engagement\***

The engagement and involvement of staff who understand the link between their own work, the organisation's resilience, and its long term success. Staff are empowered and use their skills to solve problems. \*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

### **Situation awareness\***

Staff are encouraged to be vigilant about the organisation, its performance and potential problems. Staff are rewarded for sharing good and bad news about the organisation including early warning signals and these are quickly reported to organisational leaders. \*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

### **Decision making\***

Staff have the appropriate authority to make decisions related to their work and authority is clearly delegated to enable a crisis response. Highly skilled staff are involved, or are able to make, decisions where their specific knowledge adds significant value, or where their involvement will aid implementation.

\*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

### **Innovation and creativity\***

Staff are encouraged and rewarded for using their knowledge in novel ways to solve new and existing problems, and for utilising innovative and creative approaches to developing solutions. \*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

### **Effective partnerships\***

An understanding of the relationships and resources the organisation might need to access from other organisations during a crisis, and planning and management to ensure this access. [\\*\(https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/\)](https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/)

### **Leveraging knowledge\***

Critical information is stored in a number of formats and locations and staff have access to expert opinions when needed. Roles are shared and staff are trained so that someone will always be able to fill key roles. [\\*\(https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/\)](https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/)

### **Breaking silos\***

Communication and collaboration within and between organisations to enable innovation, shared understanding, and common purpose.

[\\*\(https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/\)](https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/)

### **Internal resources\***

The management and mobilisation of the organisation's resources to ensure its ability to operate during business as usual, as well as being able to provide the extra capacity required during a crisis. [\\*\(https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/\)](https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/)

### **Unity of purpose\***

An organisation wide awareness of what the organisation's priorities would be following a crisis, clearly defined at the organisation level, as well as an understanding of the organisation's minimum operating requirements. [\\*\(https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/\)](https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/)

### **Proactive posture\***

A strategic and behavioural readiness to respond to early warning signals of change in the organisation's internal and external environment before they escalate into crisis.

\*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

### **Planning strategies\***

The development and evaluation of plans and strategies to manage vulnerabilities in relation to the business environment and its stakeholders.

\*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

### **Stress testing plans\***

The participation of staff in simulations or scenarios designed to practice response arrangements and validate plans. \*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

As we have done in the past, we've been able to help organizations quantify their organizational resilience at the resilience indicator level to help identify both areas of strength, which organizations can continue to leverage, as well as identify areas of weakness, which allow for additional resources and training to mitigate and eliminate the resilience weakness. We urge our readers to explore the exceptional work that Resilience Organisations do and take advantage of their services to help your organization utilize metrics to help quantify your resilience posture! Please visit the Resilience Organisations website for additional information :

\*(<https://www.resorgs.org.nz/about-resorgs/what-is-organisational-resilience/>)

As mentioned above, two overarching dimensions exist within the research that Resilient Organisations have conducted in building the list of 13 organizational resilience indicators. Below, we want to provide which organizational resilience indicators fall within those two dimensions. Question: is your organization better at planning or has a better adaptive capacity posture? Introduce Planning versus adaptive. We encourage you to work with Resilient Organisations and benchmark your organization's resilience posture to answer that question!

## **Planning Metrics**

- What is your organization/division/business unit's OR Proactive posture score?
- What is your organization/division/business unit's OR Planning strategies score?
- What is your organization/division/business unit's OR Participation in exercises score?
- What is your organization/division/business unit's OR Recovery priorities score?
- What is your organization/division/business unit's OR External resources score?

## **Adaptive Capacity Metrics**

- What is your organization/division/business unit's OR Leadership score?
- What is your organization/division/business unit's OR Staff engagement & involvement score?
- What is your organization/division/business unit's OR Situational monitoring & reporting score?
- What is your organization/division/business unit's OR Minimizing silos score?
- What is your organization/division/business unit's OR internal resources score?
- What is your organization/division/business unit's OR Decision-making score?
- What is your organization/division/business unit's OR Innovation & creativity score?
- What is your organization/division/business unit's OR Information & knowledge score?

## **Questions, Key Takeaways, Lessons Learned, and Business Continuity Metrics**

### **Organizations Are Utilizing Today:**

"How does the program provide value?"

"How does the program update when the business structure changes?"

### **Sample Metrics:**

- How many processes are documented?



- Prioritization of processes
- How many teams are reporting?
- How many applications support processes?
- How many BIAs have been completed/updated?
- RTOs vs. RTA (Recovery Time Actual) - The Recovery Time Objective (RTO) is a goal for how long it should take from when an outage begins until it is detected, the service is restored, and the
- Recovery Time Actual (RTA) is the real-time that it takes to failover the service or restore a backup and bring services online after a failure.
- Data tracked following exercises.
- Readiness Metrics (timeliness) – Tolerance measurement (weighted)
- Plans tested on time?
- BIAs completed on time?
- Plans completed on time?

### **Preparedness Metrics/Measures (completeness)**

- Point-in-time measure
- By department
- ii. Overall
- iii. Examples:
  - BIA/Plan Update 20%
  - Testing 60%
  - Awareness 20%
- Dashboard Scale: Red, Yellow, Green

### **Calculate & report:**

- "Uptime"
- # of activations

- organizational resilience plan completion rate
- Recovery Time Achievable in addition to Recovery Time Objective
- Non-conformities
- Basic training
- Contract tracing
- Audit findings

**Perform an Incident Impact Assessment.**

**Calculate & report:**

- # of incidents
- By revenue
- ii. By Impact
- BIA information/status
- Open vs. complete
- COVID cases/hospitalizations
- Exercises

Use existing metrics/KPIs from other teams.

**Measure & report "effectiveness" metrics**

- Gap remediation
- Lessons learned -----> completion
- Year-over-year trends vs. totals
- Month-over-month trends vs. totals
- Report on live crisis activations
- # of BIAs conducted / organizational resilience plan
- Application assessments / DR
- After-Action-Report (AAR) improvements
- Organizational resilience plan quality assurance through tabletops

- Direct cost–loss analysis
- Potential Sof "source of funds" (dept.)
- Adherence to standards (progress report)
- Process Impact
- Response acceptance/answers
- RTO vs. RTA
- Business area engagement
- Exercise data
- # of plan improved

### **Critical Emergency Management Topics/Best Practices**

- Enhanced Emergency Response
- Coordination
- Accountability
- Pre-defined roles & responsibilities
- Efficient use of resources
- Prevention of duplication of effort
- Effective leadership
- Establishment of effective crisis communication
- Establishing partnerships/collaboration/resource sharing
- Business continuity connections with emergency management

### **Emergency Management Key Graphics to Capture**

- Multitude of events
- Response to natural events
- Response to human-made events
- GIS intelligence
- Disaster management life-cycle
- Critical infrastructure risks
- Wise resource allocation

- Quantity:
- Resources
- Money
- Time

Learn from each EM phase and the key to improving preparedness.

### **Why Leadership is Vital Regarding Organizational Resilience**

During our research for this book, one overarching theme that resonated was the topic of leadership and, more importantly, how it plays such a pivotal role in organizational resilience. Early in this chapter, we introduced Resilient Organisations and their essential work in defining the 13 organizational resilience indicators. As we noted, quite a diverse set of indicators truly articulate the many dimensions of resilience! Among numerous research studies on traits or characteristics that contribute to effective organizational resilience is “leadership!”

While many can advocate that effective leadership is vital in business, research has also shown that effective leadership correlates to sound organizational resilience. During my doctoral research, in which I studied organizational resilience across a diverse array of organizations in New Jersey, leadership stood out as the most crucial resilience indicator from my research.

Honestly, when we look across many real-life disaster events or review various case studies, organizations that possess strong, decisive, and committed leadership demonstrate sound organizational resilience.

### **Additional Topics to Consider**

- Metrics "Pickles"
- Taxonomy (BC vs DR)
- Executives don't know what they want!
- Data quality/availability (\*unknown = red)

- Address the disconnect between leadership & “boots on the ground”
- Executives want results right away (use dashboard & update in real-time)
- Incidents don't have the luxury of time
- Suppliers are tough to measure
- Trust but verify
- Review SLAs & contracts
- Dashboard Components
  - "Are we Ready?" – resilience capabilities
  - Resilience Health
  - Risk/threat monitoring
- Create a "data lake."
- Use of apps (portfolio) aligned to business processes
- 3rd party contracts (SLAs)
  - HR
  - Employees
- Locations
- Teams/organizations
- Financial data & budgets
- Training status
- Incident Management
- Internal Audit controls
- Cyber security metrics
- Testing results
- Mitigation standards (levels: Gold, Silver, Bronze)
- Risk acceptance (Key: try to change their minds and build a resilience culture)
- Outages/incidents
- Response actuals create improvement and address gaps
- Training
- Compliance
- Regulatory

- Industry
- Audit
- "Where are the Gaps? – risk issues
  - List of Gaps
  - Risk/threat level (high, medium, low)
  - Mitigation options
  - Factor in \$ & time
  - ROI
  - Part of the company impacted
  - Improvement plans
  - Critical Processes
  - Preparedness
  - Outages/incidents
  - Improvement Plans
  - Results & Findings
- Priority, \$, people (ROI)
- When found & still open
- Risk acceptance
- Strategic Alignment
- Company goals/objectives
- How is the business continuity/disaster recovery/ crisis management/ organizational resilience program helping vs failing
- "Where are We At?"
- Audience = leadership & Steering Committee
- Drill Down
- Review of plans (BC, EM, DR)
- Cyber resilience
- Review Application Portfolio vs. BIA (subset – critical processes) vs
- Actuals
- Testing

- Outages
- Incidents

### **Dashboard Management**

- Planned vs. Unplanned work (threat to the program)
- Compliance
- Capabilities
- Risk & Issues
- Obstacles to the program

As you can see there are a LOT of metrics that can be pulled into your dashboard and honestly this isn't even the whole list.

### **Building a Culture of Resilience in Healthcare Organizations, by Scott Ballentine, CBCP, CCRP, MBA, PMP, FACHE**



### **Introduction**

In an era of unprecedented challenges, the healthcare sector faces an array of disruptions, from natural disasters and pandemics to cyberattacks and operational failures. These challenges highlight the critical need for healthcare organizations to develop not only robust systems and processes but also a resilient culture. Resilience, in this context, refers to the capacity of an organization to anticipate, prepare for, respond to, and recover from adverse events while maintaining essential functions.

Building a culture of resilience in healthcare is more than a strategic imperative; it is a foundational element that ensures the continuity of care, the safety of patients, and the well-being of staff. A resilient culture empowers healthcare professionals at all levels to navigate crises with confidence, adapt to rapidly changing environments, and continue delivering high-quality care under pressure.

This article explores the key components necessary to foster a culture of resilience within healthcare organizations. From leadership commitment and Associates engagement to continuous improvement and effective communication, we will examine how each of these elements contributes to creating an environment where resilience is ingrained in the organizational DNA. By understanding and implementing these principles, healthcare leaders can build a culture that not only withstands challenges but also emerges stronger from them.

## **Understanding Organizational Culture in Healthcare**

### **The Role of Organizational Culture**

Organizational culture in healthcare refers to the collective values, beliefs, behaviors, and norms that shape how individuals within an organization interact with each other, make decisions, and approach their work. It is the underlying fabric that influences everything from patient care practices to staff engagement and leadership styles. In healthcare, where the stakes are often life and death, the culture can significantly impact the quality of care, operational efficiency, and the ability to respond to crises.

A positive organizational culture fosters an environment where staff feel valued, supported, and motivated to perform at their best. It encourages collaboration, innovation, and a shared commitment to the organization's mission and goals. In contrast, a negative or toxic culture can lead to low morale, high turnover, and reduced patient satisfaction. Therefore, understanding and intentionally shaping organizational culture is critical for healthcare leaders who aim to build a resilient organization.

### **Impact of Culture on Resilience**



The culture of an organization plays a pivotal role in its resilience. A resilient culture is one that not only supports the ability to withstand and recover from crises but also promotes adaptability and continuous improvement. In such a culture, associates are empowered to take initiative, make decisions in the face of uncertainty, and contribute to problem-solving efforts during emergencies. This proactive approach ensures that the organization is not merely reactive but is prepared and equipped to handle disruptions effectively.

Moreover, a resilient culture emphasizes the importance of learning from past experiences. Organizations that prioritize resilience embed mechanisms for after-action reviews, feedback loops, and knowledge sharing into their daily operations. This commitment to learning enables the organization to continuously refine its practices and improve its response to future challenges.

In essence, the impact of organizational culture on resilience is profound. A culture that values resilience will inherently support the development of systems, processes, and behaviors that enable the organization to thrive even in the face of adversity. As healthcare organizations increasingly face complex and unpredictable challenges, fostering a resilient culture becomes not just an option but a necessity for long-term success and sustainability.

## **Key Components of a Resilient Culture**

### **Leadership Commitment**

Leadership is the cornerstone of a resilient culture. In healthcare, leaders set the tone for resilience by demonstrating commitment to the organization's values, fostering trust, and prioritizing the well-being of both patients and staff. Resilient leaders are those who can navigate uncertainty, make difficult decisions in high-pressure situations, and communicate clearly and effectively during crises. They also play a crucial role in shaping the organization's response to challenges by modeling resilience through their actions.

To cultivate resilience, leaders must actively promote and invest in resilience-building initiatives. This includes providing the necessary resources for training and development, encouraging a culture of continuous improvement, and fostering an environment where associates feel empowered to voice concerns and suggest improvements. Leadership commitment to resilience is also reflected in the organization's strategic priorities, where resilience is integrated into long-term planning and decision-making processes.

### **Associates Engagement and Empowerment**

A resilient culture thrives on the active engagement and empowerment of all associates. In healthcare, frontline staff are often the first to encounter and respond to crises, making their involvement in resilience efforts essential. When associates are engaged, they are more likely to take ownership of their roles, contribute innovative ideas, and collaborate effectively with colleagues.

Empowerment goes together with engagement. Empowered associates are those who have the autonomy to make decisions, take initiative, and act swiftly in the face of challenges. This can be achieved through clear communication of roles and responsibilities, access to necessary resources and information, and a supportive environment where associates are encouraged to take calculated risks without fear of retribution. By empowering associates, healthcare organizations can ensure that resilience is embedded at every level, allowing for a more agile and responsive workforce.

### **Training and Education**

Training and education are fundamental to building and maintaining a resilient culture in healthcare. Regular training ensures that staff are equipped with the skills and knowledge necessary to manage emergencies and adapt to evolving situations. This includes not only technical skills but also soft skills such as communication, teamwork, and problem-solving, which are critical during crises.

Ongoing education also plays a role in keeping staff informed about the latest best practices, regulatory requirements, and technological advancements that impact resilience. Training programs should be comprehensive, covering both general resilience principles and specific scenarios that are relevant to the organization's operations. Additionally, simulation exercises and drills can be invaluable in preparing staff for real-life situations, allowing them to practice their responses in a controlled environment.

### **Communication and Collaboration**

Effective communication and collaboration are at the heart of a resilient culture. In healthcare, where multidisciplinary teams often work together to provide patient care, clear and consistent communication is essential. During a crisis, the ability to quickly disseminate accurate information and coordinate efforts across departments can make the difference between a well-managed response and a chaotic one.

To foster resilience, healthcare organizations must establish robust communication channels that facilitate both routine and emergency interactions. This includes ensuring that all staff are aware of communication protocols and have access to the tools they need to stay informed. Collaboration should be encouraged across all levels of the organization, breaking down silos and promoting a collaborative approach to problem-solving.

### **Continuous Improvement and Learning**

A resilient culture is one that is committed to continuous improvement and learning. In healthcare, this means regularly evaluating processes, outcomes, and responses to identify areas for improvement. Continuous improvement is driven by a mindset that views challenges and setbacks as opportunities for growth rather than failures.

Healthcare organizations can foster this mindset by implementing regular after-action reviews, where teams analyze their performance during crises and extract lessons learned. These reviews should be used to inform future planning, update protocols, and refine training programs. Additionally, organizations should encourage a culture of

feedback, where staff feel comfortable sharing their insights and suggestions for improvement.

By embedding continuous improvement and learning into the fabric of the organization, healthcare leaders can ensure that resilience is not a static goal but an ongoing journey. This approach helps the organization adapt to new challenges, stay ahead of potential threats, and continuously enhance its capacity to deliver high-quality care under all circumstances.

## **Challenges in Building a Resilient Culture**

### **Resistance to Change**

One of the most significant challenges in building a resilient culture within healthcare organizations is resistance to change. Healthcare environments are often deeply rooted in established routines and practices, and any attempt to introduce new resilience-focused initiatives can be met with skepticism or pushback. This resistance can stem from a variety of factors, including fear of the unknown, discomfort with new responsibilities, or a belief that existing practices are sufficient.

To overcome resistance to change, leaders must communicate the value and necessity of resilience initiatives clearly and consistently. It is essential to involve staff at all levels in the change process, seeking their input and addressing their concerns. Providing education on the benefits of resilience, along with examples of how it has successfully mitigated risks in other organizations, can also help to alleviate fears and build buy-in. Additionally, change management strategies, such as phased implementation and ongoing support, can make the transition smoother and less intimidating for staff.

### **Balancing Day-to-Day Operations with Long-Term Resilience Goals**

Healthcare organizations often struggle to balance the immediate demands of day-to-day operations with the need to invest in long-term resilience. The healthcare environment is inherently fast-paced and resource-intensive, with staff and leadership frequently focused on addressing immediate patient care needs, regulatory requirements, and operational challenges. This focus can make it difficult to allocate

time, attention, and resources to resilience-building activities that may not yield immediate benefits but are crucial for long-term sustainability.

To address this challenge, healthcare leaders must prioritize resilience as a core component of the organization's strategic objectives. This involves integrating resilience goals into daily operations and ensuring that resilience planning is seen as complementary to, rather than in competition with, other organizational priorities. Leaders can also emphasize the interconnectedness of resilience and operational efficiency, demonstrating how resilience initiatives can lead to more stable and sustainable operations in the long run.

### **Resource Constraints**

Resource constraints are another significant barrier to building a resilient culture in healthcare. Financial limitations, staffing shortages, and limited access to training or technology can hinder the implementation of resilience initiatives. In some cases, organizations may feel that they lack the resources to invest in comprehensive resilience planning or to maintain the necessary infrastructure and systems that support resilience.

To navigate resource constraints, healthcare organizations can adopt a strategic approach to resilience planning, focusing on the most critical areas first. Prioritization is key, organizations should assess their risks and vulnerabilities to identify where resilience investments will have the greatest impact. Additionally, organizations can explore partnerships, grants, and other funding opportunities to support their resilience efforts. Leveraging existing resources creatively, such as cross-training staff or using technology to enhance communication and collaboration, can also help maximize the impact of limited resources.

### **Maintaining Resilience During Organizational Changes**

Healthcare organizations frequently undergo changes, such as mergers, acquisitions, leadership transitions, or shifts in service delivery models. These changes can disrupt

existing practices and make it challenging to maintain a focus on resilience. Organizational changes often bring uncertainty and may divert attention away from resilience efforts as staff and leaders adjust to new structures and processes.

To maintain resilience during periods of change, it is essential to integrate resilience principles into the organization's change management processes. This means ensuring that resilience remains a priority even during times of transition. Leaders should communicate clearly about how changes will impact resilience initiatives and provide reassurances that resilience will continue to be a focus. Continuity in leadership and consistent messaging about the importance of resilience can help sustain momentum and keep the organization on track despite the challenges posed by change.

### **Ensuring Organization-Wide Engagement**

Building a resilient culture requires organization-wide engagement, but achieving this level of involvement can be challenging. Different departments or units within a healthcare organization may have varying levels of commitment to resilience, depending on their specific roles, responsibilities, and perceptions of risk. Additionally, achieving alignment across large, complex organizations with diverse workforces can be difficult.

To ensure organization-wide engagement, healthcare leaders must promote resilience as a shared responsibility. This involves setting clear expectations for all departments and units, providing the necessary resources and support, and recognizing and rewarding contributions to resilience efforts. Communication is critical, leaders should regularly communicate the importance of resilience, share success stories, and highlight how individual and departmental actions contribute to the overall resilience of the organization. By fostering a sense of collective ownership, leaders can encourage greater participation and ensure that resilience becomes embedded in the organization's culture at every level.

### **Case Studies/Examples**

#### **A. Success Stories**

***Case Study 1: The Cleveland Clinic's Resilience-Building Initiatives***

The Cleveland Clinic, a leading healthcare provider in the United States, has been recognized for its comprehensive approach to building a resilient culture. In response to the increasing frequency of natural disasters and public health emergencies, the Cleveland Clinic implemented a robust resilience program focused on preparedness, response, and recovery.

One of the key initiatives was the development of an enterprise-wide disaster preparedness plan that integrates the input of clinical, operational, and administrative teams. This plan includes regular simulation exercises that involve all levels of staff, ensuring that everyone is familiar with their roles during a crisis. Additionally, the Cleveland Clinic invested in infrastructure improvements, such as enhanced backup power systems and resilient IT networks, to ensure continuity of care during disruptions.

The success of these initiatives was evident during the COVID-19 pandemic when the Cleveland Clinic was able to rapidly scale up its operations, maintain critical services, and effectively manage the influx of patients. The organization's strong focus on resilience enabled it to adapt to evolving challenges and emerge stronger from the crisis.

***Case Study 2: Kaiser Permanente's Resilience Through Integrated Communication***

Kaiser Permanente, one of the largest healthcare organizations in the United States, has long been committed to fostering a resilient culture. A significant part of their strategy has been the integration of communication across all levels of the organization. Recognizing that effective communication is crucial during a crisis, Kaiser Permanente developed a comprehensive communication strategy that ensures timely and accurate information flow across its facilities.

This strategy includes a centralized communication hub that disseminates real-time updates during emergencies, as well as regular training for staff on communication protocols. The organization also emphasizes the importance of transparency and collaboration, encouraging cross-departmental communication and decision-making.

During the wildfires in California, Kaiser Permanente's communication strategy was put to the test, and the organization was able to maintain operational continuity, coordinate evacuations, and keep staff and patients informed throughout the crisis.

## **B. Lessons Learned**

### **Lesson 1: The Importance of Continuous Improvement - Boston Medical Center**

Boston Medical Center (BMC) provides a powerful example of how continuous improvement can drive resilience. After experiencing several operational disruptions due to severe weather events, BMC embarked on a journey to enhance its resilience by focusing on continuous learning and improvement. The organization implemented a rigorous after-action review process, where teams analyzed their responses to disruptions and identified areas for improvement.

One of the key lessons learned was the need for greater flexibility in their emergency response plans. As a result, BMC revised its plans to allow for more adaptive responses, such as flexible staffing models and scalable resource allocation. This approach proved beneficial during subsequent events, enabling BMC to respond more effectively to unforeseen challenges. The lesson here is clear: resilience is not a static goal but an ongoing process that requires regular reflection and adaptation.

### **Lesson 2: Balancing Immediate Needs with Long-Term Resilience - Mount Sinai Health System**

The Mount Sinai Health System in New York faced a significant challenge during Hurricane Sandy, which exposed vulnerabilities in its infrastructure and emergency preparedness. In the aftermath, Mount Sinai recognized the need to balance immediate operational needs with long-term resilience planning. The organization undertook a comprehensive review of its infrastructure and invested in significant upgrades, including flood protection measures and enhanced emergency power systems.

However, the key lesson learned was the importance of integrating resilience planning into everyday operations. Mount Sinai established a resilience task force responsible for



ensuring that resilience considerations are embedded in all strategic decisions, from building design to supply chain management. This holistic approach has helped Mount Sinai not only to recover from past disruptions but also to prepare more effectively for future challenges.

### **Lesson 3: Engaging the Workforce - Northwell Health**

Northwell Health, the largest healthcare provider in New York State, has demonstrated the critical role of workforce engagement in building a resilient culture. Following a series of natural disasters, Northwell Health recognized that staff at all levels needed to be more actively involved in resilience efforts. The organization launched a comprehensive staff engagement program focused on resilience, which included training, workshops, and the creation of resilience champions within each department.

The program emphasized the importance of individual responsibility in resilience, encouraging staff to take proactive steps in their own areas to prepare for emergencies. This approach not only increased overall preparedness but also fostered a sense of ownership and accountability among staff. The result has been a more resilient workforce that is better equipped to manage crises and support the organization's overall resilience goals.

### **Steps to Foster a Culture of Resilience**

#### **A. Leadership Initiatives**

##### **Set a Clear Vision for Resilience**

Leaders must articulate a clear and compelling vision for resilience within the organization. This vision should be integrated into the overall mission and strategic objectives of the healthcare facility, ensuring that resilience is viewed as a core component of organizational success. Regular communication from leadership about the importance of resilience helps to reinforce its value and align the entire organization with this goal.

##### **Model Resilient Behavior**

Leaders play a critical role in shaping organizational culture by modeling the behavior they wish to see. Demonstrating resilience in the face of challenges, maintaining a calm and composed demeanor during crises, and making thoughtful, informed decisions under pressure can inspire similar behaviors in staff. Leaders should also be visible and approachable, providing support and guidance when needed.

### **Empower Decision-Making at All Levels**

To build a resilient culture, leaders should empower associates at all levels to make decisions and take action during crises. This involves delegating authority, providing the necessary resources, and encouraging a culture of accountability. When staff members feel trusted and supported, they are more likely to take initiative and respond effectively in emergency situations.

## **B. Staff Engagement Strategies**

### **Foster Open Communication**

Open and transparent communication is essential for engaging staff in resilience efforts. Regular updates on resilience initiatives, opportunities for staff to provide feedback, and channels for two-way communication all contribute to a culture where staff feel informed and involved. Leaders should encourage staff to share their ideas, concerns, and suggestions related to resilience, fostering a sense of ownership and collaboration.

### **Provide Continuous Training and Development**

Ongoing training and professional development are crucial for maintaining a resilient workforce. Training should cover both technical skills and soft skills, such as teamwork and problem-solving, which are vital during crises. Offering regular simulation exercises and drills helps staff to practice their responses in a controlled environment, building confidence and preparedness for real-life scenarios.

### **Recognize and Reward Resilience**

Recognizing and rewarding staff contributions to resilience efforts can motivate continued engagement and reinforce the importance of resilience within the organization. This recognition can take various forms, from formal awards and public

acknowledgment to informal praise and appreciation. Celebrating successes and learning from challenges together as a team strengthens the collective commitment to resilience.

## **C. Implementation of Continuous Improvement Practices**

### **Conduct Regular After-Action Reviews**

After-action reviews (AARs) are a critical tool for continuous improvement in resilience. Following any significant event or drill, teams should come together to evaluate what worked well, what did not, and what can be improved. These reviews should be systematic and involve input from all relevant stakeholders. The insights gained from AARs should be documented and used to update policies, procedures, and training programs.

### **Integrate Resilience into Strategic Planning**

Resilience should be a key consideration in all strategic planning processes. This means incorporating resilience goals into the organization's broader strategic objectives and ensuring that all major decisions, from resource allocation to infrastructure investments, consider their impact on resilience. By embedding resilience into the planning process, organizations can proactively address potential vulnerabilities and enhance their capacity to respond to future challenges.

### **Foster a Culture of Innovation and Adaptation**

Encouraging innovation and adaptability is essential for a resilient culture. Healthcare organizations should create an environment where staff feel safe to experiment with new ideas and approaches to resilience. This can involve pilot programs, cross-departmental collaboration, and support for research and development initiatives focused on enhancing resilience. By embracing a culture of continuous learning and adaptation, organizations can stay ahead of emerging threats and opportunities.

### **Conclusion**

Building a culture of resilience in healthcare organizations is not only a strategic priority but a fundamental necessity in today's complex and unpredictable environment. As

healthcare systems face a growing array of challenges, from natural disasters and pandemics to cyber threats and operational disruptions, the ability to remain resilient is critical to maintaining the continuity of care, ensuring patient safety, and safeguarding the well-being of staff.

Throughout this article, we have explored the essential components of a resilient culture, including leadership commitment, associates engagement, continuous training, effective communication, and a focus on continuous improvement. We have also examined the challenges that organizations may encounter in their journey toward resilience, along with real-world examples of how leading healthcare institutions have successfully overcome these obstacles.

The long-term benefits of cultivating a resilient culture are clear. Organizations that prioritize resilience are better equipped to anticipate and respond to crises, recover more quickly from disruptions, and adapt to an ever-changing landscape. Moreover, a resilient culture fosters a sense of unity and purpose among staff, enhancing morale and contributing to a more positive work environment.

As healthcare leaders, the responsibility to build and sustain this culture lies with you. By taking proactive steps to embed resilience into the core of your organization, you can ensure that your healthcare facility is prepared to face whatever challenges the future may bring. Now is the time to act—invest in resilience today to secure a stronger, more resilient tomorrow.

## Can Community Resilience to Disaster Be Taught?, By Dr. Bernard A. Jones, CBCP



Dr. Bernard A Jones, MBCI, CBCP, CORP, ITILv.3, sits on the ACP National Board of Directors as the Information Committee Chairman. Dr. Jones recently completed doctoral research on organizational resilience at New Jersey City University. His research benchmarked organizational resilience in New Jersey and enhanced a tool that allows organizations to determine their organizational resilience score.

### **ABSTRACT**

The field of resilience is multifaceted and diverse. The foundations of resilience research are embedded in psychology; however, in recent years, the concept has been adopted in many other areas. Moreover, resilience has become more prevalent in disaster response literature but is somewhat confusing in the different ways it is defined and applied. This paper attempts to clarify resilience and interest in developing dialogue about better ways to assist those who deal with tragedy and disaster. If we as a society want to survive, recover, and thrive in the aftermath of disaster and/or traumatic events, we need to start with assisting individuals and organizations in understanding resilience. We need to assist them in tapping into past experiences while enhancing their traits and characteristics for better future resilience. Hence, this paper seeks to address how community resiliency to disasters be taught.

## INTRODUCTION

The study of resilience has a long history, and beginning In 1943, resilience was first constructed and defined with research on children and family trauma. In 1970 the concept of resilience was introduced in ecology studies as a valuable framework to analyze and determine the effect of disasters on a particular natural system to gauge the preparedness of natural systems in the event of a disruption (Holling 1973). The field of social studies is also used to illustrate the institution's behavioral response, economies, and communities, to disasters (Holling 1973). Deshingkar (2012) framed the term institutional resilience and offered a rationale for considering the inadequacy and rigidity of current responses by institutions to environmental changes. Cutter et al. (2010) define resilience as a community's ability to recover by using its resources and introduced the concept of resilience as sustainable hazard mitigation, indicating that resilience refers to the community's ability to tolerate and overcome losses and damage without any help from outside the community. According to Holling (1973), community resilience refers to the ability of a community to absorb, resist, and recover from a disaster.

Similarly, researchers have suggested that attributes of system resilience define how systems can absorb stress utilizing adaptation and resistance. System resilience is also defined as the ability of a system to maintain primary structures in the event of a disaster and the capacity to bounce back after a disastrous occurrence. While there are differing definitions of resilience, clarifying each is essential. Such charges have faced several criticisms from social scientists and natural scientists (Brand & Jax, 20017). Ecological experts want to restrict the concept of resilience to the natural system because of conceptual clarity (Brand & Jax, 20017). Star (2010) refers to resilience as a 'boundary object' and argues that the concept of resilience is likely to enable the exchange of ideas through all disciplines, which is essential to develop a clear understanding of social-ecological systems. However, using a broader definition because of a shared vocabulary is likely to make resilience vague, hindering scientific progress. Geographers have indicated that the concept of resilience is not enough, and it is untrue when it is not critically transferred to social context (Brand & Jax, 20017).

Thus, the concept of resilience is broad in sense and application, and its conceptualization requires consideration of areas like personal resilience, institutional resilience, and community resilience.

However, it is essential to remember that the concept of resilience is not mainly applied to social or ecological approaches but is applicable in various fields to illustrate the capabilities to return to its initial condition. The use of resilience in education, psychology, and engineering, developed an exciting image of resilience through different scientific perspectives. Social scientists focus more on the social context of disaster resilience, while engineers focus on the technical dimension. For instance, human resilience is regarded as the capacity of every individual to undergo transformation and change despite the risk involved (Cannon and Müller-Mahn, 2010). In physics, resilience refers to a system's quality or material returning to the state of equilibrium after a stressful event instead of breaking (Bohle, Etzold & Keck, 2009). According to (Bohle et al., 2009), the term resilience refers to surviving and coping with a disastrous event with minimum effects and damage. It also involves the capacity of reducing and avoiding losses, containing the impact of disasters, and recovering with reduced social destruction (Bohle et al., 2009). On the other hand, the concept of resilience in hazard studies is centered on social and engineered systems. It involves pre-event mitigation measures to avoid hazard-related losses and damages and post-event approaches to adjust the situation and reduce the disaster's impact. Since disaster resilience determines the capacity of a community to bounce back from a crisis or disaster and regain its initial position by improving its adaptive capacity, community resilience involves the disaster managers' capacity to assist its members in overcoming a disaster's effects and restoring normalcy. A question that has attracted a lot of attention is whether the concept of resilience is a legitimate research concept. As a result, an increasing amount of literature has surfaced about identifying a potential conceptualization of community resilience.

Thus, the methodology of disaster resilience is primarily community-based. However, the modern community experiences natural and human-inflicted disasters such as the

COVID-19 pandemic. Therefore, it is paramount for communities to update risk management plans to derive a comprehensive program that enables the community to mitigate a disaster. By answering community resilience to disaster be taught, this paper provides insights into how community disaster managers can enhance the community's preparedness and mitigate disasters.

## **A Review of the Literature**

This section reviews the literature on resiliency according to the following sub-topics: history, ontology, and knowledge presentation.

### **Resilience History**

The study of resilience has enjoyed a renaissance in the past three decades, after evolving over 70–80 years (VanBreda, 2001). What began as an inquiry into resilience in children has grown to a more broad, comprehensive, and exciting field of study. Currently, the study of resilience encompasses individuals (both children and adults), families, communities, workplaces, and policies (VanBreda, 2001, p. iii) and has been extended to addressing organizational resilience (Jones, 2015).

Resilience theory is a multifaceted field of research that has been addressed by social workers, psychologists, sociologists, educators, and many others over the past few decades. (VanBreda, 2001, p. 1). In short, resilience theory addresses the strengths people and systems demonstrate that enable them to rise above adversity (VanBreda, 2001, p. 1). Thus, while reviewing the rich history of resilience, it is important to briefly discuss resilience as it applies to individuals, families, communities, and organizations. The concept of resilience is commonly referred to as positive adaptation despite adversity. Based on the original focus on the invincible child, experts found that most factors promoting resilience begin outside of the individual (Werner, 1995), prompting the search for elements at the family, individual, cultural, and community levels. Additionally, there is an increasing interest in resilience as an attribute of cultural groups. (Wernere, 1995) discovered that resilience factors change depending on various risk factors because resilience is a process. To describe the resilience process in a specific context, it is crucial to determine and measure the risk involved.



Researchers also try to understand how specific protective elements interact with risk factors and other protective factors to support relative resistance (Luthar, 2006). Because of this objective, scholars have developed three resilience models: challenge, protective, and compensatory.

Modern resilience research was developed by psychologists and psychiatrists, focusing on social and psychological determinants of health. However, the concept has slowly extended its application from psychological health to general health (Yates et al., 2003). Initial studies on resilience focused on the individual; however, research experts have focused on resilience as an attribute of entire communities (Yates et al., 2003). There are variations in the usage of the term resilience. Psychologists refer to three resilience applications: maintained competence amid stress, post-trauma recovery, and excellent development outcomes concerning high-risk conditions (Yates et al., 2003). A commonly used definition of resilience is progressive adaptation despite adversity. According to Luther (2006), resilience is defined in two unique contexts: significant hardship and progressive transformation. Based on this view, it is challenging to measure resilience directly. However, it can be inferred indirectly based on these two contexts. Other research experts acknowledge the concept of the two-part construct. Lastly, resilience theory has contributed to individual resilience, which helps understand how an individual's perspective on dealing with life difficulties fundamentally affects the individual's experience and response. In addition, family researchers have begun to address the family as a context for an individual's resilience and even as a unit of analysis in itself (Frankel, Snowden, & Nelson, 1992). Similar to the transition from individual resilience to family resilience, community resilience defines the next level of focus and research. Research on the concept of community resilience has led to the expansion of the resiliency concept from the family level to the community level has been similarly difficult (Bowen, 1998). As stated by VanBreda (2001): "There is still a tendency to view community resilience as the community promoting the resilience of the families and individuals which it comprises" (p. 141). More recently, researchers have conceptualized the community as a system in its own right (e.g., Blankenship, 1998; Bowen, 1998; Bowen & Martin, 1998; McKnight, 1997). (VanBreda, 2001, p.142).

The history of organizational resilience began with a focus on organizational adaptability. Organizational adaptability and planning comprise the two dimensions of organizational resilience (Jones, 2015). Jones (2015) defines organizational adaptability as: “modifications and alterations in the organization of its components to adjust to changes in the external environment” (pg. 19). An organization needs to be increasingly adaptable, versatile, and tolerant of uncertainty to operate effectively in changing and varied environments. However, researchers use various terms such as adaptability, flexibility, and versatility. Therefore, the ability of the enterprise to respond to unpredictable changes and deal with uncertain environments includes being an adaptive, agile, and flexible organization (Jones, 2015).

### **Resilience as Persistability**

Holling’s (1973) article “Resilience and Stability of Ecological Systems” is the seminal article in the study of resilience. By examining spruce budworm outbreak and their functions for the boreal forest in Canada, Holling argued that the natural system evidenced nonlinear dynamics. In his article, he discussed equilibrium-based models of natural systems. He proposed a complex, adaptive system that would maintain its cyclicity and illustrate many possible states. The ecological resilience was determined by the degree of disturbance that a system could manage and persist. This kind of understanding was uniquely based on the implied meaning of stability which illustrated the ability of a system to bounce back to an equilibrium state after a temporal disturbance. Shifting from such logic of stability to resilience, the focus was on the attributes enabling the system to exist with instability and disturbance. Advocating for underlying strength and flexibility would increase the possibility of persistence.

### **Resilience as Adaptability**

Experts of the Resilience Alliance, a global and interdisciplinary study network, supported the concept of resilience by carrying out empirical case studies on socio-ecological systems (Walker, 1993). These experts developed the conceptual considerations and empirical findings from an elaborate meta-theoretical model known as the adaptive cycle—a heuristic model that demonstrates an endogenous-based

multi-stage cyclicality of complicated systems. The overall stages that such a system passes through include: accumulation and growth, sudden collapse, stagnation, rigidity and lock-in, and renewal and reorganization. In the adaptive cycle's lifespan, social-ecological resilience is described as the ability of a socio-ecological system to absorb disturbance and re-organizing while experiencing the change by maintaining the same structure, functions, identity, and feedback (Holling, 2001). This description combines two concepts of ecological resilience and adaptive cycle. First, the concept of social-ecological resilience refers to the degree of change the system is likely to undergo while remaining within the stability state (Holling, 2001). Second, the level of self-organization of the system is defined as the ability to re-organize after disturbance in an emergent manner. The capacity for adaptive and learning systems is part of the third factor. On adaptation, those who support resilience thinking, place themselves within the climate change discussion. The question becomes whether individuals can combine their knowledge and experiences to adapt successfully to global environmental change. The concept of resilience began as a boundary object between two communities of practice: social science and natural science, which allowed for interdisciplinary exchange and collaboration.

### **Resilience as Transformability**

The fundamental concept of resilience thinking was that environmental issues should not be handled without a social context. Similarly, the concept of resilience is treated as an invitation expanded to social scientists to participate in the integrative study according to the normative goals of sustainability (Gallopín, 2006). Analyzing the concept of resilience used in social systems, which has been an issue addressed by critical social scientists, resilience supporters have contributed to the concept of transformability (Gallopín, 2006). As indicated earlier, a system is perceived to have several stability states, a basis of attraction that jointly involves its stability landscape. By being subjected to particular stress through internal structures and feedback loop dynamics, the system may move from one level to another, thus illustrating its role changes. The concept of transformability articulates the capacity of a system to transform the stability landscape and develop new system pathways when economic,

social, or ecological structures make the existing system untenable. The term untenable discusses the center of the development discourse, such as human rights, equality, and justice.

The origin of the concept of resilience has developed in phases from the previous focus on the persistence of ecological system roles by centering on socio-ecological systems' adaptability towards handling the transformability of society in the event of global change or disaster. Using the three genealogical phases describing the inherent principles that involve the concept, the term resilience is described in an overall sense as a system's capacity to persist in its current state of functions while experiencing disturbance and change by adapting future challenges transforming to improve its functionality.

### **Ontology**

Ontology (lived experience) refers to the structured means of knowledge organization according to factors or concepts and the prevalent relationships (Lin & Sakamoto, 2009) and is particularly relevant to resilience. While research has identified traits and characteristics of resilient individuals, resilience is intertwined with lived experiences. Resilience "can be viewed as a qualitative categorical constructor as a continuum of adaption or success experiences" (Tusaie & Dyer, 2004, p. 3). Resilience may not be an unusual phenomenon, for we were pre-programmed to resilience for the species' survival. Therefore, ontology or the lived experience of an individual is seen as a necessity concerning adaptation and evolution (Smith, 1999).

Computer sciences and biomedicine areas have successfully used ontological engineering to present and organize knowledge (Lin & Sakamoto, 2009). However, research using ontological methods in community development has focused on disaster management and community resilience (Xu, 2007). Thus, it is critical to link new ontologies like disaster mitigation and knowledge planning with future community resilience. A systematic model can be created through ontological methods to represent significant community resilience factors and the relationship between the elements.

In the wake of a disaster or a traumatic event, questions are often asked about what one can do to accept, adapt, and recover. Unfortunately, the answer is not so quickly given; it depends on the context or situation. In considerable measure, it depends on who the person is, what has happened to them, and what in context they experienced the event (Panter-Brick, 2014). Understanding the processes through which individuals adapt to, overcome, or grow beyond has been the shift of thinking since the early 1990s. (Luthar, Cicchetti, & Becker, 2000). Moreover, past life experiences, not just related to untoward events, may impact personal resilience.

The application of the ontology method to study community resilience has significant benefits.

The two main benefits include:

- The formalizing of knowledge in the field.
- The ability to reason or manipulate the knowledge.

It enables knowledge formulation and the ability to manipulate or reason within that knowledge. Formal representation of community resilience knowledge is critical for researchers intending to apply ontology methods in studying future community preparedness to disasters. Ontology enables integrating new concepts into the existing body of knowledge, ensuring that community resilience knowledge does not remain static evolves with current disaster events. Also, ontology methods enable researchers to infer and manipulate new knowledge (Xu, 2007). This allows researchers to add new relationships or factors within the current model of disaster management.

### **Resilience and the COVID-19 Global Pandemic**

The current COVID-19 global pandemic and how national economies have responded calls for a better approach to disaster response. There has been an increase in natural disasters, disaster events, and recovery costs regarding the number of people affected (Berkes, Colding & Folke, 2008). Also, the high prevalence of natural disasters has

nationally and regionally increased economic burdens. Due to the limited resource capacity for effective disaster response, communities should be prepared for disasters to mitigate their effects effectively. Thus, it is critical to install mechanisms to enhance community resilience before a disaster outbreak. No one factor leads to community resilience. Instead, it takes various factors to enable community resilience to a disaster (Holling, 1973). Different communities have unique functions and structures, and the effects of disasters on communities differ depending on severity, type, and degree of damage caused by the disaster (Holling, 1973). However, community resilience to disasters significantly relies on universal and specific attributes of the community and disaster. The current COVID-19 pandemic has taught community disaster managers that they require a progressive non-static disaster management plan to enable an effective response to emerging disasters. Ecological approaches study the community as a system of complex socio-ecology, i.e., the associations between a society and its environment (Lin & Sakamoto, 2009). Accordingly, ecological approaches deal with how natural environment changes, which humans may abet, affect society and adapt to natural and human-enabled changes. According to Bahadur, Tanner & Ibrahim (2013), community resilience to disasters measures three concepts:

- The quantity of transformation a community can witness and remain intact according to structure and control on functions.
- The level to which community systems can function as self-organizations.
- The ability of the community to increase and build its capacity for adaptation and learning (Bahadur et al., 2013).

Through community resilience, researchers can design theoretical frameworks to enable interventions that can increase the ability of a community to effectively respond to various disasters. Using ontology models to represent and organize current knowledge in community resilience to disasters will help develop comprehensive community-based disaster management plans. Thus, the present study investigates if community resilience to disasters can be taught to enhance community preparedness for various disasters.

## REPRESENTATION OF KNOWLEDGE

There are two kinds of knowledge: tacit and explicit (Grant, 2007). Polanyi was the first to differentiate between easily expressed learning by using language and tacit knowledge that is difficult to articulate verbally. Tacit knowledge is very complicated, with researchers suggesting that it is unarticulable knowledge, while other experts argue that although it is difficult to articulate, it is not impossible (Zhenhua, 2003). For instance, it is possible to teach an individual every step required when performing a ballet dance, but this explicit knowledge is not adequate; a professional dancer has acquired a tacit understanding of movements that enable them to dance wonderfully. The discussion of implicit and explicit knowledge is essential when considering the kind of knowledge represented and what should not be captured. Notably, a knowledge engineer may demonstrate detailed knowledge concerning a community's resilience to disaster, but the individual usually does not have the capabilities to verify the tacit knowledge. However, a knowledge engineer should depend on the expert's tacit knowledge when faced with semantic ambiguity when resolving such problems. It is necessary to regard the context when describing knowledge. For instance, the knowledge regarding community resilience to an unexpected event is not the same as responding to a long-term event like a civil war. Regarding developing a community's resilience, it is worth considering the type of disaster and the distinct characteristics of the community. It, therefore, explains why all elements that add to community resilience, and their mutual connection, are regarded in the context of the knowledge identified in the literature search process (Davis, Shrobe, & Szolovits, 1993). The idea of context is about a particular situation where the study is being carried out. However, additional research needs to identify the broader context of community resilience knowledge when widening the ontology since it is essential.

When deciding on what to apply, a knowledge engineer should identify the functions of overall knowledge representation. One such function is to use multiple computer software programs to complete a particular task. For instance, the model of medical decision-making knowledge enables a clinician decision support system to be

developed to assist in diagnosis. Thus, the first function is to boost computational efficiency to speed the process of decision-making.

The second function is a model of reality. To reason about a subject, one must have a model that can be altered to answer particular questions. The representation of knowledge is only a model of reality. Various options must be taken when selecting a method regarding what is essential for the system of knowledge and the end-user (Davis et al., 1993). Such choices are referred to as ontological commitments and are the third function of knowledge representation. Such responsibilities guide the researcher to develop knowledge representation that enables knowledge representation to become a manageable process.

The ontological commitments for this study involved: the decision of not representing the fundamental knowledge. Instead, the ability involved in collecting journal articles; this included both ecological and psychological approaches; and emphasizing factors at a greater abstraction level. The fragmentary theory of intelligence is the fourth function. Here it highlights that representation of knowledge may include fragments of insights into developing intelligent reasoning. Such insight is only a fragment of a more significant phenomenon referred to as intelligent reasoning (Davis et al., 1993). Considering the fragmentary theory function in the context of this paper, it isn't easy to represent all knowledge. In such a case, the area of expertise represented is community resilience to disaster. The last role related to this study is the medium of human expression. Knowledge representation works to provide information to a machine; in this case, it creates an ontology that can be applied by an algorithm known as a learner, helping to identify the inconsistencies in the logic. Finally, the function of knowledge representation focuses on how the selected model affects its application. Considering the last role, a knowledge engineer should identify how a particular model should be. In this study, the method chosen should represent the complex relationships involved in the community resilience function of knowledge.



These roles should be considered when choosing the method to represent knowledge concerning community resilience to a disaster. There are three basic approaches from which a researcher can select: rule representations, frame representation, and semantic representation. A semantic network focuses on the natural human tendency to organizing knowledge according to hierarchies and associations (Davis et al., 1993). The knowledge representation approach applies links and nodes to represent a particular idea and the relationship between them.

Frame representation is based on semantic networks and has links and nodes with procedural data linked to each node. Accordingly, each node represents a particular situation and information concerning related processes connected. This method is applied when organizing knowledge. Consequently, frame representation was not used. The production rule representation method uses a collection of conditions, such as if-then statements, that provides possible inferences that determine if the conditions are achieved by the facts involved in the knowledge area. If needs are met, it results in the activation of a particular order to derive a specific action. An example of applying this method could involve the following: If you are ill, go to a hospital for medication. Such a method was not used in the relationship between ideas, such as illness, and hospitals, to capture the complex nature of the community resilience field.

## **Discussion**

As stated previously, the different uses of the term resiliency have one thing in common—humanity. Moreover, since individuals comprise a community, it seems relevant and essential to focus attention on the community's resiliency to various disasters to ensure the individual's resilience. Hence, the question guiding this research was, can community resiliency to disaster be taught?

It is challenging to integrate new findings into the current body of knowledge due to the limitations in community resilience to various disasters. Current researchers interested in result integration can have semantic misinterpretation, and they might ignore critical knowledge areas. However, representation of knowledge through ontology methods and

integrating the knowledge into one ontology do not suffer from semantic ambiguities and possible misinterpretations. Thus, when modeling a complex problem like community resilience to disaster, it is critical to include much knowledge for full representation of the field and to enhance the learner's ability. For instance, problems would exist if new findings concerning the impact of various social capital aspects on community resilience fail to acknowledge the effects of information and social network flow on resilience (Wallace & Wallace, 2008). Since social networks form part of social capital, the researcher should view this relationship when performing a description of the overall observation of the research problem. Researchers can avoid such inconvenience through knowledge presentation using ontology methods when incorporating findings within the holistic body of knowledge. Ontology enables all learning to be contained within a single spectrum.

This author posits that although teaching resilience may be challenging, the application of ontology as a method to study community resilience to disaster allows researchers to tap into the community's lived experiences, including the successes and failures of the past, which may provide a pathway to improved resiliency. This author also posits that it is most likely not possible to teach resiliency, but tapping into one's lived experiences, including the successes and failures of the past, may provide a pathway to improved resiliency.

The history of resilience is centered mainly in the psychological realm—intrinsic or innate traits and characteristics of a resilient community to disaster. These traits or characteristics include good self-esteem, positive emotions, planning skills, extraversion, and self-efficacy, among community members. Research is based on surveys gathered from subjects identified as resilient or experienced traumatic or untoward environments with little or no lasting debilitation. Much of the early research focused on children who may have been maltreated or were raised in oppressive conditions where the researchers concluded they were not negatively impacted. Using ontological methods to present community resilience to disaster benefits researchers in the community disaster management plan. It provides the values of a

community concerning its resilience to various risks. Second, researchers can use ontology to determine the degree of community resilience to disaster. The ability of a researcher to question knowledge on community resilience allows the researcher to conceptualize the impact of integrating and representing knowledge from different approaches to enhance a community's preparedness and mitigation strategies to various disasters. Third, researchers can use ontology to determine the degree of community resilience to disaster. The ability of a researcher to question knowledge on community resilience allows the researcher to conceptualize the impact of integrating and representing knowledge from different approaches to enhance a community's preparedness and mitigation strategies to various disasters.

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However, the application of ontological methods to study community resilience to disaster suffers from limitations. When researchers design ontology models for studying community resilience, they set activities and goals that the model must fulfill. These activities and tasks are referred to as competency questions and are applied to define the ontology's scope and determine its completion. The competency questions concern every factor, like the capability to execute the activity presented by the problem because the questions are precise. Thus, when the inclusion of instances is not appropriate due to the focus on overall knowledge representation rather than concept instances, the researchers may experience challenges in determining a community's resilience to disaster. Evaluation of the ontology to determine the correct representation of knowledge would be difficult without the instances.

## **CONCLUSION AND RECOMMENDATIONS**

While the uses and definitions of resilience are varied, the literature review suggests that community resilience to disaster may be taught through ontological methods. Community resilience to disaster is more about the lived experience combined with intrinsic or innate traits and characteristics. However, learning individuals within a community strategy to tap into one's personal experiences, perceptions, and attitudes and learn how to identify and enhance one's innate traits and characteristics appear to be a sound strategy for building community resilience to disaster.

The author offers suggestions concerning these conclusions. First, further research is needed, particularly in the qualitative realm. Second, resilience, in the context of individuals, is a human dynamic. Third, as Van Manen (1990) suggested, we explain nature, but we need to understand human life. Hence, hermeneutic phenomenological studies are highly recommended.

Another recommendation is that a curriculum is developed and implemented as part of first responder (public safety and emergency services workers) training and education. This should include strategies for tapping into personal experiences, beliefs, attitudes, perceptions, and learning schemas. In addition, courses that include expressive writing techniques, reflective practice, problem-based situations, and ways of experimenting with strategies may prove great value to the first responder and the people in the communities they are serving. Lastly, an exploration into the topic of emotional intelligence and its relevance in disaster management is needed. Emotional intelligence looks into the aspects of self-awareness, self-regulation, motivation, empathy, and social skills linked to disaster managers' core competencies. This author advocates that future research into the possible linkage between emotional intelligence, disaster management, and community resilience is warranted.

If we as a society want to survive, recover, and thrive in the aftermath of disaster and/or traumatic events, we need to start with assisting individuals and communities with understanding their past resilience. We need to help with tapping into experiences while enhancing their traits and characteristics for future resilience. This will play a role in

improving community resilience since communities are made up of individuals. Organizations exist as a vital part of providing products and services to individuals, communities, countries, and society as a whole. The ability of organizations to respond to and recover effectively following a disaster has a significant influence on the length of time that essential services are unavailable. Subsequently, enhancing organizational resilience is critical toward creating more resilient communities and a more resilient society. Additionally, this may be vital for our first responders, as they are the first line of defense against a world of trauma and destruction. Without them, our ability to survive and thrive may be hampered.

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