Newsletter
THE INTERNATIONAL EMERGENCY MANAGEMENT SOCIETY

CALL FOR PAPERS & POSTERS

TIEMS 2020 ANNUAL CONFERENCE

CITIZENS AND CITIES FACING NEW HAZARDS AND THREATS

Resilience FRANCE

HAUT COMITÉ FRANÇAIS POUR LA RÉSILIENCE NATIONALE

IN THIS ISSUE:

The International Emergency Management Society

TIEMS is an international collaborative organisation for emergency management and disaster response, continuously developing through contributions from current members and chapters and expansion with new members and chapters from across the world. Members and chapters comprise of a multidisciplinary group of international experts with different educational and cultural backgrounds, which offer valuable expertise to the TIEMS international network. TIEMS comprises of emergency planners, researchers, managers, response personnel, practitioners, social scientists, and other interested parties within emergency management and disaster response. Read more about TIEMS and its activities in this newsletter.

Kelly-Anne Frith
TIEMS Newsletter Editor

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TIEMS MISSION STATEMENT

www.tiems.org
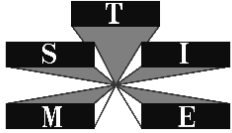
TIEMS prepares the world for emergencies. TIEMS is a global forum for education, training, certification, and policy for emergency and disaster management. We do not respond to emergencies: we ensure that others are ready to respond. This is important internationally because some parts of the world otherwise have limited support for preparation.

As the international community discovers and develops new technologies, methodologies, and best practices, we offer conferences, ongoing forums, and training courses that rapidly and continuously spread the knowledge to every corner of the community. As policy makers grow to understand both the need for preparation and the support TIEMS provides, we expect to influence policy choices that strengthen cooperation among regional communities before disasters strike.

CHAPTERS

Chapters provide a regional focus for TIEMS activities. This is important because every region has unique circumstances and challenges, so there is no planning process that applies everywhere. Currently TIEMS has chapters representing:

Belgium/Netherlands/Luxembourg, China, Finland, India, Iraq, Italy, Japan, Korea, Middle East and North Africa, Nigeria and West Africa, Romania, United States of America, Ukraine, the Philippines, France, South Africa and Australia.

Each chapter is autonomous. Some chapter members are members of TIEMS international, and others are only members of the chapter, with local rules governing membership. The chapter establishes local activities and coordinates with the rest of TIEMS as needed.

The TIEMS Secretariat, located in Brussels, is available to the chapters for administrative support. The chapters report annually to the Secretariat about chapter activities, plans and finances.

ACTIVITIES

- TIEMS organizes international conferences, workshops and exhibitions, worldwide, with a focus on Emergency Management and Disaster Response topics
- TIEMS engages in research & technology development (RTD) projects that enable TIEMS members to apply their expertise to international emergency management initiatives
- The TIEMS International Group of Experts (TIGE) comprises 108 experts from 23 countries with wide ranging expertise and experience available to assist with emergency preparedness planning and response worldwide
- TIEMS Education and Training comprises TIEMS Academy with courses in Emergency Management and Disaster response and TIEMS International Certification - TQC for experts working in emergency management.

MEMBERSHIP

As a member of the TIEMS, you are part of an international community of leaders, practitioners and academics in emergency management, with diverse backgrounds in engineering, science, government, academics, military, and industry working together to make the world a safer place. Membership affords unique opportunities to learn, serve, and network.
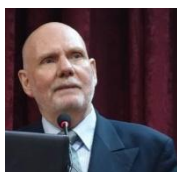
Learn: From the multi-disciplinary, multi-national TIEMS community and through special programs.

Serve: By helping us in our mission to reduce the impacts of disasters and emergencies worldwide.

Network: With regional and international colleagues to develop valued personal and professional relationships, and enhanced opportunities.

You are welcome to join us as a TIEMS member.

K. Harald Drager
TIEMS President

Conferences and Workshops - TIEMS organizes conferences, workshops, and exhibitions worldwide covering a wide range of research, best practices, and other topics in emergency management. In recent years conferences have been held in Manila in the Philippines, Kiev in Ukraine, San Diego in USA, Rome in Italy, Niigata in Japan, Aix-en-Provence in France, Erbil in Iraq and Beijing in China, and in 2019 it was held in Korea. TIEMS 2020 Annual Conference will be virtual and held in Paris. In addition, local chapters host local international conferences and workshops throughout the year.

RTD Projects – Because TIEMS is known in the international community for the wide-ranging expertise of its members, and for its ability to network researchers, practitioners, and policy-makers, TIEMS is often asked to participate in Research and Technology Development (RTD) projects sponsored by the European Commission and other organizations. TIEMS members who express interest to participate in the TIEMS RTD projects, are selected based on their qualifications, and the expertise needed to staff the projects. RTD projects TIEMS has been involved in were *ASSET*, a four-year program to improve public health communications during health emergencies, and *HERACLES*, a three-year RTD program to develop technologies to improve cultural heritage sites in the face of climate change. TIEMS was a subcontractor to ECORYS for developing an expert HUB on wildfire expertise in Europe for the DG ECHO project "*Network of European Hubs for Civil Protection and Crisis Management*". This HUB will serve as an example HUB for other disaster HUBs in Europe. Most recently, TIEMS is a partner in a 2-year *IMPETUS* project with a host of partners all funded by the European Commission, starting 1st September 2020.

Experts - The TIEMS International Group of Experts (TIGE), consisting of 108 experts from 23 countries with different educational background and experience, has been established as a resource to assist the global community in emergency planning, preparedness, and response. They are all TIEMS volunteers manning the TIEMS Board, the TIEMS Advisory Board and TIEMS Chapter Boards worldwide. TIGE's unique worldwide network of experts adds the cultural diversity to emergency management and disaster response that makes TIEMS such a valuable international network.

Education, Training and Certification - TIEMS believes that Education, Training and International Certification in Emergency Management and Disaster Response is the Key to Improved Resilience Worldwide, and TIEMS is therefore offering a Comprehensive International Education, Training and Certification Program in this field. TIEMS motto is: *Preparedness Saves Lives*! TIEMS wants to promote an internationally shared understanding of emergency management elements, systems, qualifications, and terminology, and this is embedded in **TIEMS International Certification - TQC - Operations and Good Practise**. TQC stands for – TIEMS QIEDM Certification, where QIEMD is "Qualifications in International Emergency and Disaster Management".

TIEMS Structure - TIEMS is a true international organization, with a structure comprised of a TIEMS Board of Directors and an Advisory Board with members from 13 countries. The TIEMS Secretariat is in Brussels, Belgium, where TIEMS is registered as an international not for profit NGO. The members of TIEMS form the Annual General Assembly, which meets once a year during the TIEMS annual conference, during which TIEMS members evaluate the past performance of the organization and lay down plans and elects its board of directors.
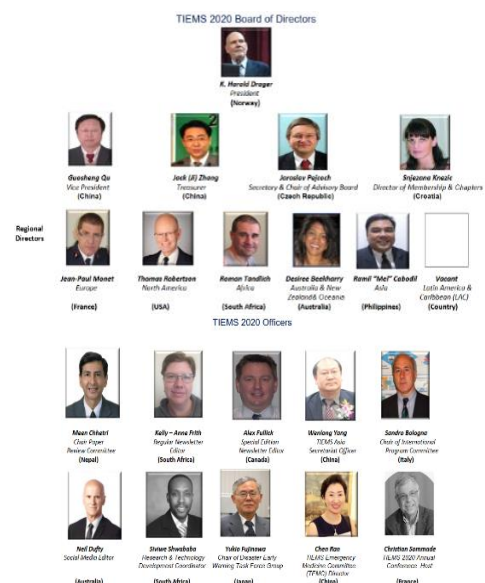
MESSAGE FROM TIEMS PRESIDENT

The Corona Pandemic

The corona pandemic has now lasted for 8 months and today's worldwide status is:

- More than 24 million people infected
- More than 825 000 died of Covid19
- And the virus is still spreading and the "second wave" has hit many European countries after opening up again after the close down when the virus hit Europe

The worldwide trend is shown in the picture below:

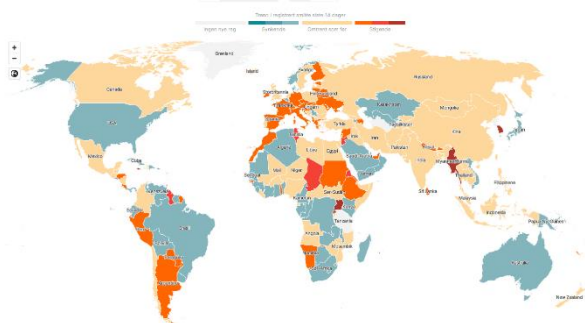Red is increasing trend, blue is downwards trend, and yellow is status quo. We definitely have not seen the end to this pandemic. However, the positive news about a vaccine being available at the end of 2020 is good news, and hopefully this can stop the spreading. Then "lessons learned" of this pandemic need to be main focus the coming year.

TIEMS France Chapter

The President of TIEMS France Chapter, Christian Sommade, has below, described the organization he has build up over the past 30 years, Resilience France, and which is behind and in partnership with TIEMS France Chapter. Resilience France is an important organization, with an excellent network all over France covering the security field, and I believe this is a win-win situation for both TIEMS and Resilience France.

TIEMS 2020 Annual Virtual Conference

TIEMS France Chapter is the responsible host for TIEMS 2020 Annual Conference, which was to take place in Paris in November. The pandemic has also hit TIEMS, and we have decided that this year's annual conference will be virtual, and below in the newsletter is found the call for papers and posters. The deadlines are:

Abstract submission: **September 15, 2020**

Notification of acceptance: **September 30, 2020**
Full paper submission: **November 1, 2020**

The virtual conference will take place, 30th November – 4th December, and the topics of each day will be decided later.

I hope a "taste" of a few of the submitted abstracts, from 8 countries will trigger your interest to submit:

- Confucian resilience or former developing countries resilience? Why Asian countries suffered less from coronavirus than the west?
- What makes hospital staff ready to manage the COVID-19 pandemic? A psycho-social approach
- Cyber Resilience Awareness Training Cyber Ranges
- Engaging populations in disaster management: needs, opportunities and challenges for ICT
- Applying Artificial Intelligence to Emergency and Disaster Management
- Preliminary Study on Benefit Evaluation of Disaster Prevention of Rainstorm Based on Integrated Disaster Risk Governance Model

Please, submit your paper or poster abstract at:

https://easychair.org/conferences/?conf=tiemsac2020

Your paper or poster will be included in the Proceedings of TIEMS 2020 Virtual Annual Conference.

The Impetus EU Project

TIEMS is now starting up as a partner in a new Horizon 2020 EU project 1st September 2020, IMPETUS (Intelligent Management of Processes, Ethics and Technology for Urban Safety). This is about smart cities, addressing technology, ethics and processes, and more details are described in the newsletter below.

TIEMS main responsibility in the project is dissemination and you can follow the development in Impetus on Impetus web-site:

www.impetus-project.eu

TIEMS has recruited 14 excellent experts among TIEMS members from 7 countries to participate in the project. This is a great benefit for TIEMS members, and also adding excellent knowledge and experience to the project.

AI in Emergency Management

Artificial Intelligence (AI) is in my opinion an important tool that can improve emergency management. Thomas Robertson (TIEMS Regional Director for North America) outlines in an article in the newsletter below, ideas of how this can be done.

I agree with his conclusion as follows: Leading edge Artificial Intelligence using large artificial neural networks have proven to be very effective in analysing patterns in large volumes of data and mapping those patterns to information that can support the planning, prediction, situation assessment, and decision making required for Emergency and Disaster Management.

TIEMS International Certification TQC

Already in 2006, TIEMS considered how TIEMS could contribute to more international focus on the profession of emergency management, and the conclusion was that this could best be done by introducing an international certification of emergency management and disaster resilience. Over the years since 2006, TIEMS international experts has worked with developing such a certification, and it has been discussed in a workshop in the last three annual TIEMS conferences in Ukraine, the Philippines and South Korea. Good ideas and critical and constructive comments have been made during these workshops, and this has added value to the certification concept, which we have named:

TIEMS International Certification – TQC

TQC stands for TIEMS Quality Certification, and an overview of the concept is described below in the newsletter.

TIEMS has engaged 11 members from 7 countries, Ukraine, China, Australia, USA, South Africa, Nigeria and Jordan to be TQC test candidates, and these experts have given us very valuable feed-back on the practically and content of the TQC certification, which at the same time is announced as an opportunity in these countries.

The 11 candidates are at different stages of the TQC certification process, Application, Compliance and Examination, and the first candidate has already been through the TQC examination. We plan to have all 11 TQC certified during September. A special, issue of TIEMS newsletter will then describe more details of TQC and present the 11 TQC Test candidates and their view and experience with the TQC certification. This will at the same be the international launch of TIEMS International Certification – TQC.

The proof of TQC Certification will be the below Diploma.

COVID19 Status Update

TIEMS last newsletter in April 2020 focused on the coronavirus and Covid19, with contributions from 17 countries/regions in TIEMS worldwide network. Roman Tandlich has done a follow up of the corona pandemic and below in the newsletter is an update, with valuable information and experience.

This is important reading for those who follows the pandemic closely!

TIEMS on LinkedIn

https://www.linkedin.com/groups/13796066/

The TIEMS LinkedIn Group has now been created for all TIEMS members to share information worldwide. Through this Group, members can further their networking and share information, thus raising the collaborative efforts amongst TIEMS membership. We encourage all members to consider posting information on events, development opportunities, reports on emergency events that may be of interest to members, or any other topic that members think will be of benefit to other members.

If anyone has any questions, please contact Russell DIPPY at russell.dippy@outlook.com

Oslo 27th August 2020
K. Harald Drager
TIEMS President

MESSAGE FROM THE EDITOR

Hello,

In this Newsletter updates from TIEMS members from various countries on the spread of SARS-Cov-2 and the COVID-19 pandemic are given, as well as an update and information on the TIEMS TQC International Certification. We're also proud to announce that TIEMS has been awarded funding from the European Commission for the Horizon 2020 IMPETUS Project on "Intelligent Management of Processes, Ethics and Technology for Urban Safety"! A massive congratulations to Joe Gorman, Harald Drager and the rest of the team who made this happen!

So, a little bit about me: I have a background in biological sciences having been a researcher for nearly 15 years. I have recently completed my PhD degree in Biotechnology at Rhodes University, Grahamstown, South Africa. In 2015, while looking for a source of income, I stumbled upon as an administrative post that introduced me to the world of academic publishing at a small local publishing firm with international reach. I quickly took on the role of production coordinator for a host of medical journals, utilising my expertise in the pseudo-medical research field that biochemistry and biotechnology offer. From there, my publishing career blossomed where I took on the role of publishing editor for a range of African-based, natural science journal titles.

Publishing has given me the opportunity to work with people, mainly in research, from all tiers, from the struggling author eager to get their work published to the reviewers and referees critiquing the written work to the Editors-in-Chief and copy-editors, who polish the written manuscripts, and typesetters and graphic artists, who produce beautifully set manuscripts, for publication to the wider audience.

As always, take care of yourselves and your families, and stay safe!

TIEMS Newsletter Editor

Kelly-Anne Frith

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Grahamstown, South Africa

FRENCH TIEMS CHAPTER

BRIEF INTRODUCTION

In partnership with Haut comité français pour la résilience nationale (HCFRN)

The French TIEMS "Chapter" is provided by the association "Haut comité français pour la résilience nationale (HCFRN)" which participates in the reflection on the doctrine, organization and techniques of our country in terms of global security and resilience. Its activities aim in particular to support actions contributing to better protection of populations as well as organizational and structural resilience.

The HCFRN, in partnership with the institutional and private players concerned, has been able to develop, over the last 30 years, a unique expertise in France in terms of analysis and monitoring of major risks and threats, particularly through its monitoring activities and information platform (7/7), the organisation of conferences and publications, research within the FP7 and H2020 European projects, and the organisation of major "lessons learned" events. As a platform for exchanges, it is a relay between the Authorities and the civil society on issues such as national security and resilience, emergency/crisis management and business continuity.

It also manages and awards resilience labels for cities and companies as well as personal certification in crisis management.

Over the past 20 years, the HCFRN has organized more than 200 breakfast debates in the French Senate, 70 technical conferences including 5 international ones, trained more than 1000 people in training courses conducted both for the public and private sectors and published its work[1] through four websites.

The HCFRN's members includes a large proportion of large and critical infrastructure companies, the government departments in charge of those issues, some local authorities and many experts. It informs more than 12000 people each month about its activities and serves 2000 people who subscribe to its work. The HCFDC's websites receive more than 30000 visits annually. It has seven permanent staff members and is located in Paris and Nîmes.

Contribution by: Christian Sommade
Christian.sommade2@gmail.com

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[1] www.hcfdc.org   www.defencivtv.org   www.pavillon-orange.org   www.autoprotectionducitoyen.eu

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CALL FOR PAPERS AND POSTERS:
TIEMS 2020 VIRTUAL ANNUAL CONFERENCE

Citizens and Cities Facing New Hazards and Threats
Paris

30th November — 4th December 2020 **[NEW DATE!]**

Given the uncertainty created by the coronavirus and COVID-19 spreading worldwide, TIEMS Board of Directors has made below decisions:

1. TIEMS 2020 Annual Conference will be an arranged as a virtual conference using Zoom for virtually attendance each day of week 49 (30th Nov to 4th December). The topics of each day of the virtual conference will be selected later.
2. TIEMS Annual Conference will be arranged physically in Paris in 2021, South Africa in 2022 and China in 2023.

Today, nearly 70% of the EU population lives in urban areas, and this is likely to increase over the next few decades. Cities are main centres for all economic, social and cultural activities in Europe and create around 80% of the EU's gross domestic product. According to a European Parliament policy study "Mapping Smart Cities in the EU" (January 2014), the core idea of Smart Cities is to better connect human capital, social capital and ICT infrastructures in order to generate greater and more sustainable economic development and a better quality of life for citizens. Over the past few years, projects and programs have multiplied at local, national and European level and some lessons can already be drawn from past experiences.

However, new technologies have also created new risks for citizens, which are still poorly considered. The aim of the conference will therefore be to provide an overview of the risks generated by smart cities and to find solutions, as far as possible. In addition, the coronavirus and COVID-19 has shown the pandemic risks as a real and deadly threat in urban areas.

The following **topics** will be discussed (not limited):

- Coronavirus and COVID-19 Worldwide Status, Consequences and Remedies
- Smart and resilient cities towards natural and technological disasters
- Climate change and adaptation of rescue and response forces
- Cyber security issues for emergency management operations
- AI and new technologies in civil protection area
- Safety and security of (new) energies for first responders
- Value of responders actions on saving lives and properties
- Resilience policies for cities: What benefits?
- Focus on EU civil protection and international mechanisms
- Other subjects related to the previous topics

Two types of abstracts can be submitted to one of the tracks above:

- Completed or ongoing academic research (max 1000 words).
- Practitioners talk (from 200 to 500 words): we strongly encourage submissions describing real-world experiences and case studies and lessons learnt for this TIEMS conference.

Once submitted, all articles will be distributed for evaluation among the pool of reviewers according to their domain of expertise and the topics addressed by the paper. Practitioner submissions will be reviewed according to relevance and ability to contribute to discussions rather than by standard academic criteria.

Accepted papers will be organized in TIEMS 2020 Virtual Annual Conference Proceedings.
Please, to submit an abstract for a Paper or Poster at:

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https://easychair.org/conferences/?conf=tiemsac2020

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Abstract submission: **September 15, 2020**
Notification of acceptance: **September 30, 2020**
Full paper submission: **November 1, 2020**

The best papers will be published through TIEMS and HCFRN websites. Videos will be available on HCFRN website.

Submit your abstract at: https://easychair.org/conferences/?conf=tiemsac2020

More information on TIEMS web/site at:

https://www.tiems.info/index.php/activities-events/current-events/event-6

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HORIZON 2020 PROJECT: IMPETUS

www.impetus-project.eu

Intelligent Management of Processes, Ethics and Technology for Urban Safety

The IMPETUS consortium is proud to announce that, after a highly competitive selection process, we have signed a contract with the European Commission to carry out an innovative project to enhance the resilience of smart cities in the face of security threats in public spaces.

With the Covid-19 pandemic currently filling headlines around the world, it is perhaps easy to forget other threats to our well-being. But they have not gone away. One such is terrorism, which continues to be a major threat to security in EU Member States. We have witnessed horrific attacks across the EU in recent years, and — sadly — have every reason to believe that they may continue.

IMPETUS will provide city authorities with new means to address security issues in public spaces, and so help protect citizens. Using data gathered from multiple sources, it will facilitate detection of threats and help human operators dealing with threats to make better informed decisions. The IMPETUS approach addresses three complementary but overlapping areas:

Technology: Leverage the power of Internet of Things (IoT), Artificial Intelligence (AI) and Big Data analysis to provide powerful tools to manage physical and cyber security in cities.

Ethics: Balance potentially conflicting needs to collect, transform and share large amounts of data with the imperative of ensuring protection of data privacy — all in the context of ensuring benefits to society.

Processes: Define cognitive processes and deployment guidelines supporting decision making and coordination, fully aligned with the needs of multiple city stakeholders involved in security operations.

IMPETUS will detect potential threats by using AI techniques to search social media and the deep/dark web for unusual and suspicious activities, and to analyse available smart city data. Threats will be classified and assessed to determine an appropriate response using a human-in-the-loop approach to combine the strengths of AI and human judgement.

The project will build on tested technologies but enhance and combine them in a coherent and user-centred solution that goes beyond state-of-the-art in key areas such as detection, simulation and analysis, and intervention.

The consortium consists of 17 partners from 11 different EU Member States and Associated Countries. It brings together five research institutions, seven specialist industrial and SME companies, three NGOs and two local government authorities. The consortium will be complemented by COSSEC (Community of Safe and Secure Cities) — a group that the project will establish and foster. COSSEC will be made up of end-users and other stakeholders able to provide feedback on IMPETUS solutions as they are being developed, and to promote the IMPETUS approach more widely.

Major on-street trials will be held in the cities of Oslo, Norway and Padova, Italy.

OSLO: Major parade on Norway's national day, 17ᵗʰ May. Events gathering large crowds such as this one can be prime targets for terrorist attacks.
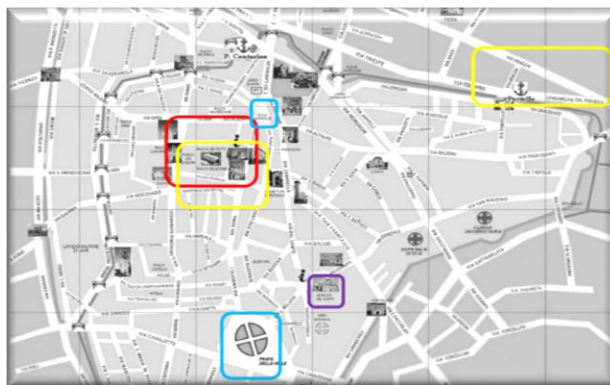
PADOVA: A scenario to be tested will be the 13ᵗʰ June procession celebrating the Solemnity of Saint Antonio of Padua. The map identifies some soft targets (market, concert arena…).

The project will receive financial support of 8 M€ from the Horizon 2020 programme for research and innovation of the European Commission. The project starts in September 2020 and will last for two years.

If you want to know more about IMPETUS please contact:

Project Coordinator: Joe Gorman, SINTEF Digital, Joe.Gorman@sintef.no
Dissemination Manager: K. Harald Drager, TIEMS, khdrager@online.no

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APPLYING ARTIFICIAL INTELLIGENCE TO EMERGENCY AND DISASTER MANAGEMENT

Artificial Intelligence (AI) is concerned with computer systems that perform tasks associated with human intelligence, such as recognizing faces, understanding language, playing chess, assembling electronics, or driving a car. Today thanks to AI, Siri answers our questions, Safety Sense 2.0 drives our Toyotas, cultures are bridged by Google Translate, and AlphaGo is the world champion of *Go*, a 2500-year-old game with more move choices than the number of atoms in the observable universe.

In this article we further explore AI and ask, 'How can recent advances in AI help Emergency and Disaster Management?'

What is AI?

AI research and development has been going on since the 1950's. Since that time methods from various branches of mathematics and computer science have been pressed into service to develop computer-based systems that perform tasks associated with human intelligence. Examples of approaches to AI include:

- **Artificial Neural Networks (ANN):** ANNs interconnect large networks of simple computing units. ANNs, the earliest approach to AI, was inspired by the human brain's interconnection of billions of relatively simple neurons. In the 1950's engineers discovered that ANNs could learn to do mathematical calculations by giving them enough examples and designing them to systematically adjust themselves until they get correct answers. An example of today's use of ANNs is facial recognition.
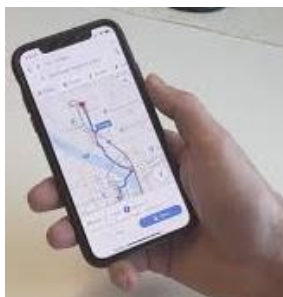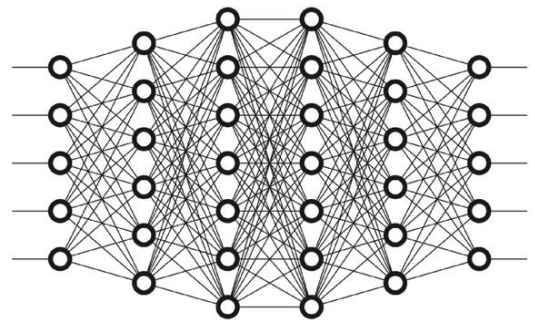
- **Symbolic Logic:** this approach to AI attempts to replicate human conscious reasoning by creating formal 'languages' that represent objects, ideas, and actions, and the relationships among them. The AI is then given rules about how to answer questions and solve problems concerning the things it 'knows'. For example, when we ask the mapping app on our smartphone to find us the best route to an address, it is using a limited form of symbolic logic that allows it to represent the world and navigate through it.

- **Expert Systems:** these AIs rely on databases of knowledge put together with the help of experts, so the AI can answer questions about a specialized field such as medicine or how to use a bank's website. A common use today of expert systems is chatbots, that can carry on a conversation with a customer and help answer their questions.

- **Mathematical statistics:** these AIs use mathematical models to describe likelihoods of particular events happening, such the stock market going up, or whether a person will be interested in a particular product. Today AIs such as these are used to make recommendations for products that are presented to you on the internet.

ANNs are the Leading Edge of AI

The earliest approach to AI, artificial neural networks (ANNs), generated much excitement when first discovered. But by the 1970s the approach was largely abandoned, because it had failed to perform as expected. A few researchers continued to champion the approach, and by around 2010 ANNs began to make impressive advances.

Today, modern computing power, the internet, and clever engineering have made it possible to create ANNs with millions or even billions of units, and train them with millions of examples to recognize objects and people, translate languages, play complex games, control robots, and drive cars. The network below uses about 700,000 units to forecast global weather.
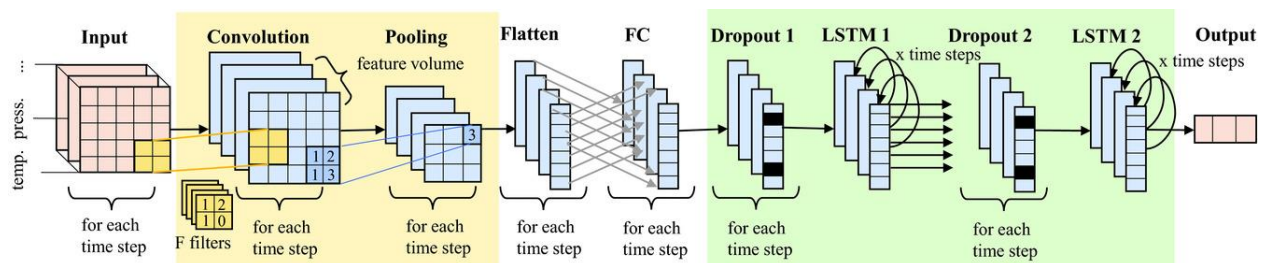
These very large ANNs (sometimes called Deep Neural Networks) have performed so well that they dominate discussion of AI today. Because ANNs are on the leading edge of AI, other approaches developed through AI research, while very useful, are often considered to be more ordinary components of software applications.

So, while ANNs are not the only form of AI that will benefit Emergency and Disaster Management (EDM), the rest of this discussion will focus on ANNs, since they have led to the most recent advances in AI.

How Can ANNs Help Emergency and Disaster Management?

ANNs map patterns in data to outputs that represent some useful interpretation of the data, such as a likely flood zone or the amount of building damage. Below are some examples of how ANNs can be used to help detect and interpret patterns throughout the four phases of the Disaster Management Cycle: Mitigation, Preparation, Response, and Recovery.

Mitigation

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Mitigation seeks to reduce the risks associated with emergencies and disasters. In some cases, emergencies can be predicted and prevented by analyzing patterns in a particular situation. For example, AI is being used to predict and help prevent construction job site risks.
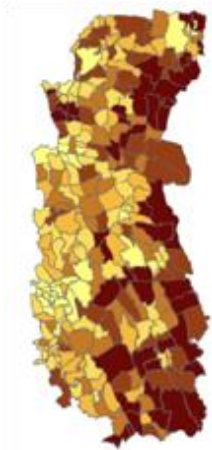
Natural disasters may not be preventable, but AI can recognize patterns in the environment to predict disasters and provide early warning.

Poor urban areas are especially vulnerable to disasters and poverty data is in scare supply and difficult to collect. Researchers at Oak Ridge National Laboratory in the US have developed a AI-based technique to identify poor, informal settlements from high-resolution satellite imagery. Their approach used a variety of spatial, structural, and contextual features to classify areas as formal, informal, and non-settlement classes. The method was tested in Caracas, Kabul, Kandahar, and La Paz, and demonstrated that good accuracy could be obtained using the same features in these diverse areas.

Preparation

Disaster preparation ensures responders and the public are as ready as possible to deal with disasters in a way that minimizes their impact. A primary responsibility of emergency managers is to develop good plans to execute when disaster strikes. Such plans must deal with patterns of natural and social phenomena, and AI can help analyze these patterns and guide effective planning.

For example, Google has been partnering with India's Central Water Commission to develop AI-enabled flood forecasting and early warning. Google uses a variety of elements such as historical events, river level readings, terrain and elevation, to run hundreds of thousands of simulations for each location to create river flood forecasting models that can more accurately predict where and when a flood might occur, and also how severe it will be.

Response

Emergency response must provide aid where it is needed. Knowing where and what sort of aid is needed is a challenge, especially in large-scale disasters. Our modern world is flooded with situational information from social media, surveillance cameras (fixed, drones, satellites), and internet-of-things sensors. However, it is very challenging for emergency managers to sort through and interpret this data. This is an ideal application for AI.

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A system called Artificial Intelligence for Disaster Response (AIDR) has been developed to help analyze Twitter tweets during emergencies and disasters. The system is available as free and open software, and it is designed to be tailored to responder needs. The responder first identifies keywords and/or hashtags that are used as a preliminary filter for tweets. Next responders identify topics of interest such as "Medical Needs" or "Sheltering", and manually tag example tweets in each category. The ANN then learns to classify relevant tweets in each category, and automatically streams relevant information to responders.

Recovery

During disaster recovery a wide range of activities are undertaken to attend to casualties and survivors, restore buildings and infrastructure, and re-establish social systems and businesses. When international aid is involved, complex interactions among multiple organizations must be coordinated. Situation assessment, resource allocation, and planning can all be supported by AI's ability to recognize patterns in data.

For example Google, in collaboration with the United Nations world Food Program Innovation Accelerator, has developed a system for automatic damage assessment using very high-resolution satellite imagery. The system uses a form of ANN called a Convolutional Neural Network, to identify buildings and compare their condition before and after the disaster. This automated damage assessment can greatly improve the timeliness and effectiveness of recovery efforts for large-scale disasters such as the 2010 Haiti earthquake, which required assessment of over 90,000 buildings in the Port-au-Prince area alone.

Summary

Leading edge Artificial Intelligence using large artificial neural networks have proven to be very effective in analyzing patterns in large volumes of data and mapping those patterns to information that can support the planning, prediction, situation assessment, and decision making required for Emergency and Disaster Management.

Contribution by: Thomas V. Robertson
Thinking Teams
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TIEMS INTERNATIONAL CERTIFICATION - TQC

TQC = TIEMS Qualifications Certification in International Emergency and Disaster Management

Summary

The International Emergency Management Society (TIEMS), believes that education, training, and international certification in emergency management and disaster response is the key to improved resilience worldwide. TIEMS has therefore launched a comprehensive international education, training, and certification program, under the motto: "Preparedness Saves Lives!". The "TIEMS International Certification – TQC" is supported by a "TQC Candidate Certification Guide" illustrating the process from the candidate's TQC application, through compliance evaluation to the examination with the purpose to familiarize the TQC Applicant with the TQC Process and Framework.

Motivation

TIEMS – The International Emergency Management Society, believes that education, training, and international certification in emergency management and disaster response is the key to improved resilience worldwide. TIEMS has therefore launched a comprehensive international education, training, and certification program, under the motto:

Preparedness Saves Lives!

The TIEMS Qualification Certification (TQC) certifies qualifications in International Emergency and Disaster Management, and is supported by a separated "TQC Candidate Certification Guide", illustrating the process from the candidate's TQC application, through compliance evaluation to the examination, with the purpose to familiarize the TQC Applicant with the TQC Process and Framework.

What is TIEMS International Certification - TQC?

TIEMS International Certification - TQC, is a "Certification of Qualifications in International Emergency and Disaster Management" for individual emergency managers with a nationally recognized professional certification for individual emergency managers, or other individuals with documented competence and experience, practical or academic, in international emergency and disaster management. TIEMS's long-term goal is to become an international certification body officially accredited by a recognized accreditation entity. The short-and medium-term goal is to set up the certification procedure, to implement the supporting certification web platform, to gain experience with and incrementally improve the procedure, and to attain worldwide recognition.

Why Another Certification Scheme?

Although there are several qualification and certification schemes for individual emergency managers worldwide, they mainly focus on specific countries' requirements rather than having an international focus. **TIEMS International Certification - TQC, is based on the assumption that "the Applicant is already certified at national level, or he/she has competences and experience recognized at national or international level".**

TQC only certifies knowledge and competencies about international standards, requirements, and best practices, necessary to create "an international common understanding" among those working with emergency and disaster management internationally.

An internationally focused certification will share international standards to: (1) promote global competence in emergency management; (2) share best practices; (3) support international collaboration; and (4) support the establishment of a common international understanding among those working with emergency and disaster management. The importance of international certification is recognized worldwide.

Why is this essential?

Major natural and man-made disasters often extend beyond the borders of a single country. A country hit by a disaster can launch an appeal to the international community for help when the country is unable to properly handle the disaster situation. **TIEMS International Certification – TQC can act as the facilitator element in the cooperation's efforts between countries and organizations, through the use of a common language and a common knowledge and understanding.** Cooperation is also essential to prevention, and the exchange of good practices in prevention and preparedness is the backbone of such cooperation.

TQC Application and Certification
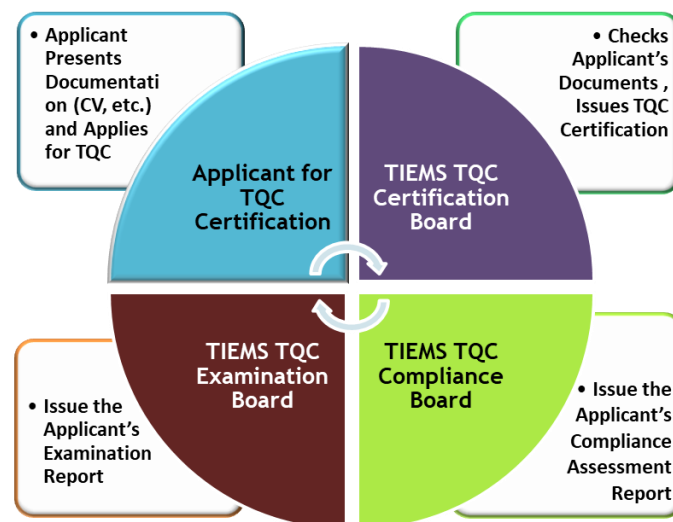
The TQC Certification organization is part of the overall TIEMS organization, and comprises three major players: TQC Certification Board, TQC Compliance Board and TQC Examination Board. There are also one more Board, the TIEMS Academy Board, that support TQC by providing access to TQC teaching material. TIEMS is working on designing TIEMS Academy courses to assist candidates in their further professional development and the course offering will be available in the near future. TIEMS International Certification is a voluntary process open to **TIEMS members ONLY**. First, an individual's qualifications are evaluated against standards of knowledge, skills and experience. Qualified individuals are then eligible to take the TQC exam and become TQC certified based on the results of the exam. TQC certification is time-limited to 3 years. To retain the credential, participants need to maintain the TQC qualification standards and be periodically re-evaluated.

The full TQC Certification Procedure is available for potential Applicants from the TIEMS website:

https://tiems.info/index.php/activities-events/education.

The TQC Web Platform is found on the following link: TQC Web Platform .

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The TQC process is organized in 8 steps:

STEP 1	STEP 2	STEP 3 & 4
A TQC Applicant who decides to apply for TQC Certification interacts with TQC Certification Board by filling out the TQC Application Form accessed from TIEMS web-site and by this communicate interest in TQC Certification.	*The TQC Certification Board evaluate the Applicants TQC Application Form and if finding him/her qualified, sends him a "username" and "password" for access to the TQC Web Platform. He/she then needs to upload all the required documentation described above, to the TQC Web Platform.*	*The TQC Compliance Board assesses all Applicant's documentation and follows the Compliance Rules to verify that it is compliant. At the end of STEP 4, the TQC Compliance Board issues the Compliance Report, and if compliant gives the candidate "green light" to continue the TQC certification process, or the TQC Compliance Board will provide feedback to the applicant to help him/her to correct deficiencies, where possible, before the candidate can continue the TQC certification process.*

STEP 5 & 6	STEP 7 & 8
The TQC Examination Board reviews the Compliance Report and works with the Applicant to set up and administer a proctored on-line exam according to the TQC Candidate Study and Evaluation Guide. After the exam, the TQC Examination Board issues an Examination Report.	*The TQC Certification Board assesses the Applicant's Compliance and Examination Documentation and decides whether to award TQC Certification to the Applicant. The TQC Certification Board completes its activity by issuing the Certification Report.*

TIEMS International Certification Compliance

To be eligible to take the TQC exam, a candidate should provide evidence of education, participation, and contribution:

- **Education** – one of more of the following:
  i. Bachelor's degree in science, engineering, social science or emergency/disaster management specialty (International Standard Classification of Education Level 6, e.g. a bachelor's degree from a reputable university)
  ii. Fift hours of emergency/disaster management training in the last five years
  iii. A certification related to emergency/disaster management at the national level
  iv. One or more courses provided by TIEMS Academy or a teaching institution
- **Participation** - three years' experience as a first responder, volunteer, educator, leader, or other activity, practical or academic, directly involved with emergency/disaster management, in the last six years
- **Contribution** – one or more of the following:
  i. At least five publications or speaking engagements in emergency/disaster management
  ii. Participation as leader or board member of an organization that participates in emergency/disaster management
  iii. Teaching emergency/disaster management
- **Competence** in the following areas (CAS) of international emergency and disaster management:
  i. International Perspectives
  ii. Preparedness, Prevention, and Mitigation
  iii. Predictions and Early Warning
  iv. Emergency Operations
  v. Public Warning
  vi. Search and Rescue
  vii. Recovery and Reconstruction

TIEMS Academy will guide the TQC Certification Candidates to relevant teaching material for their preparation for the TQC certification. As time goes by, TIEMS Academy will be providing access to an increasing number of courses relevant to TQC certification.

Required Documentation

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The following documents will be uploaded, as required to demonstrate that education, participation, and contribution requirements have been met.

1. A curriculum vitae (CV), showing the candidate's educational and professional experience. The CV may be submitted using the Europass online form at https://europass.cedefop.europa.eu/
2. Copies of course diplomas or certificates
3. Copies of certifications related to emergency and disaster management
4. Evidence of publications, presentations, teaching, or leadership
5. Professional references – professional references can be used to show that a candidate has met the Section 1 contribution requirements. If the candidate can document that they meet the contribution requirements without professional references, no professional references are required
6. Additional background and experience documentation demonstrating education, participation, and contribution
7. Competence Area Summary (CAS):
   The CAS is to demonstrates that the candidate has knowledge and/or experience in the seven competence areas of international emergency and disaster management. These competence areas show that the candidate has an understanding of how emergency and disaster management operates at an international level.

TIEMS International Certification Examination

The exam covers the Competency Framework on "International perspectives, standards, and best practices" and consists of 10 essay and 50 multiple-choice questions.

TQC COST POLICY

TIEMS general policy is that education and certification in emergency and disaster management should be affordable by most, and therefore the cost of being TQC certified will be kept at a minimum, covering only the cost to TIEMS for offering and maintaining the TQC service. The Applicant need to pay a TQC Certification Fee to cover the costs of the certification process. After the Applicant has passed the TQC exam, his/her TIEMS membership will be upgraded to TIEMS Professional Certified Member.

If the TQC Applicant fails to fulfill the compliance requirements, as described in the section TIEMS International Certification - TQC Compliance, 50% of the TQC Certification Fee will be refunded. The kept fee is to cover the expenses incurred by TIEMS personnel by evaluating the Applicant's compliance requirements.

Note that TIEMS does not guarantee that an applicant's certification will be successful. No claim of liability, in any shape of form, can be made by any applicant against TIEMS and/or any of its officers who are part of the TQC process(es).

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CORONAVIRUS AND COVID-19 UPDATES

Personal freedoms during pandemics and the potential vulnerability implications

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Introduction

In the international domain, it has been stipulated by Human Rights Watch (2020) that international human rights law, specifically that of the International Covenant on Civil and Political Rights, allow the UN members to impose restrictions on rights of individual citizens during states of national emergency. More specifically, these rights can be limited in the case of public health emergency, as long as these are proportionate, necessary and lawful (section 4 of the Siracusa Principles, 1984). In the case of the COVID-19 pandemic, examples of these restrictions will include limiting the freedom of movement by (self-)isolation or quarantine when a person has tested positive for COVID-19 or been diagnosed as having the disease. It has, in many countries, led to mandatory testing of the individual and the tracing of people who might have had a contact with the COVID-19-infected persons. Constitutional arrangements, cultural and social norms, the structure and functioning of the social compact in a given country or territory will have a major impact on the way that the Siracusa principles will be implemented and how these will be adhered or tolerated by the local population(s). Implementation can be done using flexible legislative tools, such as proclamations, executive orders or regulation which are gazetted or published in the equivalent of the U.S. Federal register. The practices of choice and their enforcement mechanisms will differ across the world and will also differ in the level of success.

The last 30 years have seen the removal of barriers to the mobility of people, barriers to trade and economic opportunities worldwide. Rise of the internet and the phenomena such as social media/networks has connected people like never before. These trends have been a blessing to many and the inter-connectedness of the world has removed many obstacles to exchange of information, knowledge and best practices. The field of emergency and disaster risks management (EDRM) have not been an exception to this rule. Presence of social media and all other inter-connectedness tools has made EDRM more difficult and simpler at the same time. Systems of the EDRM have adapted to this. Currently the adaptation and the essence of inter-connectedness are being challenged through the restrictions on travel and physical mobility of the people and goods amid the COVID-19 pandemic. In the context of a disaster such as the COVID-19 pandemic, the concept of freedom play a critical role in the execution of the EDRM operation and in the provision of healthcare. In this context and for the conditions in a given settings, the interpretation of freedom can be best captured as described by Sokol (2002) and as put into context of the disasters below.

Personal freedoms Siracusa limitations due to a public health emergency

Sokol (2002) describes three types of freedom, as they would be perceived by populations under lockdown and that might be useful to EDRM of COVID-19: freedom of advertising, freedom of a supermarket and freedom of game.

Freedom of advertising, i.e. go towards something and leave or put a distance between yourself and members of the household you are part of. During the COVID-19 lockdown and other measures, freedom of movement had been limited. Therefore the freedom of advertising of people around the world has been limited as an individual was not able to go to work, they could not go for a jog, they can't take their dog for a walk, nor could they enjoy the freedom of movement across your city, country and beyond. Simply put you couldn't just go anywhere you might feel like at that moment in time.

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Practically, the limitation of the freedom of advertising is likely to lead to the increase in the anxiety levels among the population. The pain and suffering, on the mental health front, will increase among the population. Increased mental health strain could lead to increase stress on the patients to be admitted to healthcare facilities.

Limiting movement should and does limit social interactions and contributes to the decreasing in the spread of COVID-19. However, limits of this nature can contribute to increasing in the disaster vulnerability of the population. Middle and high-income earners might be laid off at work. This might in turn lead to the negative impacts on the social network that these economically active citizens might be part of. Loss of work by members of the economically productive population can lead to the cascading effect where dependents per economically active populations will suffer. This will be the result of the absence of an income in a social setting, which in turn might lead to food insecurity and the exacerbation of social and health vulnerabilities that might apply to that society. The high-income/developed countries have mitigation measures in place, but developing or peripheral/semi-peripheral countries might struggle to cope.

Freedom of a supermarket, as defined by Sokol (2002), can be seen as the fact that you can go to shop and choose what you want to buy. In other words, you are able to make choices about your everyday life. Lockdown measures, which have been imposed around the world, have limited the ability of the population in a country to engage in coping strategies such as "retail therapy". Socialising with friends, e.g. at the coffee shop, might also fall into this category. So, it can be said that the COVID-19 lockdown has limited the ability of law-abiding citizens to gallivant a particular area where they live, work etc. At the same time, lockdown measures limits the travelling from low-income areas such as peri-urban settlements to central business districts in metropolitan areas, to upmarket areas for work and to shops to purchase basic goods such as food. Rural areas might be isolated due to the limitations on movement and need to get permits with which regular citizens can move geographically between various places.

Choices of society are and their freedom of the supermarket will be further limited by the decreased choices of the goods that one can buy during a lockdown, i.e. in many countries not the entire assortment of everyday goods might be available in the shops. Shopping habits of the citizens in a country under lockdown will have to adapt. Purchase of a wide variety of goods, that were available in the climate of globalisation, might no longer be possible under lockdown conditions. Therefore the supermarket freedom of the population will be limited, as procurement of goods tom other countries is limited as well...borders of many nations are closed. Movement of cargo might continue, but will also be limited in terms of which goods are transported internationally. This might have implications on the mental wellbeing of the population which is impacted by COVID-19.

Freedom of game is complementary to the supermarket freedom according to Sokol (2002). For practical purposes, freedom of game means that a human being in a free society has the option to participate in activities outside of their household and these activities are governed by sets of rules. Examples can include the freedom of a human to decide and study towards a higher education degree and enrol in a higher education institution. Enrolment in a degree does not depend on where the applicant comes or what his background is, but rather the enrolment is a function of meeting a set of entrance criteria. At the same time, the progression of the individual citizen in the degree studies is only a function about whether they are meeting the criteria, e.g. passing exams, as stipulated in the accreditation criteria of the particular degree. Finally, the degree is only awarded after the candidate has met all the criteria for the degree in question and in line with accreditation.

Another example of the freedom of game is that a citizen can participate in the sports, e.g. jogging on a public road provided that said individual abides by the rules of the road and the traffic laws of their country. It would be also advisable for the runner to train and be aware of the risks of over-training. Thus freedom to game is the possibility to improve the conditions of one's life, to participate by choice in activities that stimulate one's interest and curiosity. This is all limited during lockdown. During the COVID-19 lockdown, remote learning facilities have been in place for the university students around the world, but isolation can lead to increased anxiety. This in turn might increase the prevalence of co-morbidities among the patients in a particular country, with or without COVID-19. Limiting exercise

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might lead to the decreased fitness among the population. Potentially, this could result in the increased pressure on the healthcare system and increased costs of disease management in particular country.

During the COVID-19 pandemic, freedoms of advertising, supermarket and game are interdependent, especially in the low-income segments of a country's population. These segments of the population are vulnerable due to the limited availability of resources such as finances. This in turn will, at least partially, limit the population segment's ability to exercise their respective freedoms. Disaster vulnerability is multi-faceted and for the low-income segments of the population, especially in developing countries will be linked during the COVID-19 outbreak, the ability of low-income household to send someone shopping and to get the transport. Safety and security conditions, along with crime rates, in the place of residence might govern the freedom of advertising, i.e. which a member of the household can go shopping and leave the family dwelling. Crime rates, physical security and overall safety of the society in question will control which members of the household will have the freedom of advertising and who will not. It controls who and which members of the household can go shopping and which members of the household just stay at home and might be at risk of domestic abuse and/or attack by robbers. This might lead to the differentiated impacts of the COVID-19 pandemic on the various age and gender segments of the population, potentially putting selective pressure on the elements of society in a given country around the world.

Freedom to the supermarket might also be limited by place of residence of a citizen, along with the household income, as it will have a strong influence on the items that designated household member/members will be able to purchase. This might in turn have an impact on food security and diet (which control the overall wellbeing of the population), electricity consumption, access to information. During a disaster, the lack of electricity can lead to decreases of the ambient temperature inside the dwelling and this can in turn lead to the increased susceptibility toward certain diseases, e.g. respiratory illness. Lack of electricity and limited income/internet connectivity can have a cascading effect on the freedom of game, as it might compromise a pupil's/child's/student's ability to participate in education activities. Information dissemination might also be limited. Such information not reaching the target population can increase the vulnerability and limit the freedom of game, freedom of supermarket and the freedom of advertising. Such as limitations will apply to the entire social network of a particular individual who would receive such food parcels or social grants.

Freedoms, as defined by Sokol (2002), are linked to the interpretation of disaster vulnerability and mainly the ethical dimension of the disaster vulnerability. The framework, defined by these freedoms, allows for disaster vulnerability to be interpreted in the context of everyday life of the population which is affected by the COVID-19 disaster. Increased restraints on normalcy will put ore strain on the people mental health and stress levels. This will more strain on healthcare workers such as nurses. Besides these limitations, limited movement of goods local and across the world will put severe strains on the availability of the resources in the EM and DRM space. Allocation of the scarce resources will be determined by the availability of the scarce resources, e.g. the personal protective equipment (PPEs). The healthcare workers might be exposed to conditions which are challenging to maintain their mandate and pose ethical challenges.

In the context of the COVID-19 pandemic, it is important to investigate the impact of the environment created by the pandemic in the healthcare facilities, on the performance of the everyday duties and the legal mandate of nursing staff, as well as the mental health and related impacts. This is important for reasons such as maintenance of the quality of care, elimination of mortalities and morbidities related to COVID-19, as well as on the studies which have shown that similar respiratory conditions, e.g. SARS in 2003, had a major impact on healthcare facilities even at low number of total cases (Tolomiczenko et al., 2005). Therefore the current TIEMS newsletter seeks to provide an updated picture about the development in the disaster risk management response to the COVID-19 pandemic in some of the countries where the TIEMS are active.

References

Human Rights Watch. (2020). Human Rights Dimensions of COVID-19 Response. Available at: https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response#_Toc35446580 (website accessed on 24th August 2020).

Siracusa Principles on the Limitation and Derogation of Provisions in the International Covenant on Civil and Political Rights (UN Doc E/CN.4/1984/4, 1984). Available at: https://www.uio.no/studier/emner/jus/humanrights/HUMR5503/h09/undervisningsmateriale/SiracusaPrinciples.pdf (website accessed on 18th April 2020).

Sokol, J. (2002). Jaký liberalizmus neboli Jaká svoboda? (What liberalism, what freedom?). Vesmír 81: 348-352.

Tolomiczenko, G. S., Kahan, M., Ricci, M., Strathern, L., Jeney, C., Patterson, K., Wilson, L. (2005). SARS: Coping with the impact at a community hospital. Journal of Advanced Nursing 50(1): 101-110.

The Timing Couldn't Have Been Worse

By [Jon Seals](#), Editor-in-Chief, [Disaster Recovery Journal](#)
Received on 10th August 2020 and accepted after editorial review on 24th August 2020.

In the days leading up to the event, COVID-19 was ravaging citizens overseas and had just begun to spread across the United States. Hundreds of registered attendees, speakers, and exhibitors were facing company travel bans due to the growing threat, but the U.S. government had yet to ban large gatherings, Florida hadn't declared a state of emergency, and Walt Disney World was still very much open for business.

Disaster Recovery Journal has business interruption insurance, but epidemic outbreaks *are not covered* in this 100-page policy. To take it one step further, the risk or fear of an outbreak is certainly not covered.

Many registrants and exhibitors were already choosing to cancel, accepting that no refunds would be given because it was only days from the show. This opened us to liability to those same registrants. If we canceled, those registrants would be the first to request a refund, even though they were the major reason causing us to cancel.

It was a double-edged sword to do the right thing.

DRJ President Bob Arnold cancelled the live event five days before it was supposed to start (the final day Coronado Springs would refund hotel guests for room nights.)

The next few days were a chaotic blur. Everyone had their hands out and many of those people were angry.

Staff members Rose Chotrow, Lesley Vinyard, and Emily Rice handled hundreds of brusque emails and phone calls. We appreciated the patience and public support we received from most on social media, but Arnold had to deal with our biggest problem alone.

The majority of our revenue had already been spent leading up to the event, and full refunds have become nonexistent in today's business world.

For those of you who don't know, a large event contract demands the host (DRJ) guarantee a certain number of hotel room nights, food and beverage, audio/visual, and much more. This contract was signed back in 2016. Walt Disney World had already accepted one large payment and were demanding the rest of their money.

At the same time, many of our sponsors, exhibitors, and third-party vendors all wanted their money back.

Like I said, we're a small company, with just seven employees, and negotiations on both sides were tense. Arnold managed to make a deal with Disney and all of our registered attendees within two weeks.

Registrants were offered several different options to transfer their attendance or get deep discounts to multiple conferences in the future at a greater value than they originally paid. We also recorded webinar

versions of most spring sessions and a month of townhall roundtables to quickly host DRJ Spring 2020 as a virtual conference.

Arnold has spent virtually every day since the pandemic changed our business model in negotiations with sponsors, exhibitors, and third-party vendors. Not all of them are completely satisfied but it's better than going out of business.

The pandemic has forced many of us to do business differently. It's forced us to work from home. It's forced us to worry about our health and the health of those around us. It's forced us rethink many of the choices we've made.

The first edition of Disaster Recovery Journal after the pandemic was filled with articles about "the new normal" and "how to handle returning to the office." The fall edition (released Aug. 17) features several lessons learned. Many of our writers were candid about mistakes and wondered aloud about how to get better and what needs to change.

I get the feeling we'll be facing new challenges from here on out. Thank you for the services you provide to your communities.

NOTE: DRJ Fall 2020 will feature more than 65 sessions, roundtable discussions, a trade show, and other networking opportunities in a live virtual environment Sept. 28-Oct. 1, 2020, with complete access for another six months.

TIEMS Australia COVID-19 Response – August 2020

By Brian Holecek, OAM CEM, TIEMS Australia Committee
Received on 8th August 2020 and accepted after editorial review on 24th August 2020.

The COVID-19 impacts within Australia's population and economy differ across our States and Territories. In May and early June 2020 COVID infection rates within each state were slowing and each State or Territory's respective Premiers or Chief Ministers were reviewing their COVID restrictions. Some states did ease their restrictions due to the decrease of COVID-19 infection numbers. However, in the later part of June 2020 Victorian cases spiked from residents of a public housing building precinct, age care facilities and workers at some of the Hotels utilised to accommodate travellers returning to Australia.

The COVID-19 transmission number in Victoria's capital Melbourne has resulted in an increased lockdown. (Stage restrictions 4) which include:
- Mandatory wearing of masks in public,
- Curfew from 8pm to 5 am,
- Only permitted to shop for essential items,
- Permitted work, or
- For emergency reasons

The regional areas of Victoria have "Stage 3 Restrictions, Stay at home".

New South Wales recently saw an increase of COVID-19 infections from a person who was a freight transport worker from Melbourne who and attended a party at the Hotel south west suburbs of Sydney. This started a ripple affect as most new cases can be trace back to the event.

There have been several cases of false declaration on permits resulting in numerous fines been issued, including in Queensland who has not had any new cases some time. Two Queensland women returned to its capital Brisbane from Melbourne via Sydney. As the flight they boarded in Sydney originated from Sydney, these women did not declare they had been in Melbourne to attend a party. They attend several locations in Brisbane before they felt unwell and went for testing and tested positive for COVID-19.

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There has been many other false declaration or people avoiding border checks, most have been traced and future action is pending.

Update of Borders closures since last newsletter:

- New South Wales from Victoria: Closed permits only
- South Australia From Victoria: Closed permits only
- South Australia and New South Wales: travel permitted but 14 days Isolation required once entering South Australia
- Queensland has closed the border to New South Wales and Victoria and only allowing travellers via air for returning Queensland residents, with 14 days isolation at resident's expense
- Western Australia Border has closed its border to travellers leaving from Victoria, ACT and New South Wales

International Flights:

The is a current ban on all overseas travel out of Australia, unless granted an exemption, the exemptions are mainly for essential work purposes. Overseas travel from Australia is not expected recommence for the remainder of 2020 and early 2021 possible later. Although a travel bubble may occur with New Zealand in the near future.

Federal financial assistance:

The Australian Government has several financial packages for citizens who are financially affected these are:

Job Keeper:

The Job Keeper Payment is a temporary subsidy for businesses significantly affected by coronavirus (COVID-19). Eligible employers, sole traders and other entities can apply to receive $1,500 per eligible employee per fortnight. This payment was originally due to conclude on 27 September 2020, it has been extended to 28 March 2021. The payment rate of $1500 per fortnight for eligible employees and business participants. The amount reduces to: $1,200 per fortnight from 28 September 2020, and $1000 per fortnight from 4 January 2021.

Job Seeker:

The payment for people between 22 and Age Pension age who are looking for work. It is also for people who are sick, injured, or have disability and cannot work or study for a short time this amount also includes a coronavirus payment:

- Singles at: $565.70 Jobseeker Payment and $550 Coronavirus Supplement = Total $1,115.70
- Partnered at: $510.80 Job seeker and $550 Coronavirus Supplement = Total $1,060.80 each

Each Australian State and Territory are providing financial assistance to local business in varying ways, dependant on the needs of each individual state or territory, this support is in various programs however the common thread for this financial support is aimed at encouraging in growth and developing new industries and reinvestment.

Current Situation as of 3pm on 6 August 2020

A total of 19,862 cases of COVID-19 have been reported in Australia, including 255 deaths and 11,112 have been reported as recovered from COVID-19.

- Over the past week, there has been an average of 519 new cases reported each day. Of the newly reported cases, the majority have been from Victoria.
- COVID-19 cases were reported across all ages:
  o The median age of all cases is 38 years (range: 0 to 106 years)
  o The median age of deaths is 82 years (range: 33 to 103 years)
- There is a relatively equal ratio of male-to-female cases across most age groups.
- Following the peak of cases at the end of March, there were a relatively low number of new cases reported daily between mid-April and early-June 2020. Cases have increased since mid-June.

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- Of cases with a reported place of acquisition, 26 % have recent international travel history, including over 1,300 cases associated with cruise ships.
- The overall proportion of cases under investigation in each state and territory is relatively low, indicating that public health actions, including case identification and contact tracing, is occurring in a timely manner.
- To date, over 4,632,000 tests have been conducted nationally. Of those tests conducted 0.4 % have been positive.
- The 'cases in aged care services' table presents the number of cases that have been reported among care recipients in Australian Government subsidised residential and in-home care settings in each state and territory

Total COVID-19 cases and deaths by states and territories:

Jurisdiction	Total confirmed cases	New cases in last 24 hours	Deaths
Australia	20,272	464	266
ACT	113	0	3
NSW	3,842	11	50
NT	33	0	0
QLD	1,087	0	6
SA	459	3	4
TAS	229	0	13
VIC	13,867	450	181
WA	642	0	9

Source: Department of Health, States & Territories Report 7/8/2020

Total COVID-19 tests conducted and results:

This table shows the total number of COVID-19 tests conducted and the percentage that returned a positive result, in Australia and in each state and territory, since 22 January 2020.

Jurisdiction	Total test conducted	Positive Tests (%)
Australia	4,724,026	0.4%
ACT	56,219	0.2%
NSW	1,617,177	0.2%
NT	27,125	0.1%
QLD	638,011	0.2%
SA	270,926	0.2%
TAS	73,251	0.3%
Vic	1,1771,953	0.8%
WA	268,742	0.2%

Source: Department of Health, States & Territories Report 07/08/2020

The Manchester Briefing on COVID-19: International lessons for local and national government recovery and renewal

By Professor Duncan Shaw, The University of Manchester, UK
Received on 26th July 2020 and accepted after editorial review on 24th August 2020.

What is 'The Manchester Briefing on COVID-19'?

The Manchester Briefing is aimed at those who plan and implement recovery from COVID-19, including government emergency planners and resilience officers. Each week we bring together international lessons and examples which may prompt thinking on the recovery from COVID-19, as well as other information from a range of sources and a focus on one key topic.

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Inspiration for the lessons is taken from the many local, regional, national and international meetings we attend from which we identify the current topics and foresee needs for lessons. The lessons themselves are taken from websites (e.g. UN, WHO), documents (e.g. from researchers and governments), webinars (e.g. those facilitated by WEF, GCRN), and other things we find. We have also interviewed over 60 experts in resilience, response, and recovery who have been instrumental in shaping our thinking and identifying important lessons to share through the Briefing.

The Manchester Briefing reports what others have done to prepare for pandemics, respond to the effects of COVID-19, and recover their people, places and processes. We make no judgement on the effectiveness of the approaches nor recommend any specific approach for there is a wider audience for The Manchester Briefing, all working in different contexts which make some lessons attractive or infeasible.

The Manchester Briefing is disseminated to approximately 50,000 people through a partnership network that covers:
- emergency response organisations (e.g. The International Emergency Management Society; UK Emergency Planning Society);
- international organisations (e.g. Global Resilient Cities Network, United Nations Office for Disaster Risk Reduction, The Global Network of Civil Society Organisations for Disaster Reduction)
- local government networks (e.g. Local Government Association; SOLACE)
- response and recovery committees (e.g. C-19 Cross-government Foresight Strategic Group, local resilience forums)
- businesses (e.g. Business In The Community; British Standards Institute)

It is issued on a weekly basis and (as of 31st July 2020) is in week 18.

The Manchester Briefing focused on how cities and countries are working on Recovery and Renewal:

Recovery involves the transactional activities done by organisations involved in the local resilience partnership. The focus of recovery activities are to: reinstate statutory services; learn from the response to COVID-19; and prepare resilience for the next emergency. Recovery is relatively short-term, aiming to address fragilities exposed by the crisis. The pace of addressing these fragilities will depend on ongoing demands from the crisis, organisational fatigue, and supply challenges.

Renewal involves the transformational activities done by multiple and broader strategic partnerships needed to tackle ambitious programmes of change e.g. addressing the UN's Sustainable Development Goals. Renewal is longer-term, aiming to appreciate what happened during the response (allowing time for thinking and healing) and then renew through ambitious activity that will be orchestrated through short and longer term delivery. Renewal is complex, social, strategic, broad-based (e.g. environmental, economic, legal, societal), democratic, geographic (growth and sustainability), and represents a developmental process. Renewal needs to be aligned to positive agendas – so may be aligned with new strategic plans that are beyond the negativity of COVID-19.

Structuring lessons around our key issues

There is UK National Guidance[2] for recovery which focuses on structures and process to be followed by local resilience forums as part of their usual recovery from emergencies. That guidance provides four generic categories for recovery: humanitarian assistance, economic, infrastructure and environmental (Figure 1). The Manchester Briefing presents lessons using these categories, enabling all issues to be identified and plans to be aligned across sectors and groups. The following is not a comprehensive list, but examples to illustrate the scope of each category are:
- **Humanitarian Assistance** (including health) – physical impacts (including individuals' health, housing, financial needs); psychological impacts; volunteers

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[2]   https://www.gov.uk/guidance/emergency-response-and-recovery

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- **Economic** – reopening businesses; retail, leisure, hospitality
- **Infrastructure** – restoring daily life (educational establishments, welfare services, transport system, waste management); digital infrastructure and cyber security; Supply Chain Management and logistics
- **Environmental** – green spaces, accommodating social distancing; pollution control

These categories are supported by key enablers:

- **Communication and engagement** – connectivity between health and wider system; use of media; community engagement; public reassurance regarding health and social care concerns and the capability/capacity of the health and social care system
- **Governance and legislation** – emergency legislation and the transition into recovery, use of existing governance mechanisms
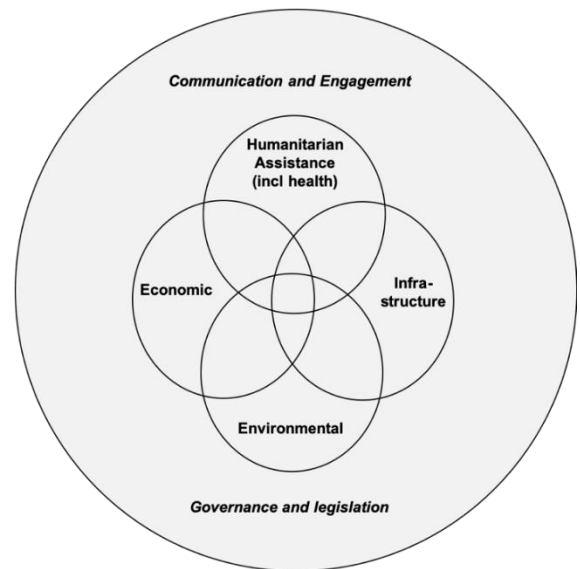
Figure 1: Six categories for planning recovery (from The Manchester Briefing in Week 2)

Using these six broad categories we used the weekly lessons to create a more detailed view of the topics to be considered as part of Recovery and Renewal (see Figure 2).

Humanitarian Assistance (Including health)	Economic	Infrastructure
• Vulnerable people • Volunteers • Community engagement • Health and wellbeing • Public protection • Management of deaths	• Economic strategy (national and local) • Business regeneration/ rejuvenation • Public sector • Voluntary, Community and Social Enterprise sector • Personal finance • Innovation	• Infrastructure providers • Infrastructure customers • Energy (utilities) • Digital • Workforce/ staffing • Urban infrastructure • Health systems • Education and training • Welfare (including social care) • Transport • Waste management • Supply chains & logistics
Environment	**Communication**	**Governance and legislation**
• Urban planning • General environment • Clean energy	• General communications • Targeted communications • Connectivity between Health and the wider system	• Legislation • Planning for recovery • Risk • Governance (national and local) • Justice and law enforcement • Emergency planning • Legal and financial frameworks for response • Learning lessons

Figure 2: Menu of recovery and renewal topics to consider within each category (The Manchester Briefing - Week 9)

Each week The Manchester Briefing provide 4 briefings:

1. **Focus of the week** – a thought piece from our staff on how to plan Recovery and Renewal. Some weeks these are instructional articles that present a methodology to plan response, recovery or renewal activities. Other weeks these are provocative articles which aim to stimulate thought and debate.

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2. **Lessons you may find helpful from across the world** – each week we provide 10-20 lessons from different countries based on key topics from meetings we have had during the previous week. We select lessons that are of interest to the recovery process although many also relate to the response phase, and the overlap between response and recovery.

3. **Case study** – usually a 2-page deep dive into a topic of general interest containing either lessons for a particular issue or from a particular country.

4. **Webinars** – a list of webinars that have taken place in the last week from which recording are available, and of webinars that take place in the coming week.

After producing 18 weeks of The Manchester Briefing, we have covered a wide range of topics. Table 1 summarises just a few of the topics covered.

Table 1: Coverage of the lessons covered across the last 18 weeks of The Manchester Briefing

Week #	Focus of the week	Each week we produce 10-20 lessons. Just two lessons to highlight …	Case study
1	Using the Disaster Resilience Scorecard and its Public Health Addendum to help you to think about aspects of recovery	• Consider how to ensure appropriate composition of community engagement teams for COVID-19. (Sierra Leone) • Consider strategies to tackle spikes in gender based violence resulting from social distancing and quarantine. (China)	Recovering society from COVID-19: What recovery means and how it will be implemented drawing on the evidence from Ebola (West Africa) and Hurricane Katrina (New Orleans)
2	Recovering from COVID-19: the key issues. A framework to conduct impact assessments for recovery planning	• Consider how to engage with specific groups that can advise on vulnerability issues. (Vietnam) • Consider evacuation planning, including prepositioning resources to evacuation centres and how to evacuate people during COVID-19 (Phillipines)	Identify the widest range of tasks which volunteers may usefully perform Investment into clean energy that considers sustainability
3	Blogs about COVID-19: A list of organisations and sources writing blogs on COVID-19 from a range of perspectives and countries	• Consider local economic strategies that account for seasonal impacts and other fluctuations to businesses. (Canada) • Consider how to retain the motivation of volunteers who have not been tasked. (UK)	Targeted volunteer recruitment maps. Impacts on the environment and people's safety when reopening green spaces.
4	Working in partnership for Recovery and Renewal – the need for strategic partners to collaborate	• Consider how pandemics in informal settlements are managed, their context-specific needs, and challenges in contagion. (West Africa) • Consider risk assessments to examine the requirements for the options for easing lockdown whilst supressing the spread of COVID-19 (India)	Communication: an Australian perspective – Using tested communications systems used for other disasters such as forest fires to be aware of cognitive bias, and build trust and transparency
5	A framework for recovery drawing on the UK Government's National Recovery Guidance	• Consider how to congratulate children for their compliance and forbearing with lockdown restrictions. (Iceland) • Consider how use of public space will need to be transformed, especially in urban centres or historic towns. (UK)	Four phases for ending lockdown – the approach used in Spain to work towards full re-opening of the country and services
6	Health and Care: The challenges of system recovery using the lenses of people, place, processes, partnerships and power	• Consider strategies for monitoring the populations' mental health and the capacity of social work provision (UK) • Consider how to support and enhance equitable economic regeneration. (Hawai'i)	Opening social activities in Iceland including different types of activities, different ages, and services
7	Making decisions under deep uncertainty to recover from COVID-19	• Consider advising citizens to prepare for self-isolation in the event of a second wave of COVID-19. (USA) • Consider the criteria used to ease lockdown restrictions using five tests. (UK)	Measures to ensure the safe return of pupils to school including adjustments to the school day and attention to infrastructure
8	Starting the planning for Recovery and Renewal – and a first task of commissioning Impact Assessments	• Consider how democratic elections can still take place. (Korea) • Consider the need to speak with children about COVID-19 with accurate information appropriate for their age and developmental level. (USA)	Test, Trace, Track in Korea – Lessons for working with the public on IT supported test, trace and track
9	Developing recovery actions for COVID-19 through addressing effects, impacts, and opportunities	• Consider ways to work with local businesses to offer advice on incentivizing consumers. (China) • Consider partnerships with telecom companies for effective use of telecom data to help test, track and trace. (Japan)	Supporting care homes in the UK – How to support care homes as virus hotspots that have been hugely disrupted

10	Guest briefing from GRCN: Do cities have adequate tools to plan their recovery from the COVID-19 crisis?	• Consider social justice by taking a whole of society approach to Recovery and Renewal. (TMB Team) • Recovery is transactional and short term – Renewal is transformational and longer-term (TMB Team)	National Carers Week UK – Supporting carers in the challenges carers face, including those who may not identify as having caring responsibilities
11	The Ambition for Renewal – Creating a platform for longer-term strategic change	• Consider an integrated programme of support to vulnerable people from civil society and business. (Columbia) • Consider undertaking capability gap assessments for skills needed for recovery (Australia)	Emotional health & wellbeing of staff and the public
12	People & communities affected by COVID-19: people who have been disproportionately impacted by the effects of COVID-19;	• Consider how to support the agricultural sector with their distribution (France) • Consider the impact of remittances on the local economy and the opportunity to digitize payments (Nepal)	Homelessness during COVID-19: Lessons from Greater Manchester, UK on how to support homeless people and contain virus spread
13	Guest briefing from GC Consulting: Economic response and recovery in the context of COVID-19 social distancing measures	• Consider how to adopt, accelerate and promote the Circular Economy. (Denmark) • Consider developing COVID-19 addendums to local resilience plans to amend (not rewrite) approaches (Columbia)	Localised 'Smart Lockdowns' where cases of COVID-19 could not be sufficiently contained through other measures
14	The contribution of Humanitarian and Conflict response to recovery and renewal from COVID-19	• Consider how COVID-19 may increase risks to victims of human trafficking. (United Nations) • Consider supporting the impacts of prolonged illness and recovery from COVID-19. (New Zealand)	Travelling safely: Leaving your country and arriving overseas – including providing advice to travellers, travel operators, accommodation and service providers
15	Policing and managing civil unrest during COVID-19: Reflections from the USA and Australia	• Consider how to manage cultural heritage during COVID-19 and make it available during lockdowns. (Italy) • Consider how to secure and recover supply chains, and to prepare them for a post COVID-19 world. (Dubai)	Setting up a recovery coordination group and the commissioning of impact assessments for COVID-19 to initiate the identification of recovery actions
16	Developing resilient systems for crisis and emergency response (Part 1)	• Consider the impacts of the 'digital divide' on children's ability to learn at home during lockdown. (Spain) • Consider screening sewage and wastewater to monitor the correlation between sewer data and COVID-19. (Netherlands)	Supporting children with autism and their parents during COVID-19 to adjust to, cope with, and understand the changes to normal routines
17	Debriefing our experiences of COVID-19 response using the Viable System Model	• Consider certifying businesses 'COVID-19 safe' and providing display certificates. (Monaco) • Consider ensuring that the public have an authoritative timeline of activities and decisions taken. (Vanuatu)	Impacts of COVID-19 on sex workers – and the support needed for this marginalised, and economically precarious people who are at increased risk of homelessness and abuse
18	Assessing performance of our response to COVID-19 to identify areas of strength and pinpoint areas of weakness	• Consider establishing a relief fund for the public and businesses to contribute financially to recovery. (Barbados) • Consider lessons from Mongolia's approach to containing COVID-19 which has been so successful. (Mongolia)	How different emergency services have supported COVID-19 response efforts

How to receive The Manchester Briefing

The Manchester Briefing on COVID-19 is freely available on a weekly basis from:

www.ambs.ac.uk/covidrecovery

The back catalogue of briefings is available for download in case people have missed a week. In addition, there are supporting materials such as a video, blogs, and short summaries that are available through the website.

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COVID-19 situation in Italy

(updated on July 31, 2020)

By Simona Cavallini, Sandro Bologna, Vittorio Rosato, TIEMS Italian Chapter
Received on 9th August 2020 and accepted after editorial review on 24th August 2020.

The status of infected, hospitalized and deaths due to covid-19

The first case of COVID-19 officially detected in Italy was on 21st February 2020. The previous issue of the TIEMS newsletter reported the Italian situation updated 9th April 2020. After four months (i.e. on the 31st July 2020) the total number of infected people (grey line in Figure 1) reached 247,537 units (+72%). According to the official data provided by the Italian Ministry of Health, 12,422 are still infected (5.00%), 199,974 (80.8%) recovered and deaths amount to 35,141 (14.2%).
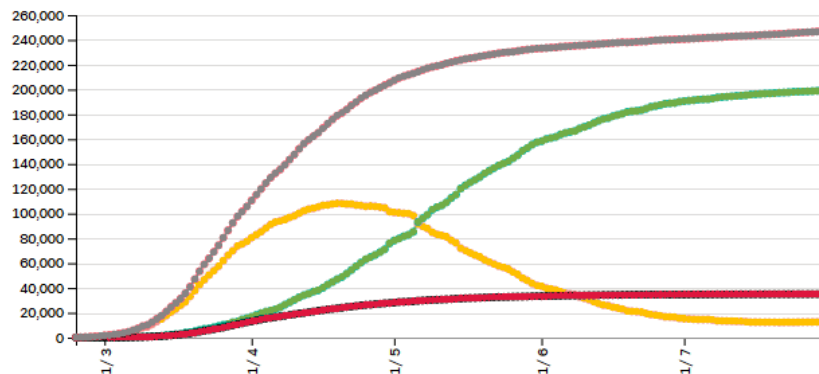
Figure 1: Evolution of the COVID-19 situation from the end of February to the end of July (Source: authors' elaboration of a graph taken on https://lab24.ilsole24ore.com/coronavirus/)
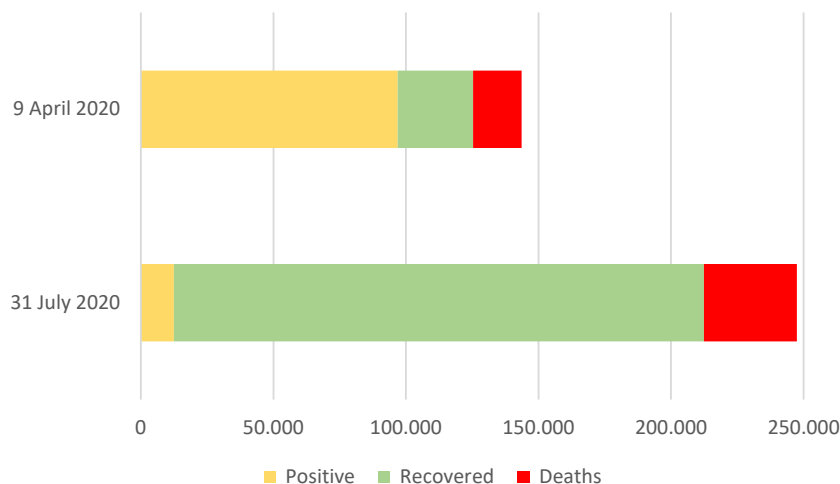
Figure 2: Comparison of the Italian situation after 1.5 months and after 5,5 months from the first COVID-19 case (Source: authors' elaboration of data taken on https://lab24.ilsole24ore.com/coronavirus/)

Figure 2 shows that in the last four months the total number of COVID-19 cases has continued to increase but at a lower rate. The contamination was contained and this is proved by the low relative percentage of positive cases at 31st July (5.0%) (respect to 67.5% at 9th April). On 27 March the higher number of deaths in day was recorded (i.e. 969). According to John Hopkins University data on the COVID-19 contamination in the world by country, on 9th April Italy ranked third for infected cases (after USA and Spain) and the first country for both the number of deaths and the dead rate. On 31st July, the pandemic assumed a totally different extent and a world-wide scope. Italy with 247,537 COVID-19 cases was the 15th country. The USA is still the most affected country with a number of COVID-19 cases (4,495,015) almost 20 times higher and with a number of deaths (152,055) 4 times higher. Only four countries in South America (i.e. Brasil, Perù, Cile, Colombia) reached 3.5 million COVID-19 cases and 130,000 deaths.

At the end of July, the reduced severity of the pandemic in Italy is confirmed by the share of hospitalized among the COVID-19 cases (5.8%). Among hospitalized people more than 5% (41) is in critical care. At the beginning of April beds in critical care hosting patients affected by COVID-19 were 3,605. The COVID-19 contamination remains not homogeneously distributed on the Italian territory. On 31st July, the five most affected regions (i.e. Lombardia, Piemonte, Emilia Romagna, Veneto and Toscana) registered 76.0% of the total COVID-19 cases. More than 95,000 cases (51.1%) in Lombardia region only.

The rate of spreading the last week

During the week 25–31 July 2020 figures indicates a slowdown of the COVID-19 infection rates and the impacts of the virus. The number of Italian COVID-19 cases increased of 1,673 units. In the same week, an analogous number of people recovered (1,654). In these days 39 people died. During the first week of April (i.e. from the 3rd to the 9th April) deaths (3,598) were ten times higher.

How many are tested out of the total population

On 31st July 2020 more than 6.8 million COVID-19 tests were carried out in Italy (which population overpass 60 million inhabitants). COVID-19 test coverage on population varies across the 20 Italian regions depending, among the others, on the specific strategy at regional level to monitor the COVID-19 infection.

What kind of protection measures are done by the government

Among the factors contributing to the containment of COVID-19 effects in Italy, rigorous lock-down measures imposed by the national government and population respect of such provision have been crucial.

On 4th March 2020, schools and other education institutions were closed in Italy while the national government officialize the lock-down status on 9th March 2020. On that date, a Decree by the Italian Presidency of the Council imposed further restrictive measures: most of the productive activities closed and movements of citizens restricted to the municipality they live. Such measures were relaxed only on 4th May when the so-called "Fase 2" (i.e. Phase 2) started: a number of productive activities were allowed to re-open and citizens could start to meet their relatives (in most of the case with movements restricted at regional level) (Sole24Ore website). Social distancing and obligation of use of individual protection devices in public close spaces are still the key rules to be respected to be respected to contain at minimum the COVID-19 spreading.

To have an overview of the current situation and to understand possible risks in the next future, a large, nation-wide seroprevalence test has been carried out within the Italian population during July 2020. Seroprevalence test measures the presence of specific immunoglobulins in patient's blood, whose presence testifies that a contact has occurred between the person and the virus. The test has ascertained that over 1.45 million people (at the national scale) have been affected by the virus (2.5% of the whole population)(website of the Italian Ministry of Health), although with no symptoms, with a large spread across the territory (+48% in some areas in the north where the epidemic has been stronger and prolonged) whereas the largest part of the country has been affected as low as 1%.

This, on the one hand, testifies that the contagion number is at least six times larger than that obtained by the count of official cases (i.e. those diagnosed through oral swabs) and, on the other hand, that the largest part of the country population has not developed COVID-19 antibody and thus is still susceptible to an eventual new epidemic wave. This has further strengthened the national government strategy to continue the containment measures such as social distancing and obligation of use of individual protection devices in public close spaces. Adoption of specific measures for schools and other education institutions (supposed to reopen in September 2020) are under discussion while smart working up to the end of the year for public and private offices is seen as one key point of the Italian COVID-19 containment strategy.

Open issues under discussion

At the time of this report there are different open issues under discussion, among there at least two deserve to be mentioned:

(1) IMMUNI contact-tracing app: Since early May Italy has been gradually easing restrictions on movement and business activities, but there is concern that infections may surge again if people don't stick to social distancing rules. The app dubbed "Immuni" (immune) is aimed at reducing the risk of such flare-ups by recording when users are in close proximity with each other. Their mobile phones will exchange codes through Bluetooth technology. If a person tests positive for the virus, the app tells recent contacts to self-isolate and get tested, helping health authorities to react quickly and limit contagion. According to the COVID-19 emergency unit, in this way we will be able to identify someone who was sitting on the bus next to an infected person, or similar. There has been heated debate in Italy over possible privacy violations, but the government has said users' personal data will not be collected and the app will not geolocate them. In addition, all recorded contact logs must be deleted once the health emergency is over or by Dec. 31 at the latest. The debate is still going on, and at the present time only about four and half millions people have installed Immuni contact-tracing app.

(2) Declassification of the minutes of the Committee of COVID-19 experts: In the end, the turning point arrived, the secret-level of the minutes of the Technical-Scientific Committee on the period of the Coronavirus emergency was removed. The long-awaited and hoped-for decision came after days of very harsh polemics against the Italian Prime Minister Giuseppe Conte, who has been accused on several occasions of trying to hide the whole truth about the Decrees used in the months of March and April. The government had appealed to the Council of State against the decision of the TAR (i.e. Tribunale Amministrativo Regionale, the administrative court working on regional basis) to make public the proceedings secreted of the Technical-Scientific Committee of the Civil Protection. The announcement was made by the Einaudi Foundation through a press release reporting that it received the documentation in question from the Presidency of the Council of Ministers. From the beginning of August, such minutes of the Committee of COVID-19 experts are available on the Einaudi Foundation website. In this way "information and transparency with respect to elements of such relevance for the life of Italian citizens will prevail" said Einaudi Foundation representatives.

Ignoring the Wake-Up Call or in Denial?

By Geary Sikich, Entrepreneur, consultant, author and business lecturer
Received on 10th August 2020 and accepted after editorial review on 24th August 2020.

As of 5 August 2020, COVID-19 has claimed over 700,000 lives and has over 18 million confirmed cases. Yet, it seems that people are casually disregarding protective measures that have been enacted by governments at all levels. Could it be that confusing information in the early stages of the pandemic contribute to the seemingly casual approach people are taking? Or, could people be numb to the seriousness of

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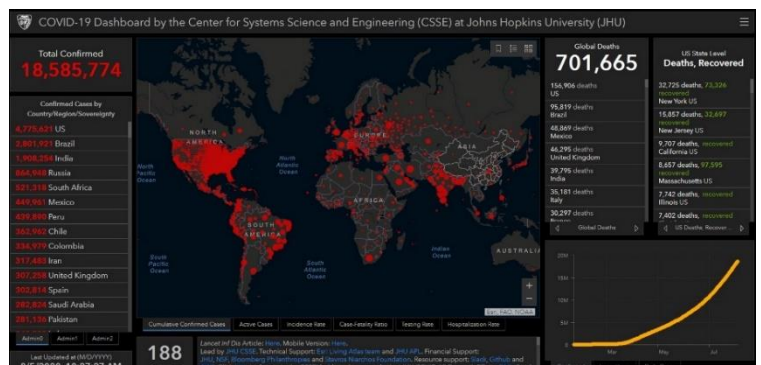
this pandemic because they have been conditioned by movies, such as, Contagion, Outbreak, Flu, etc.?

The Effect of Conditioning – Movie Mayhem

Movies, such as the ones I cited above and the numerous disaster films that proliferate in Hollywood and film studios across the world have an effect on people. Made for television disaster films and other television series, reality shows, etc., have an effect on people, influencing them to think that this is the real world. In fact, you can readily do a simple survey of television watchers and by asking a few simple questions determine how their beliefs about the world have been shaped by what they watch.

It is difficult to get people to acknowledge the seriousness of the COVID-19 pandemic when they do not see people in Hazmat suits desperately attempting to save the human race from carnage and extinction. When we look at the real world, we do not see dead and dying laying in the streets with frantic First Responders and medical people screaming for assistance STAT! The news media does not get to do extensive coverage of Emergency Rooms. Why? Because they are Emergency Rooms and this virus is pretty easy to spread from patient to reporter, camera person, etc.

Take a look at the photo. This is what movies condition us to expect: chaos, confusion, etc. Reality is hard to rationalize when we do not see the virus and being told that we need to wear masks, social distance, take precautions, are subject to lockdowns and have freedom of movement curtailed.

America (USA) Not Used to Not Entitled

Americans love their freedom and chafe at being told that they cannot do something. "You have to wear a mask". "You have to social distance". "Wash your hands frequently". These and other well-intentioned orders are being regularly ignored. In many instances fights, shootings and other confrontations have occurred as a result of attempts to enforce the rules. Is civil disobedience the result of frustration? Or, is it human nature? By the way, the US (America) is not the only place where these events occur, it just has media attention and gets broadcast and appears in social media applications where you can complain, post just about anything and feel free to express yourself. Try doing that in some other countries.

VUCA – America

VUCA – Volatility, Uncertainty, Complexity, Ambiguity is a good reflection of where the USA is today. We have to begin to understand the interdependencies that the pandemic is revealing. The current situation in the USA can be broken down into five parts:
- Economic
- Societal
- Geopolitical
- Environmental
- Technological

These five categories contain many sub-categories and critically, they are interdependent in many complex and opaque ways. A brief discussion of each follows:
- **Economic**
  The USA is still one of the strongest economies in the world today. However, the strains of the pandemic are beginning to become apparent. Widespread layoffs in the service sector have caused unemployment to surge. The service sector, gig economy or whatever you choose to label it accounts for approximately 70% of Gross Domestic Product (GDP) and almost 80% of

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employment in the USA according to the authors of COVID-19: The Great Reset. These workers have been hard it by the pandemic. How long can the economic strain be sustained before the situation erupts? Government stimulus has helped. However, the second round of stimulus is now mired in political bickering, leaving those without a safety net (i.e., savings) with few options.

- **Societal**
  We are seeing a fraying of society in the USA. The pandemic has brought a lot of tension to the surface. Just yesterday evening and early this morning (9, 10 August 2020) Chicago is experiencing widespread looting in its business district, where shops have been broken into and looted. An Alderman stated in a news interview that, "The looters show no fear of the police" as they ransack stores. The COVID-19 pandemic is putting a lot of stress on the USA; stress that the out-of-work service sector is expressing in growing violence and protests against the system.

- **Geopolitical**
  The domestic political situation in the USA is currently best described as divisive. It seems that there is little bi-partisan support for the enactment of a unified response to the pandemic. Instead of 50 states operating as one, we have each state operating against the others for supplies of personal protective equipment, etc. There is no uniformity of what is required for individuals – "wear a mask, don't wear a mask". Lockdowns are inconsistently enforced. The Federal government is at odds with the states in many critical areas. All in all, the geopolitical situation in the USA is an unhealthy mess and may not get well soon. This will have an effect on the containment and extinguishment of the pandemic due to inconsistent and conflicting guidance.

- **Environmental**
  While the environment has benefited from the pandemic – less pollution due to lockdowns, plant closures, less driving, etc., there is another aspect to the environmental impact of the pandemic. The vast amount of medical waste generated will have to be dealt with at some point. The unregulated waste from discarded masks may actually present a vector for the coronavirus to continue its spread. The environmental impact of closed buildings reopening can present additional healthcare risks. Cleaning of buildings to ensure that they are safe and habitable is an environmental concern and a potential environmental impact that needs to be assessed and addressed.

- **Technological**
  Technology has seen a temporary shift, i.e., working from home, working remotely, etc. This has been an interesting development as more and more companies are seriously considering making the change permanent. The change from office to home work environment may be viewed by many as a blessing. However, the stress that it puts on infrastructure (environmental impact) cannot be overlooked. The USA has an old infrastructure that may not be as robust as it should be. Additionally, we see the threat of cyber intrusion, the need for greater cyber security and physical security as issues that impact the technological area. In the area of medical technology there are stresses to develop a vaccine to address COVID-19. The question of when a vaccine will be available, its effectiveness, etc. is not know at present, putting more stress on technology for a solution.

Concluding Thoughts

My recent article, entitled, "Where is Our Next Shock Coming From", offered five potential shocks that could result from the COVID-19 pandemic. I will summarize them below as they apply to the USA. While these potential shocks are not guaranteed to materialize, they are worth considering for government and business leaders at all levels as we navigate the COVID-19 pandemic and its aftermath.

- **Shock # 1:** COVID-19 Economic Recovery – An oscillating recovery with one step forward and maybe two steps backward for a while and then a gradual smoothing of the oscillations and a resetting to another operational model may be the reality. Somethings will change forever and somethings will cease to exist. However, the path forward has always been marked by extinction and renewal. The hospitality industry – restaurants, hotels and related services may not see a robust return to the pre-COVID-19 days. The transportation industry is being devastated by the impacts to airlines operations worldwide. The cascade effect has seen oil prices drop to record lows and tenuously recover some of the pre-COVID-19 price per barrel. Many who depend on

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jobs in the service industries could find that the road to recovery is one that will experience significant after-shocks.

Bottom Line: Economic recovery will not be rapid; many industries will shrink as a result of changing market preferences and a large segment of the population my never get out from under the yoke of debt.

- **Shock # 2:** Geopolitical Tensions Explode into Armed Conflict – Take your pick of potential hotspots that could explode – Russia – Ukraine, China – India, India – Pakistan, North Korea – South Korea, China – USA, Europe – Eastern Europe, Middle East – anywhere, Israel – Iran, Saudi Arabia – Iran, Iran – USA, the list could go on and on; but, I think you get the gist. Could we be on the path to a major global conflict? The tipping points are there and COVID-19 has provided fuel for the fires. Internal conflict in the USA is already occurring on a limited basis, could it become widespread?

Bottom Line: COVID-19 has created the ideal storm for fanning the flames of national and global conflict. Instability, desperate measures to retain a status quo, loss of economic exchange due to trade policies; the smallest spark could set off a chain reaction that would be devastating.

- **Shock # 3:** Sovereign Debt Triggers Global Depression – Even while the markets continue to recover, the issue of Sovereign Debt hangs over us like the Sword of Damocles. It's not just the US that is of concern, it is every major country in the world. Debt is rampant and governments are printing money as fast as they can. What will it take to lose confidence in a country's fiat currency?

Bottom Line: A COVID-19 induced depression could lead to large scale conflict with significant consequences.

- **Shock # 4:** A Great Reset – Leaders of the world unite to declare a clearing of all debt from the books. Everyone starts over again with no debt obligations. While this may seem farfetched and in the realm of fantasy, it could happen. According to Wikipedia a debt holiday, debt relief or debt cancellation is the partial or total forgiveness of debt, or the slowing or stopping of debt growth, owed by individuals, corporations, or nations. From antiquity through the 19th century, it refers to domestic debts, in particular agricultural debts and freeing of debt slaves. In the late 20th century, it came to refer primarily to Third World debt, which started exploding with the Latin American debt crisis (Mexico 1982, etc.). In the early 21st century, it is of increased applicability to individuals in developed countries, due to credit bubbles and housing bubbles.

Bottom Line: A low probability, high impact event that would be rationalized by everyone afterward, expressing that they all saw it coming – a "Black Swan" by Nassim Taleb's definition. Could a debt reset alleviate the social ills that COVID-19 has brought to the surface?

- **Shock # 5:** The Internet Lynch Pin Collapses – Any number of causes for a collapse of the Internet have been posited; from solar flares to hackers. While it seems impossible for the Internet to collapse, the reality is that the Internet is fragile in so many ways. One can think of very few areas that the Internet has not penetrated. However, there are fingers of instability that emanate from the Internet to almost every aspect of society. Connected as we are, could we survive a significant or total degradation of the Internet? How dependent is the world on this fragile underpinning? It goes beyond social media into the heart of all of the world's critical infrastructures, geopolitical interfaces, financial, manufacturing, food producing, transportation, healthcare, etc.

Bottom Line: A low probability, high impact event that would be rationalized by everyone afterward, expressing that they all saw it coming – a "Black Swan" by Nassim Taleb's definition.

I leave you with an excerpt from an article on Ulysses Grant that reflects decision making in times of uncertainty.

> *"Once, a colonel approached Grant with a requisition order authorizing large expenditures. Briefly reviewing the report, the general gave his approval, catching the colonel by surprise. Might the general want to ponder the matter a little longer? Was he sure he was right? Grant looked up. 'No, I am not,' he responded; 'but in war anything is better than indecision. We must*

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decide. If I am wrong, we shall soon find it out and can do the other thing. But not to decide wastes both time and money, and may ruin everything.'"

This concludes a snapshot view of the current COVID-19 situation in the USA. It is not meant to be comprehensive or focused on traditional emergency response perspectives. It is meant to get the readers thinking about the complexity that we are dealing with and the realization that things do not occur in a void; actions, reactions all cascade and have collateral effects.

References

Apgar, David, "Risk Intelligence – Learning to Manage What We Don't Know", Harvard Business School Press, 2006.

Chernow, Ron, "Grant" Penguin Press; 1st Edition October 10, 2017, ISBN-10: 9781594204876, ISBN-13: 978-1594204876, ASIN: 159420487X

Davis, Stanley M., Christopher Meyer, "Blur: The Speed of Change in the Connected Economy", (1998).

Forstchen, William R. Ph.D.; "One Second After", Forge Books; 1st edition (March 17, 2009), ISBN-10: 0765317583, ISBN-13: 978-0765317582

Kahneman, Daniel, Rosenfield Andrew M., Gandhi, Linnea, Blaser Tom, Harvard Business Review October 2016 Issue; "Noise: How to Overcome the High, Hidden Cost of Inconsistent Decision Making"

Kami, Michael J., "Trigger Points: how to make decisions three times faster," 1988, McGraw-Hill, ISBN 0-07-033219-3

Kovach, Bill and Rosenstiel, Tom "Blur: How to Know What's True in the Age of Information Overload" 2010, Bloomsbury USA

Levene, Lord, "Changing Risk Environment for Global Business." Union League Club of Chicago, April 8, 2003.

McKinsey   https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/five-fifty-the-quickening?cid=fivefifty-eml-alt-mkq-mck&hlkid=c6ca136656764dab87072927f8d3120f&hctky=2266725&hdpid=31cd7f75-4c0d-42d4-aba8-9235dd0977f7

Musser, George, "Spooky Action at a Distance", Scientific American/Farrar, Straus and Giroux, Copyright 2015 by George Musser, **page(s):** 168-170

Orlov, Dimitry, "Reinventing Collapse" New Society Publishers; First Printing edition (June 1, 2008), ISBN-10: 0865716064, ISBN-13: 978-0865716063

Schwab, Klaus and Malleret, Thierry, "COVID-19 The Great Reset", Forum Publishing, World Economic Forum, 2020, ISBN 978-2-940631-12-4

Sikich, Geary W., "The Financial Side of Crisis", 5th Annual Seminar on Crisis Management and Risk Communication, American Petroleum Institute, 1994

Sikich, Geary W., "Managing Crisis at the Speed of Light", Disaster Recovery Journal Conference, 1999

Sikich, Geary W., "What is there to know about a crisis", John Liner Review, Volume 14, No. 4, 2001

Sikich, Geary W., "The World We Live in: Are You Prepared for Disaster", Crisis Communication Series, Placeware and ConferZone web-based conference series Part I, January 24, 2002

Sikich, Geary W., "September 11 Aftermath: Ten Things Your Organization Can Do Now", John Liner Review, Winter 2002, Volume 15, Number 4

Sikich, Geary W., "Graceful Degradation and Agile Restoration Synopsis", Disaster Resource Guide, 2002

Sikich, Geary W., "Aftermath September 11th, Can Your Organization Afford to Wait", New York State Bar Association, Federal and Commercial Litigation, Spring Conference, May 2002

Sikich, Geary W., "Integrated Business Continuity: Maintaining Resilience in Times of Uncertainty," PennWell Publishing, 2003

Sikich, Geary W., "It Can't Happen Here: All Hazards Crisis Management Planning", PennWell Publishing 1993.

Sikich Geary W., "The Emergency Management Planning Handbook", McGraw Hill, 1995.

Sikich Geary W., "Black Swans or just Wishful Thinking and Misinterpretation?" 2010.

Sikich Geary W., "Risk the Nature of Uncertainty", 2016

Sikich Geary W., "Can You Calculate the Probability of Uncertainty?" 2016.

Sikich Geary W., Stagl, John M., "The Economic Consequences of a Pandemic", Discover Financial Services Business Continuity Summit, 2005.

Tainter, Joseph, "The Collapse of Complex Societies," Cambridge University Press (March 30, 1990), ISBN-10: 052138673X, ISBN-13: 978-0521386739

Taleb, Nicholas Nasim, "The Black Swan: The Impact of the Highly Improbable", 2007, Random House – ISBN 978-1-4000-6351-2

Taleb, Nicholas Nasim, "The Black Swan: The Impact of the Highly Improbable", Second Edition 2010, Random House – ISBN 978-0-8129-7381-5

Taleb, Nicholas Nasim, "Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets", 2005, Updated edition (October 14, 2008) Random House – ISBN-13: 978-1400067930

Taleb, N.N., "Common Errors in Interpreting the Ideas of The Black Swan and Associated Papers"; NYU Poly Institute October 18, 2009

University of Foreign Military and Cultural Studies, http://usacac.army.mil/organizations/ufmcs-red-teaming

Vail, Jeff, "The Logic of Collapse", www.karavans.com/collapse2.html, 2006

Vembunarayanan, Jana. "Risk vs Uncertainty", 2013 (https://janav.wordpress.com/ https://janav.wordpress.com/author/jvembuna/

Venezuelan natural gas rig sinks; http://news.bbc.co.uk/go/pr/fr/-/2/hi/americas/8679981.stm, Published: 2010/05/13 14:38:59 GMT © BBC MMX

Weick, KE 1993, "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster", in Administrative Science Quarterly, Vol. 38, No. 4 (Dec., 1993), pp. 628-652

Weick, KE 1995, "Sense-making in organizations", Sage Publications

Weick, KE 2001, "Making Sense of the Organization", Blackwell Publishers

Weick, KE, Sutcliffe, KM, and Obstfeld, D. 2005, "Organizing and the Process of Sense-making" Organizational Science, Vol. 16, No. 4, pp. 409–41

https://www.aljazeera.com/indepth/interactive/2020/05/plague-mers-history-pandemics-200520124051021.html

https://economictimes.indiatimes.com/markets/stocks/news/us-economy-shrinks-at-record-32-9-pace-in-second-quarter/articleshow/77263426.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

https://economictimes.indiatimes.com/markets/stocks/news/us-economy-shrinks-at-record-32-9-pace-in-second-quarter/articleshow/77263426.cms

https://en.wikipedia.org/wiki/Debt_relief
https://www.entrepreneur.com/article/331198
https://www.youtube.com/watch?v=1mZ1f_8YOEc&feature=youtu.be

COVID-19 and BUSINESS CONTINUITY

ALEX FULLICK, MBCI, CBCP, CBRA, v3ITIL, cABCF

'We're all in it together!' That's the maxim for every nation, community, organization, and individual, when it comes to the pandemic crisis we know as COVID-19. Even the Business Continuity Management (BC/BCM), one of the industries we look towards to help safeguard us against disasters, crises, and pandemics, isn't immune from the affects and impacts of COVID-19. The BC industry's main objective is to ensure that organizations; plan for, prepare for, respond to, and recover from, disaster situations, including pandemics. The problem is that for many organizations, a pandemic Business Continuity Plan (BCP) focused on the unavailability of employees, while facilities, technology, suppliers, and processes, were still readily available and operational. COVID-19 flipped that thinking on its head.

Rarely, does a BCP and/or disaster response embrace more than one disaster scenario impacting an organization at any given time but with COVID-19 impacting organizations around the globe for several months, organizations need to adapt to the fact that other crises and disasters can – and will – occur simultaneously during the pandemic crisis. Case in point being Hurricane Hannah that hit the coast of Texas (USA) on the weekend of July 25 & 26, 2020, while also being in the grips of COVID-19; pushing emergency responders and BC professionals to the limit.

As a result, many BCP plans were ineffective in addressing the pandemic because they didn't effectively cover a global pandemic situation and/or contained so much non-usable information, they simply became unusable. What many BC professionals need to do is refocus their efforts away from numerous, confusing scenario based approach to plans, such as tornadoes, floods, fires, and earthquakes, to something more streamlined and easier for crisis leaders and employees to work with. Measure and create contingencies and responses based on 3 key areas: People Availability, Facility Availability, and Technology/Process Availability. Affectionately, these three can be easily identified as People, Places, and Things.

A major component of the BC industry and its methodology is the identification of dependencies within the Supply Chain. Suppliers both upstream and partners downstream, have all been impacted by the COVID-19. BC practitioners initially identify their organization's key suppliers to and develop contingencies should their primary supplier become unavailable for whatever reason; however, what has proven to be difficult during the pandemic is that not only are primary suppliers impacted and/or unavailable but the second and third tier alternate suppliers find themselves in the same situation as the organization's primary supplier. The situation the BC industry found itself in was a level of risk it had not been in before; COVID-19 was changing the rules.

Professor Kathleen Tierney, author of *'Disasters: A Sociological Approach'* suggests that all those involved with identifying and assessing risk, which includes the BC industry, must look beyond the probable when executing risk models[3]; a sentiment echoed by BC industry expert James Green.

Green notes that the BC industry must begin to change the way it views and calculate risk based on the impacts resulting from COVID-19.[4] BC must review the way it assesses risk levels by re-examining and expanding the usual *'Risk = Probability x Impact'* approach to encompass, as Professor Tierney states,

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[3] https://www.voiceamerica.com/episode/122672/disasters-a-sociological-approach-including-covid-19
[4] https://www.voiceamerica.com/episode/122715/a-challenging-climate-2020-is-a-defining-year-for-climate-change-and-bcm

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beyond the known probable impacts.[5] 100-year events are now occurring at a greater frequency and the breadth of their impact has a greater reach than previously experienced.

According to long-time BC industry expert Pat Corcoran, the BC landscape was historically an Information Technology (IT) centric with little input from business with very few – if any – discussions held with business representatives.[6] In today's world, a business can't operate without technology, as technology has become part *of* the business, not just something used *by* the business. One side of an organization simply can't operate without the other and BC has to ensure that all expectations, assumptions, and objectives, are aligned to ensure BCPs (and any other response plan) are effective and inclusive. As Pat says, *"Those that plan ahead of time will be successful"*. But many didn't plan ahead, or at least not on the scale experienced as a result of COVID-19. Corcoran goes on to say that pre-COVID-19, many organizations planned for, or already arranged, for up to 50% of employees to work from home and the reality is that now there is an estimated 90% of employees working from home.[7] This has created other challenges for the BC industry; logistics, support, security, and privacy.

What was once a contingency strategy for a small percentage of employees (i.e. Work at Home), has now ballooned to nearly an entire workforce for many organizations. The shipment and support of laptops, PCs, Printers, system upgrades, and desktop support suddenly isn't as easy to perform as it once was, causing the BC industry to review contingency and incident response strategies that would have been acceptable within the confines of the office workspace but now don't seem to be as easily executable as they once were.

According to privacy expert, Constantine Karbialotis, the change with employees working from home, increases the risk of Privacy and Security violations. [8] If BC is required to address and mitigate risks and develop contingencies to address these risks, then suddenly the industry finds itself in a 'new world'.

So, what is in store for the future of the BC industry? What might the landscape look like for BC when COVID-19 is declared over? If anything, BC needs to develop a closer tie with an organization's Human Resources (HR) department. COVID-19 at its core, is a people disaster, which escalated to impact other aspects of our daily lives and our operational activities. As a people disaster, HR needs to be involved with the BC department due to the continued personal and operational changes, such as work from home capabilities, that COVID-19 has identified.

As COVID-19 continues to impact organizations around the globe, perhaps the 'new normal' for BC is yet to be defined. What is known is that BC will never be the same going forward. COVID-19 has made sure that the industry must change, refocus, and reprioritize how it will function in the post-Covid world. What that new normal holds for BC is yet to be determined; in fact, the new normal has yet to be defined for all of us. *'We* are *all in it together'* after all.

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[5] https://www.voiceamerica.com/episode/122672/disasters-a-sociological-approach-including-covid-19
[6] https://www.voiceamerica.com/episode/123980/covid-19-and-business-continuity-management
[7] Ibid
[8] https://www.voiceamerica.com/episode/124251/privacty-and-business-continuity

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If anyone has any questions, please contact Russell DIPPY at russell.dippy@outlook.com

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