LOCATION-BASED DATA IN CRISIS RESPONSE

ORIGAMI RISK

Data's Critical Role in Pressing Forward

While initial outbreaks of COVID-19 hit densely-populated, urban areas of the United States the hardest, the coronavirus is now beginning to surge across less populated parts of America.

> *Rural counties now have some of the highest rates of Covid-19 cases and deaths in the country, topping even the hardest-hit New York City boroughs and signaling a new phase of the pandemic—one of halting, scattered outbreaks that could devastate still more of America's most vulnerable towns as states lift stay-at-home orders—Washington Post*

The Washington Post article, *A deadly 'checkerboard': Covid-19's new surge across rural America*, speculates what the next COVID-19 outbreak might look like. "It is coming, and it's going to be more of a checkerboard," says Tara Smith, a professor of epidemiology at Kent State University. "It's not going to be a wave that spreads out uniformly over all of rural America; it's going to be hot spots that come and go. And I don't know how well they're going to be managed."

Specific geographical information now plays a critical role in response, planning, and execution. One of the many things we're learning during the crisis is that addressing the ramifications of the pandemic is a location-by-location challenge.

The Shortfall of a Patchwork Response

As the country heads into an anticipated second wave of outbreak, the need for location-based data will continue to play a key role in the success or failure of responses. To date, we have witnessed the varying impact of the outbreak across the country that has, in part, led to a scattered response. Density of population, accessibility to proper healthcare, language barriers, access to testing, and governmental response and education are just a few factors that feed into the endless possibilities for the "perfect storm" to erupt anywhere, at any time.

Lacking a cohesive federal response to the outbreak, the U.S. was left with a patchwork of 50 different responses to the same crisis, with varying degrees of success. In what ultimately turned into a county and locale response within each state itself, Rebecca L. Haffajee, J.D.,

Ph.D., M.P.H. and Michelle M. Mello, J.D. note:

> *This is the dark side of federalism: it encourages a patchwork response to epidemics. States and localities may decide to implement aggressive disease-mitigation measures, but need not do so. The defining feature of the U.S. response to Covid-19 therefore continues to be localized action against a threat that lost its local character weeks ago.—The New England Journal of Medicine*

An array of micro responses to the outbreak have left organizations working to piece together how to operate across state lines. Many are finding that their disaster or crisis response plans are not sufficient for tackling a national crisis, much less an international one. The details that matter most in mitigating exposure, risk, and uncertainty on an international scale are also found at a local level, meaning organizations need to drive decisions with data collected at a number of levels.

An Ongoing Need for Location Data & Planning

While the need for location-based data has always existed, it was not always viewed as a necessity. Typically used to generate graphics or aesthetically pleasing dashboards, location data can be used to its highest purpose to spot key trends early enough to take action, ensure critical assets are in place where needed, or maintain operations during disruptions.

To this point, we are reminded in the Forbes article *This Is Not A Drill: Surviving Radical Disruption With Data Governance*, that organizations with an existing investment in data fare better through crises and disruption than those that do not. Cultivating location-based data is not a one-time, checkbox exercise. Rather, it is an ongoing project requiring continual data management, organization-wide standards, and a commitment to best practices. Though initiating this process is likely to be daunting, the disruption created by the coronavirus also provides organizations lacking this investment an opportunity.

> *Although painful, disruption like this offers organizations the opportunity to reexamine how and why they do things—to use a crisis for good to eventually become better. And organizations with established data governance practices and trusted data are best positioned to make the types of decisions that will ultimately determine their survival.—Forbes*

The outbreak has cast light on countless shortcomings—both governmental and organizational—that have fed into each other. Despite this, organizations are presented with the chance to come to terms with what their data should look like. Making significant improvements on this front means connecting critical assets to location-based data.

With infection rates and legislation varying from state to county, organizations need to know what their mobility and operating capabilities truly are. Macro approaches that have carried companies this far are now proving to be less than sufficient. For example, simply knowing the number of ventilators, personal protective equipment (PPE), delivery trucks, or essential personnel is no longer enough. The location of those assets themselves are what truly matters—without data dictating where mission-

critical items or people are located, the mere fact that the organization possesses them becomes somewhat useless and diminishes their value.

It is now a necessity to outline which operations or personnel are affected by specific mandates, where assets are located versus where they are needed, and whether there are other location-based threats on the horizon that need to be accounted for. Yet many organizations are not set-up to configure location-based data quickly, especially in the midst of a pandemic and economic downturn. Pulling together and reconciling location-based data for an entire organization is a laborious process that requires following best-practices for an impactful outcome. Doing so requires resources and time—two things that more and more organizations do not have and will likely not have for some time.

When Crises Compound

The world has seen the toll that widespread outbreak of an infectious disease has. At the same time, regions across the United States are experiencing it in a compounded nature. For example, massive flooding has forced thousands to evacuate their homes in Michigan, yet families are choosing to live out of their cars instead of a shelter due to fears of contracting COVID-19. This highlights yet another hole in our nation's disaster preparedness capabilities.

Additionally, the National Oceanic and Atmospheric Association (NOAA) is predicting a heavy hurricane season in the Atlantic. Not only can we expect a turbulent hurricane season amid an already catastrophic period of flooding in the Midwest, but the south is also predicted to realize a second wave of outbreak sooner than most.

As detailed in the Washington Post article, *Disaster season is upon us. The pandemic changes everything*, we are left with the stark reality that the pandemic will likely cause destruction that comes hand-in-hand with natural disasters. Two occurrences that are only becoming more common and severe due to climate change and the cultivation of livestock.

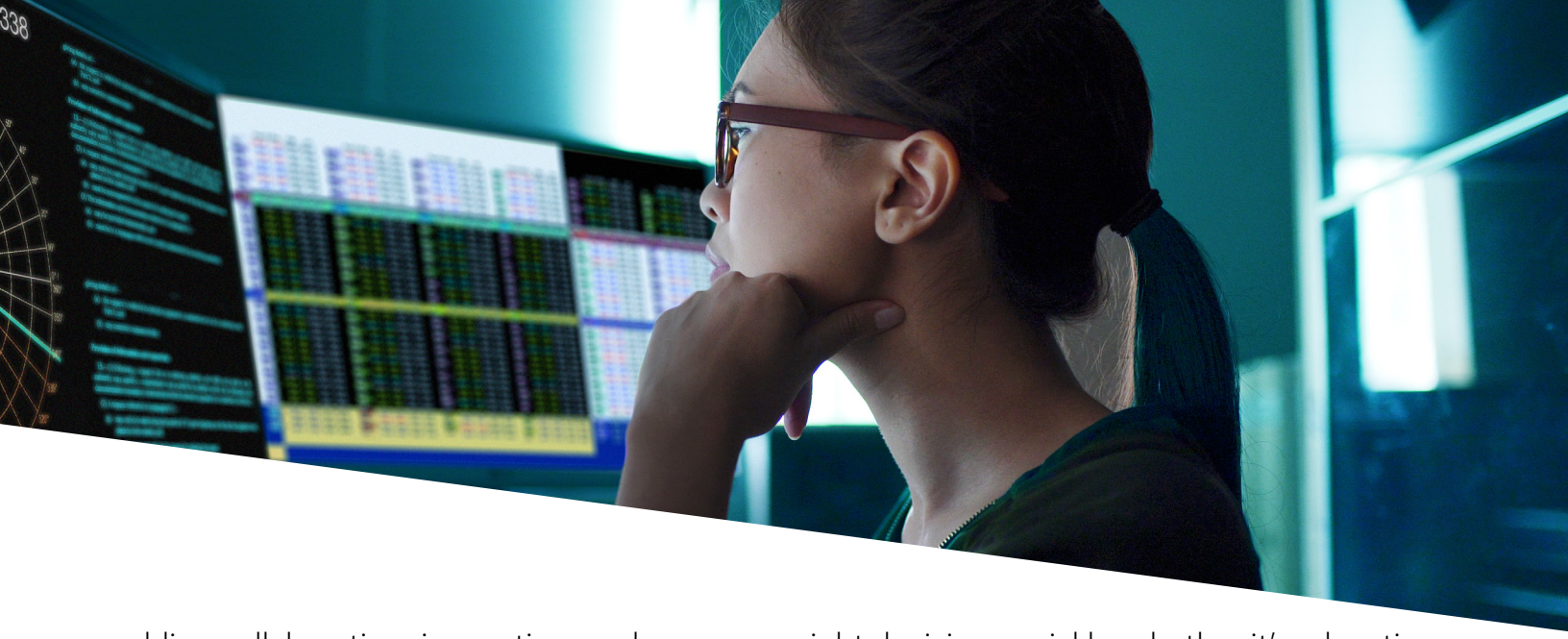
> *These challenges are each daunting on their own, but in the midst of covid-19 and an exhausted disaster-response infrastructure, are we prepared to cope with multiple disasters at once? Even without a pandemic, public health departments and hospital disaster preparedness programs across the United States have been chronically underfunded for more than a decade.—Washington Post*

Such compounding crises are unlikely to be a once-in-a-lifetime occurrence. They are, instead, something we will likely see play out in varying degrees of complexity and severity over time. Organizations can, and should, learn from the current crises and plan for the future in a way that will make a difference. How location-based data is used will be a determining factor.

But what does location-based data provide? Is it worth the overhaul in what would be a time and resource-intensive project? And for organizations left without either as a result of the economic downtown triggered by the initial outbreak, where does that leave them?

What Location Data Unlocks

Every organization has location-based functions or assets that are critical to operations and can be adversely affected by natural disasters, state lockdowns, wide-sweeping pandemics, and more. With location-based data, organizations can approach what's next on the offense,



enabling collaboration, innovation, and leadership within. Right now, any reprieve from the unknown is welcome.

> *Whatever the recovery looks like, it's likely to be uneven across geographies, industries and even local levels if hotspots of new infection develop. This will be especially challenging for enterprises that do business across regions (large chains, for example) or those that operate in areas where the virus is more difficult to contain, such as large urban centers. The need for trusted data should be another lesson learned. Data collection, management and governance can ensure mitigation of short-term impacts and help crisis-proof the business for the future.—Forbes*

The ability to see where critical resources are—stockpiles of goods, manufacturing plants, office locations, distribution hubs, mission-critical personnel—enables organizations to develop data-backed responses. Crises and pandemics are no time for knee-jerk reactions or gut instincts. They are complex situations compounded by countless factors that no single person, or a small department, can reasonably take on while accounting for other responsibilities. The only way to make the right decisions quickly, whether it's relocating personnel, transferring equipment/materials, or building protection for assets, is by utilizing location-based data. When lives and livelihoods are on the line, it is imperative to have answers and actions backed by information.

The Time is Now (for Some)

With the stark reality that compounding crises are already here in the form of massive floods across the Midwest, and more to come with a heavy hurricane season expected in the Atlantic, now is an opportune time to embrace disruption and lean into the opportunity to cultivate location-based data. Through an optimistic lens, the disruption from the outbreak has provided an opportunity for businesses to reexamine data and processes, implement best practices, and cultivate location-based data while picking up the pieces.

From a pragmatic point of view emerges the likelihood that the coronavirus is here to stay, adding further urgency to data-based needs. The Washington Post article *Coronavirus may never go away, even with a vaccine*, paints a reality in which COVID-19 becomes an endemic disease, to the likes of HIV, measles, and chickenpox.

"Experts in epidemiology, disaster planning and vaccine development say embracing that reality is crucial to the next phase of America's pandemic response," the article reads. With this new reality, steps taken by organizations in the next few months could dictate what their place in such a future could look like.

> *More immediately, states should be using this time to craft quick-response systems and protocols. With hundreds of cities and counties reopening, think of each as a mini laboratory yielding valuable data on what will work against the virus in coming years. But most still lack the tools to capture that data... We desperately need better data and fast. It blows my mind we still don't have it—Washington Post*

Coming to terms with the possibility of a future in which coronavirus is just another factor of life is crucial in taking the appropriate steps now to safeguard against failed or patchwork attempts at reacting to future outbreaks. Though, from an organizational standpoint, organizing data by location is easier said than done.

What Can Reasonably be Accomplished

Right now, we are experiencing a small window of reprieve ahead of a potentially heavy hurricane season and an anticipated second wave of COVID-19 cases. How are organizations expected to embark on a laborious data project with minimal resources, time, and bandwidth?

Determining where a project of this scale falls on an organization's priority list is first and foremost. Taking the time to use these crises to identify areas where location-specific data is needed the most is a much-needed exercise in setting a project of this magnitude in the right direction. Start with knowledge gaps your organization is already reeling from, and build on it. From there, identify stakeholders, begin to get people thinking about which departments would be involved, what a timeline might look like, and where buy-in is needed. Even without the ability to execute on curating location-based data, the planning is just as imperative.

While it is highly unlikely that many organizations will be able to get location-based data up and running by this fall, the future is certain to hold use cases. Having data organized in this manner can make a significant difference in disaster planning. It also opens up the possibility of implementing the right technology that can help you expand upon the way you put your data to work. From triggered workflows that notify individuals of necessary details as it becomes available to event-triggered reports detailing high-risk areas based on parameters set within the system, the capabilities that location-based data enables for organizations is extensive.

With the onset of the unforeseen, organizations will be forced to pivot and adapt quickly. What organizations learn as they deal with the current challenges will determine their longevity in the future.

For more information on how Origami Risk can support your organization's location-based data, request a demo. For a list of our coronavirus resources, including webinars, one-pagers, blogs, and more, click here.

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Origami Risk offers integrated risk management and compliance solutions include tools that can transform risk management and compliance processes, contribute to breaking down data silos, and provide a more expansive view of risk and compliance data.

We are recognized as the top-rated software provider for the risk and insurance industry–where system and service come together. The experience and insight of Origami Risk service professionals allows for the optimization of our RMIS to meet the unique, specific, real-world challenges that each of our clients face. The result is the implementation of solutions that make big impacts and improve operations.

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