



## **MACANDREWS & FORBES**

### **LEVERAGE DYNAMIC RISK MANAGEMENT SOLUTIONS WITH MAPTYCS®**

Geospatial risk management firm  
MAPTYCS® provides real-time access to  
risk data customized for any exposure.

## **MACANDREWS & FORBES**

### **GROUP INCORPORATED**

#### **MEET MACANDREWS & FORBES**

MacAndrews & Forbes Incorporated owns and operates a diverse array of businesses, tapping into the broad expertise of its management team to support the delivery of best-in-class products and services to end users and consumers all over the world. Its core strategy is to focus its business lines on strong market positions, high-quality management with vertical expertise, recognized growth potential, and the ability to increase productivity.

MacAndrews & Forbes' businesses span a wide range of industries, from global leaders in cosmetics to biotechnology, printing, mining, and military equipment.

### **THE CHALLENGE**

Risk managers need to have real-time access to information critical in managing a changing landscape of existing and developing key exposures. They need to answer questions without hesitation, and have the data to support their conclusions.

Traditional methods of gathering information meant asking specific questions, like identifying specific challenges within various zip codes. This meant having a very clearly defined problem or structure to reference. However, these constraints limited the depth and breadth of knowledge a risk manager could obtain about their risks.

Also, the data set of known hazards, while some important focus areas have been identified in the past, there has been very minimal credibility in the quality of data for a very long time. Data quality and new approaches to credible analysis of this data has been a key focus for the insurance industry over the last 10 years.

Different insurers have different underwriting standards, which meant risk managers had to work with several different datasets at once.

Relying on spreadsheets with hundreds of line items and values is often overwhelming and errors can easily happen when researching and analyzing data in this way. It wasn't effective or efficient. Every risk is different.

Risk managers may be handling floods today and earthquakes tomorrow, while wildfires, hurricanes, war, civil unrest, and many other risks are waiting in the wings.

Risk is not static, nor should the solution be.

## THE SOLUTION

MacAndrews & Forbes needed a vendor to partner with in their journey toward advanced, real-time risk modeling and management. They partnered with MAPTYCS® after researching solutions available in the marketplace and finding its comprehensive, synchronous results-focused solution to be the right answer.

Manuel Padilla, Vice-President, Risk Management & Insurance at MacAndrews & Forbes Incorporated and Board member at RIMS, explained more about the decision to engage MAPTYCS®, saying, "Ultimately, I was looking for a model where I can basically compile multiple data sets of information and then have immediate access to that information. It moved from being a point-in-time analysis and trying to tally up all of your assets in a particular area to what was happening at that point in time and how your assets were exposed."

MacAndrews & Forbes uses MAPTYCS® software solutions to provide real-time information and access to data. Risk managers can use the software to break down exposures in various ways. MAPTYCS® shows historical, current, and projected details of geographic areas, allowing detailed breakdowns of weather events and probabilities.

MAPTYCS® creates a visual model allowing the team at MacAndrews & Forbes to see where their assets are – then allows risk managers to overlay various conditions like severe weather events on top of the existing assets.

This visual concept of what is exposed is very important for risk managers and their clients. The tool can be used flexibly to map different exposures as desired.

Padilla talked about this flexibility, saying, "MAPTYCS® allows for flexibility to take a data set against your exposure portfolio, your platform, and you're able to overlay a data set on top of your platform. So, the flexibility of the solution is there, the limitation is how creative you are."

Padilla noted he can go a step further using the software solutions from MAPTYCS® when it comes to supply chain issues. Knowing his key vendors and clients may be impacted by weather events that happen at various points in their supply chains, it is critical to track catastrophic events along the supply chain as they arise.

"As long as we're able to define the dependencies between supplier and output, we could project further [down the supply chain]," Padilla said.







**“RISK IS NOT STATIC, NOR SHOULD THE SOLUTION BE.”**

**MANUEL PADILLA**

## THE RESULTS

As a result of its partnership with MAPTYCS®, MacAndrews & Forbes has changed its perspective on risk management and mitigation through real-time access to detailed models that can be manipulated in robust ways that are personalized to each client's book of business.

This shift from static modeling to dynamic modeling has made all the difference for Padilla and the risk managers at MacAndrews & Forbes. Recalling that prior models were static and asynchronous, this move to realtime data has proved invaluable.

Padilla explained, “Mapping this really had a lot of value in that as when I was seeing a major windstorm develop, I could project where that storm was going to impact our assets, identify the magnitude of the exposure, determine a few scenarios where the storm was projected to hit, and then develop financial models as to what an estimated loss may become based on the event dynamics at that specific point in time.

As a follow up to this, I was able to modify the analysis as the storm impact zones changed over the next few hours.

Through this analysis and tracking process, I was able to engage the business continuity group and develop operational and business continuation models designed to offset any direct impact to revenue that was likely to develop.”

Another benefit of having access to accurate information about storms and severe weather events as they are happening is that it gives the risk manager the ability to communicate with their clients before and during the event. Brokers want to know as soon as possible after a catastrophe if property in their portfolios has been damaged. In the past, it was nearly impossible for risk managers to have real-time information about all of its exposed properties.

MAPTYCS® solves this challenge with current, accurate details before, during, and after a catastrophic weather event. This means there is no delay in information gathering and sharing. Brokers can be informed immediately of any damage or destruction to their insured's property and risk managers can view damage in various ways.

Padilla shared three examples of recent catastrophic events his clients faced and how solutions from MAPTYCS® helped him manage these events.

## THE WILDFIRE IN AUSTRALIA

"I was able to track an actual wildfire to within half a mile of my facility in Australia, by all means, absolutely unheard of 15, 20 years ago even by insurance carriers and field level emergency response teams," Padilla explained.

"MAPTYCS® allowed us to basically look at that specific issue and approximate where that fire was initially. We then coordinated with real time field reports from local emergency management systems. We were then able to pinpoint the fire area to our physical plant location."

Padilla explained how he was able to overlay the data from MAPTYCS® with his existing locations. Using the software, he could perform distance analysis and compare wind speed and direction, helping to determine where the fire would move and which properties would be exposed to risk.

## THE HURRICANE IN THE US

Padilla used the software to develop a plan in advance of an approaching hurricane. With 36-48 hours' notice, his team identified the need for a business continuity and risk mitigation plan for properties in the projected path of the storm.

Padilla explained they knew the projection of the storm and anticipated it would impact several locations. Because it was a major storm, the financial impact would be large if the anticipated damage happened to their properties in the path of the hurricane. He estimated it was a few billion dollars' worth of risk from a mathematical perspective.

His team met with the plant managers from each location for business continuity and emergency response planning. Based on the projections from MAPTYCS®, they identified risk mitigation measures at each exposed location, such as moving equipment to higher ground, installing flood barriers, removing tools, and securing outdoor structures — and making sure people were safe.

They also planned to move finished inventory into the stream of commerce and out of warehouses that might be impacted by the storm. By moving finished goods into shipments to retail outlets they were able to eliminate some of the financial impact of the storm.

"In this example, we went from a multi-billion dollar exposure to a few hundred million dollars' worth of exposure, and it was because the storm kept on changing, but our ability to respond to those plans was much more mature," Padilla said. "Because in the past, you basically waited until it was over, and then you picked up the dirt and counted the garbage cans that were strewn all over the place."

"But with MAPTYCS® we can get ahead of the storm, prevent some damage, and reduce the financial impact of these severe weather events."

## THE WAR IN UKRAINE

When the Russian invasion broke out, the world watched with anticipation for many reasons. One of those compelling reasons in the early parts of the engagement, was the potential for damage to nuclear power plants in the area. Vendors and operational needs required that MacAndrews & Forbes identify where their exposures were in relation to the physical location of nuclear power plants.

Padilla explained it was an easy lift for MAPTYCS® to identify all the nuclear plants across the globe. "We were able to concentrate on our area of exposure," Padilla said. "We identified the war areas as they expanded and measured the relative distance to the closest nuclear power plants in the country, and one of them being Chernobyl."

"It was a simple ask of the software to provide a visualization of where the business is located and how far each location is from the areas of exposure. "Within hours, we had the overlay. And within minutes, we had the spatial reference to where we were, to where that was, to where the war was," Padilla said.

# THE LESSONS

MAPTYCS® and MacAndrews & Forbes have partnered together to improve risk management and mitigation, and the lessons learned continue for both partners.

Legrand, Co-Founder of MAPTYCS® described the vision for how the company helps its clients, saying: “Our vision is to offer to each of our clients their own customized location intelligence data aggregator with powerful geospatial analytics, so they can easily assess their property risks and monitor weather events in real-time.”

This vision means adapting and updating software requirements to meet client demands so that MAPTYCS® continues to provide real-time data to help risk managers and others within the insurance ecosystem. Feedback from clients like MacAndrews & Forbes continues to shape the software solutions.

One major lesson for MacAndrews & Forbes is how having clear, reliable data that is consistently available makes a difference in outcomes. Data-driven decisions mean clients can rely on the advice from Padilla and his risk managers and use it to make risk mitigation and management decisions at critical moments.

“It’s about determining what your exposure is, deciding the impact, and making a decision,” Padilla explained. “We have specific data to rely on and make decisions, which lets us be proactive rather than reactionary. MAPTYCS® also gives us the visual needed to project the impact.

“The flexibility of the solution is there; the limitation is how creative you are.”

Moving from reactive to proactive and static to dynamic, shifts the risk management conversations and risk managers equipped with the right tools will help significantly reduce the risk exposure and avoid losses.

Contact MAPTYCS® for your personalized demonstration and see the difference real-time risk management can make.



Ultimately, I was looking for a model where I can basically compile multiple data sets of information and then have immediate access to that information. It moved from being a point-in-time analysis and trying to tally up all of your assets in a particular area to what was happening at that point in time and how your assets were exposed.

Manuel Padilla, Vice-President  
Risk Management & Insurance at  
MacAndrews & Forbes Incorporated and  
Board member at RIMS



MACANDREWS & FORBES  
INCORPORATED





# MPTYCS®



MPTYCS® is an insurtech company that uses geospatial visualization and advanced analytics technology to help insurance professionals easily manage property risk exposure, assess climate risks and climate change impact, and monitor severe weather events in real-time.

SCAN FOR MORE



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

CONTACT US FOR YOUR PERSONALIZED DEMONSTRATION  
[info@mptycs.com](mailto:info@mptycs.com)