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The Economics of Weather Risk Mitigation

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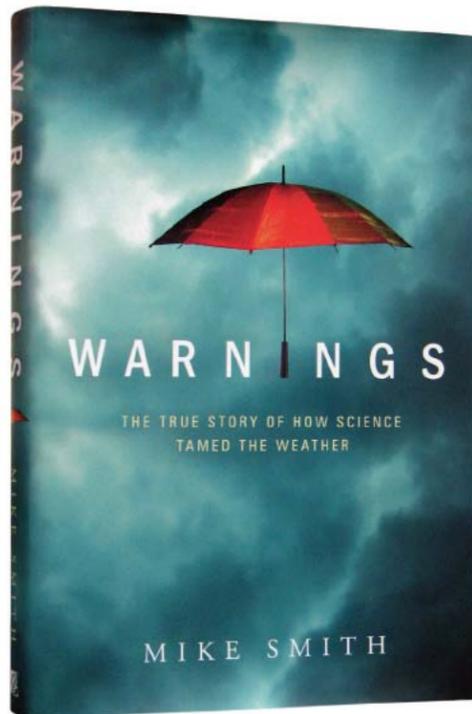


INTRODUCTION

Profitability of your business and safety for your team are key priorities for every business leader. SkyGuard® from AccuWeather Enterprise Solutions, will increase both.

Businesses that routinely guard against theft, workplace violence, fire, and other hazards are often baffled when it comes to protecting against the vagaries of Mother Nature. This White Paper will examine some recent peer-reviewed research on the use of storm warnings along with a comparison of storm warning systems as profit-enhancing business tools.

WEATHER SCIENCE



The new book, *Warnings: The True Story of How Science Tamed the Weather*, (Greenleaf, 2010) demonstrates that weather science has made remarkable advances in its ability to save lives: Wind shear airline crash fatalities cut by 100%, tornado death rate cut by 95%, and tens of thousands of lives saved by hurricane warnings. But many businesses have not embraced this safety and profitability tool. And, when businesses have tried to adapt National Weather Service warnings (broad-scale warning intended for the public-at-large) to their operations, the results have been, at best, mixed.

WEATHER AND YOUR BUSINESS

A new peer-reviewed study, “Multidisciplinary Analysis of an Unusual Tornado,” (Weather and Forecasting, October, 2010, p. 1412-1429, published by the American Meteorological Society) sheds light on some of the problems businesses, colleges, and organizations had in coping with a fatal tornado. The following are verbatim from the study:

- There were several departments that had responsibility for the activation of the text message [warning] system... including unforeseen circumstances (an official in charge of activating the system was off-site). There was also confusion whether the campus was under a tornado warning or a tornado watch and just how serious the threat to the campus was as a result
- NOAA weather radio batteries were dead
- There were false reports of a tornado where none actually occurred and there was conflicting information as to whether a warning was still in effect.
- When structures exist in which there is a chain of communication – that is, when some people rely on receiving the warning from others – a built in delay in the dissemination of that information is introduced... furthermore, these structures can also introduce additional filter on the content of the warning: there is the possibility of misunderstanding or miscommunicating important details about the threat, or of not communicating the message at all.
- In some cases, communicating an “all-clear” was impossible.



SKYGUARD

SkyGuard takes all of the guesswork out of protecting your assets and your people when dangerous weather presents itself. SkyGuard warnings are received only when your specific location is threatened and action is prescribed. Equally important, there are no expensive unnecessary false alarms which often result from using broad-scale government storm warnings. That means you are not ordering expensive shutdowns and sheltering.

How good is SkyGuard? A thirty-two month study (January 1, 2008 to August 31, 2010) of America’s automobile industry documents the amazing value of SkyGuard. An unplanned shutdown is extremely expensive (i.e., half-painted cars ruined, stamping equipment must be cleaned, robotic computers reset, etc.).

| AUTO MANUFACTURER | NWS TORNADO WARNINGS | SKYGUARD TORNADO WARNINGS | HRS. OF PRODUCTION SAVED |
|-------------------|----------------------|---------------------------|--------------------------|
| Company A | 203 | 251 | 31 |
| Company B | 54 | 14 | 31 |
| Company C | 133 | 14 | 93 |

This represents a cumulative saving of \$15 million dollars via the elimination of lost production time to the U.S. auto industry during the period of study.

Similar results were achieved with a world-leading heavy equipment manufacturer with locations throughout the United States, Canada, and Mexico:

| HEAVY EQUIPMENT MANUFACTURER | NWS TORNADO WARNINGS | SKYGUARD TORNADO WARNINGS | HRS. OF PRODUCTION SAVED |
|------------------------------|----------------------|---------------------------|--------------------------|
| Company A | 735 | 47 | 955 |

This represents a saving of more than \$20 million via the elimination of lost production.

But it isn’t just about the bottom-line, it is about the safety of your most important asset, your people.

This same manufacturer took a direct hit from a tornado on February 5, 2008. Because their business continuity department had set up a SkyGuard warning system, they received twenty-two minutes of advance warning allowing them to move 88 people into shelter where they stayed as the plant collapsed around them (along with multi-ton air conditioning equipment on the roof). Other than minor cuts, which occurred while exiting the shelter through the demolished plant, everyone was safe.

The company had rudimentary production back up just 13 days later.

This happy outcome never would have occurred with government warnings. The first tornado warning for the plant’s location was issued four minutes after the tornado struck.

SUMMARY

Tornadoes, hurricanes, lightning, floods, blizzards, ice storms, the value proposition is the same: Site-specific warnings tailored by our expert meteorologists to the exact requirements of your operation communicated via the methods optimal for you. Our clients also enjoy 24/7 call-in privileges.

For more than a quarter-century, we have been providing the most accurate and productive extreme weather information. Isn’t it time your business harnessed this cost-effective business tool? Call us today!



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