Leader® White Paper

Responding to the Unpredictable

Unleash problem-solving creativity with conference call and internet tools

By Michael T. McKibben, Chairman & Founder
Leader Technologies Incorporated, Columbus, Ohio, October 1, 2006

One of the many lessons learned from the Hurricane Katrina disaster is that ordinary people can be both heroic and creative when faced with an unforeseen situation, even one of massive proportions. These heroes were forced by circumstance to respond to a major disaster that on the one hand, could not be predicted, but on the other hand, could be predicted to be unpredictable.

A second lesson emerges from the first in regard to communications in an unpredictable situation: no amount of spending on sophisticated command centers and radio gear can replace the *parallel need* for the plain old telephone (including conference calling) and a basic internet connection as essential communications tools in a disaster. Special gear is certainly needed for unique first responder requirements, but in a disaster on the scale of Hurricane Katrina, having phone and internet tools in the hands of everyday people prevented an even greater loss of human life.

Hurricane Katrina
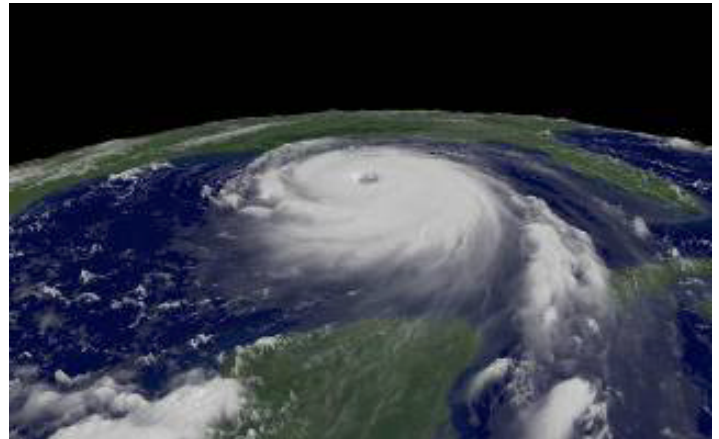**August 28, 2005 | 3:15 PM CST**

Figure 1: The Perfect Storm | Unpredictable by nature.
Source: www.nnvl.noaa.gov/

The people of Louisiana and Mississippi woke on Monday morning, August 30, 2006 having absorbed a direct blow from Hurricane Katrina. Everyone knew it was bad, but how bad? Many areas along the coast were inaccessible. Then, to add insult to injury, news came that the Lower 9th Ward levee in New Orleans had broken and water was pouring into the low-lying areas of the city.

The phone systems started responding with a fast busy signal, if they responded at all. Phone switches that were not flooded became overloaded by people attempting to connect to friends, neighbors and loved ones.

Disasters are unpredictable by nature. Unpredictability is predictable.

Louisiana's Hurricane Katrina response taught us many important lessons. One is that no matter how hard we may try, we cannot predict the unpredictable. Or stated in reverse, the unpredictability of a disaster is in itself *predictable*.

We also saw that when resources are scarce and first responder resources are spread thin or broken, people "on the ground" get creative, fast.

In the case of the Katrina response, Louisiana's telephone systems were either knocked out directly by the storm or were overloaded by citizens and rescue organizers.

Despite the problems with Louisiana's phone systems, some phones did work, and a greater percentage worked as one moved away from the worst hit parishes. In the case of our LeaderPhone® conference calling system, people around the state were able to dial out to our LeaderPhone® Center in Ohio, even when they could not call each other in Baton Rouge or New Orleans. This was the case for Governor Blanco's office and Louisiana's state agencies. Within minutes, Leader provisioned LeaderPhone® collaborative services for Governor Blanco so that she could begin coordinating the State of Louisiana's response to the largest natural disaster in the history of the United States.

The state's elected officials, on the other hand, initially had few tools to work with. No federal or state agency had provided them with any kind of communications tools as an official part of any kind of first responder network. When you think about it, this is somewhat surprising. We are so compartmentalized in our view of emergencies that we "leave it to the professionals," who, after all, are trained to respond correctly in emergencies.

But in the case of the Katrina emergency, the professionals were overwhelmed by the scale of the need. Such is the unpredictable nature of disaster. No first response scenario had ever planned for the scope of a Katrina disaster. Although worst case scenarios regarding New Orleans had predicted what eventually happened in reality, human nature seemed loathe to plan for such scenarios and certainly no official believed it would happen on his or her watch. This time the worst-case scenario was real.

The extensive pre-Katrina Homeland Security scenario planning offered no help. Resources had not been allocated to cover worst case scenarios. Because the professionals could not handle such a disaster on their own, everyone had to get creative, quickly, from Governor Blanco right down to the folks on the roofs of the Lower 9th Ward in New Orleans.

Communications was a key, and for several weeks and months, there was precious little of it. Agencies sometimes resorted to sending couriers to make sure that messages were

delivered. People on the streets settled into a new reality: emergency services were not coming and they were on their own.

In this horrific mess, the Governor's Chief of Staff implemented daily and nightly conference calls using LeaderPhone®. It provided a *strategic focal point* for the Governor to get a consistent message out, clarify rumors and set action plans. Many times those plans were made "on the fly"-- made in the conference call itself. The entire delegation of statewide elected officials was invited to participate in these conference calls. This proved an important strategic decision by the Governor and Andy Kopplin, her then Chief of Staff.

Why did LeaderPhone® conferencing work when almost 1 million telephone lines were down in the state? It worked because people were able to dial long distance, out of the state, even when they could not call each other in the state. There are a number of factors here. Mobile phone operators brought in special mobile towers and expanded the reach of undamaged towers. Also, more voice over internet (VOIP) calls were made as individual internet operators set up emergency WiFi networks.

As a result, LeaderPhone® conference calling services were consistently available to the Governor even when in-state resources were not.

Now to the real creativity – the Heroes in the Storm
(see *Leader White Paper – Heroes in the Storm[1]*)

One of the many Katrina lessons learned - or relearned – is that Aesop was right: "Necessity is the mother of invention." Lousiana's elected state officials exemplified this adage. These officials had no first response resources. No communications systems. No news capability. No vehicles. Just ingenuity.

The Governor's Chief of Staff asked Leader if we could post the conference call recordings on a special "Louisiana (LA) Gov" website, which we did. He then asked us to enable each state agency to upload news reports 24x7 for access by state officials. He then asked if these agency leaders could call in the reports from their phones wherever they were, without having to find access to a computer. Further, he asked if the state's leaders could be allowed to dial in and listen to the latest conference call when they were not able to participate and were unable to use a computer. We enabled all these options, most within a few days in most cases.[2]

With these communications tools in place, the state's elected officials had a <u>good source of accurate information</u> and an ability to access it 24x7. They were also able to <u>call in</u>

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[1] Online: <http://www.leader.com/docs/Leader%20White%20Paper%20-%20Katrina%20-%2010-27-05.pdf>.
[2] Under normal circumstances, such a wide range of features would not be possible to be provisioned within a few days or even months, especially on a large scale. These features were possible due to just patented features available in the Digital Leaderboard® voice, video and data communications software engine we developed.

each night and participate, ask questions, provide information, coordinate response,[3] ask for help, offer help, make suggestions, inspire, encourage, comfort, console, and grieve together… and issue orders. The Governor and her staff used every resource at her disposal to provide leadership.

Examples: Shelter | Transportation | Healthcare

In one case, elected officials in areas not damaged by the storm provided almost daily updates about available shelter resources for the fleeing residents of New Orleans and the hard hit coastal parishes. In another case, the state's transportation leaders provided daily updates of damage assessments to the state's road infrastructure. A third example was the almost daily reports of the progress of the evacuation of the swamped New Orleans healthcare facilities.

Getting Creative
What is needed: (1) coordinating communications, (2) accurate information/news

Many resources are needed when responding to natural and man made disasters. However, we want to focus this white paper on two essentials tools: (1) the need to communicate – one to many, many to one and many to many, and (2) the need to have accurate information with which to make decisions.

We already have telephones, so one-to-one communications is not the subject of this white paper, except in cases, like Louisiana, where the local systems became jammed with too many people trying to call each other. In that case, the systems proposed by this white paper were needed as a backup.

People who do not normally need to collaborate, suddenly become soul mates

Conference calling is the next requirement. In a disaster, people who don't normally collaborate suddenly need to collaborate intensely. On a macro level, Louisiana's various state departments, some of whom did not normally collaborate, suddenly become soul mates in Katrina's aftermath. Take for example the Department of Social Services and the Department of Wildlife and Fisheries. Wildlife and Fisheries deployed their boats to rescue people from rooftops and trees. These storm victims, self-sufficient in normal life, were suddenly homeless and in need of help by Social Services. This became a massive undertaking. Wildlife and Fisheries and Social Services, in normal times, are chronically under funded agencies within a state, so it is understandable that few if any emergency responses coordination tools were deployed. However, when these two agencies had a sudden, dramatic need to communicate and coordinate, they were able to do so via the Governor's rapidly arranged LeaderPhone®.

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[3] That response included the big news stories like the evacuation of the Convention Center and the Super Dome, but also less familiar stories, like the heroism of the Department of Wildlife and Fisheries in their life saving activities.

**Accurate news and information is vital,
otherwise people get in harm's way unintentionally**

The need for accurate and up-to-date news was the second need. People in a life-saving mode do not have time for long conference calls. Therefore, a second need is for accurate, up-to-date news and information. In the case of Katrina, again, on a macro level, this need was met via the Leader News® service where conference call recordings were posted as well as written reports.

Armed with conference calling and news, the people of Louisiana responded to the crisis in the best way they knew. The debates rage as to the level of preparation. However, it is probably safe to conclude that even if Louisiana had been the most prepared state in the union for Homeland Security scenarios, the <u>scope of this disaster dwarfed all the scenarios</u>… and taught us valuable lessons about human ingenuity.

For example, after Hurricane Rita hit, one state official found that hastily arranged trucks loaded with ice were being turned away from his disaster zone because they did not have clearance to enter. He jumped on one of Governor Blanco's nightly conference calls and discussed this problem with the assembled leaders. The trucks got through. This kind of story could be repeated hundreds and hundreds of times.

Accurate information catapults creativity

These conference call recordings and called-in agency reports were posted on Leader News® for all the state's officials to review. This spawned new ideas, new solutions, innovations… and gave people hope that they could solve the problems if they only persevered. And persevere they did.

Leader Dialog™ -- Everyman's Communications Tool

Leader Dialog™ is the world's first free conferencing and free blogging services. It can be used in everyday business, and can also become an important emergency response platform in the event of a natural or man-made disaster. It provides the user with as many conference calling PINs as needed and also provides a powerful blog to use for collaboration.

In everyday communication

Leader Dialog™'s conference call services can be used just as you use conference calling now. You provide the Dial-in number and PIN to desired participants. At the appointed date and time, they dial the number and enter the PIN. Just as easily as that, you are talking. Conference calling is used to coordinate sales efforts, solve problems, plan engineering tasks, get the partners together, have a board meeting, report to shareholders, present your product, get ideas, solicit feedback, teach, and train. For example, a LeaderPhone® state university customer has been using conference calling to conduct bi-weekly professor-student Q&A sessions.

Leader Dialog™'s blog can be used to publish thoughts, get feedback, post photos, share documents, manage projects, and build teamwork. It is a powerful set of tools that allows you to set up either public or private blogs.

In an emergency

Leader Dialog™ can become an important emergency response tool. Emergencies are, by nature, unpredictable. Whenever the appointed emergency response services become overloaded, Leader Dialog's conference call services can be used to help fill in the gaps. In these situations, the people affected by the emergency and the people responding to it can jump on conference calls to coordinate response "on the fly." For example, in the Louisiana Katrina response, the primary emergency services systems of a particular agency went down in New Orleans, so they started using Leader's conference calling system in backup… and still do.
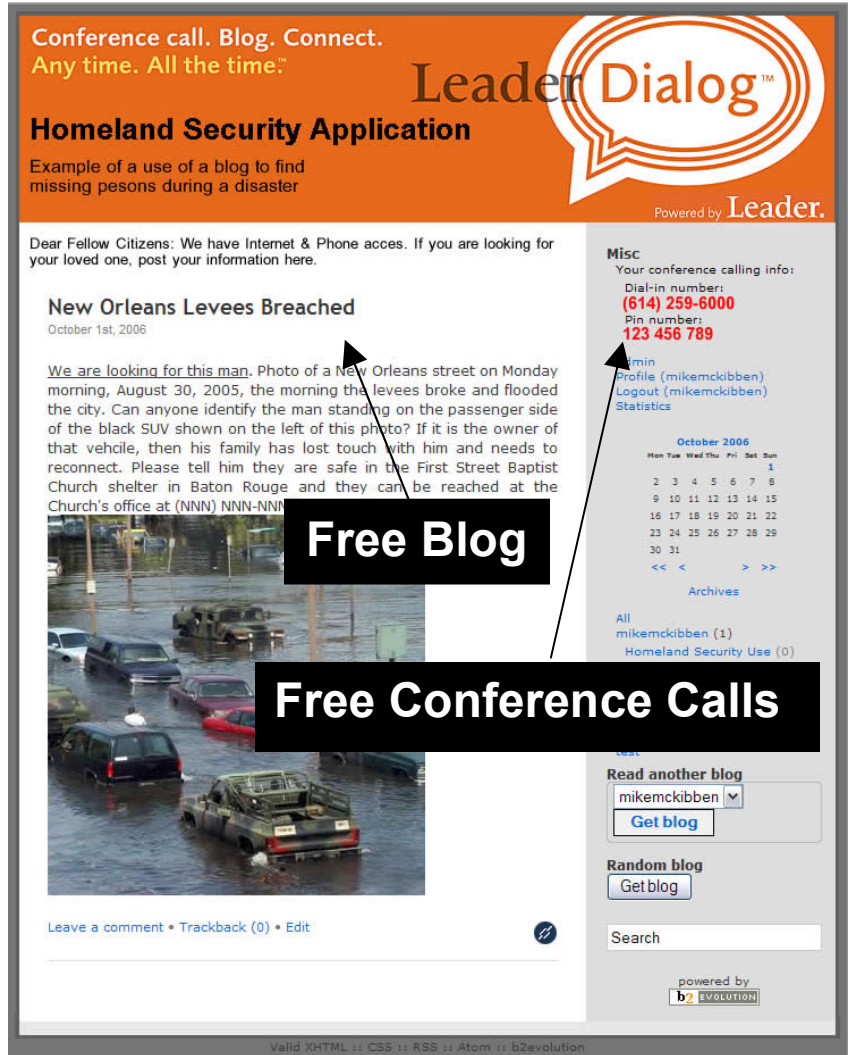

Figure 2: Sample Leader Dialog™ blog used to find missing persons during a disaster.

Leader Dialog™'s blog can have a myriad of uses in an emergency. Local, city, regional and state officials can use it to post news, answer questions, provide information, post pictures and video, and keep everyone informed. For example, the Louisiana state elected official who got the ice trucks through after Rita hit could have used Leader Dialog™ had it been available then. He could have posted instructions for others on how to overcome the security problem he encountered, maybe even posting the contact information of those who could best help.

In Conclusion

Disasters are by nature unpredictable. The fact that they are unpredictable is in itself predictable. Therefore, a good solution to this dilemma is to put communications tools in the hands of everyone affected by a disaster. Then, in the event that the disaster creates demands beyond the first responder's ability to respond, the affected people can "get creative" and quickly figure out how to augment the response.

Leader Dialog™ is a free conferencing and free blogging tool created by Leader Technologies Incorporated that can be used both commercially and in emergency response. *Commercially* it is a high quality, easy to use conference calling product with a blog service. Blogs are being used increasingly in business for everything from opinion surveys, to customer service, to ask the CEO, to editorials. In *Emergency* response Leader Dialog™ can be used to quickly get people together to share information, discuss what needs to be done, and coordinate who is going to do it. Additionally, in an emergency the blog provides a place to post information and news, connect displaced people, answer questions, console victims and give hope.
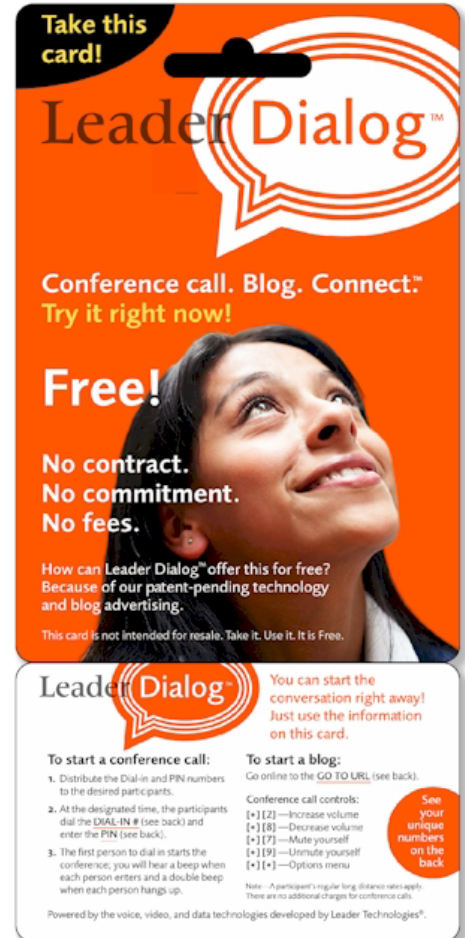
Figure 2: This Leader Dialog™ card gives you all the information needed to set up your own emergency response "command center" in an emergency situation Hurricane Katrina. In situations where first responder resources are stretched to the maximum, your creativity and that of your friends, neighbors, family and colleagues becomes a necessity.

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About the Author

Mike McKibben is the Chairman and Founder of Leader Technologies® Incorporated, a web software company that specializes in integrating voice, video & data across existing application systems to enhance collaboration & decision making. Leader® provided a simulated emergency conferencing and alerting environment for Terrorex '04 in Las Vegas that was sponsored by the U.S. Department of Homeland Security, Boeing and the U.S. Department of Defense. More recently Mr. McKibben co-hosted the Ohio Homeland Security Initiative at Ohio State University to bring together existing, working technologies to assist the first responder community in getting effective, scalable solutions implemented sooner rather than later. In early 2006 Leader created Leader Dialog™ to provide innovative new communications services to large numbers of people, partially in response to what Leader learned in supporting the State of Louisiana's Hurricanes Katrina and Rita responses. The underlying software engine for Leader's products, the Digital Leaderboard® engine has just been approved for a patent. Mr. McKibben is a finalist for the Columbus Technology Council's 2006 Executive of the Year. Learn more about Leader at www.leader.com. You may contact Mr. McKibben at mmckibben@leader.com , or at Leader Technologies, 614-890-1986.

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