



## **AchilleShield™**

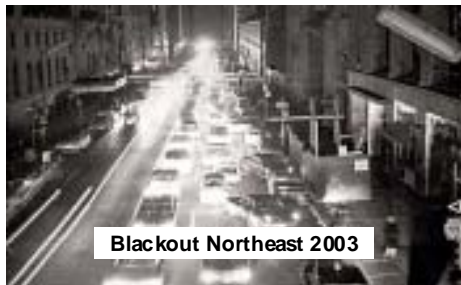
Business Continuity Planning Simulation  
Technology and Service

***Preparedness Is the First Line of Defense***

# The Risks Confronting Your Bank Today Are Daunting

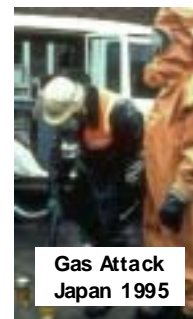
## Natural Disasters

- Earthquakes
- Hurricanes
- Flooding



## Random Events

- Regional Power Outage
- Structural Collapse
- Disease Outbreak



## Terrorism

- Bombings
- Water Supply Contamination
- Biological / Chemical Weapons
- Dirty Bombs

# The Short Term Losses Resulting from Poor Planning are Enormous

## Disaster Plans Get New Scrutiny After Blackout

John Schwarz

The New York Times

August 19, 2003

When Richard A. Grasso, the chairman of the New York Stock Exchange, said last year that the Big Board was considering a backup trading floor at a "nuclear distance" from New York City, it was treated as an ill-phrased gaffe. But after last week's power failure that blanketed an area stretching from the Northeast to the Midwest, companies are taking a harder look at whether their disaster recovery plans go far enough - literally.

"The geographic dispersion of this event really causes some rethinking for companies," said Jim Simmons, the chief executive of Sungard Availability Services, a company in Wayne, Pa. that has disaster recovery centers for about 10,000 employees in North America and Europe.

Many companies that tried to manage their own disaster recovery plans, he said, found on Aug. 14 that their backup site they had created was still within the blackout area. He said customers told him: "Gee, we thought it would be out on Long Island and not in New Jersey."

But even having backup centers hundreds of miles away might not have helped, he said, since the blackout zone extended into the Midwest and Canada. "The education coming out of this disaster is you can't predict a disaster," he said. Companies like his ensure that the data is there and desks are there for clients who pay anything from a few hundred dollars a month to a million dollars a month. "For some companies," he said, "minutes of downtime can cost millions of dollars."

So many companies look to services from companies like Sungard and I.B.M. to handle that side of the business for them. They can create disaster-hardened backup offices - even if they

happen to fall within the blackout zone - ready to go on short notice and linked directly to their computer networks in ways that ensure against any loss of important information and little, if any, interruption of business transactions.

Having operations distributed across the nation is an old and honored strategy for companies with big call centers, said Gary Morgenstern, a spokesman for AT&T. When a call center in New York goes down, he said, "that traffic is automatically routed to the West Coast," and the flow of commerce continues.

But for many companies, setting up redundant operations in far-flung places can be expensive, said Don DeMarco, vice president for business continuity and recovery services at I.B.M., "and the probabilities are fairly low" that a true test of such preparations will ever come. "I can only think of one or two clients in the past couple of months," he said, "who have told us they want substantial geographical separation between their operations centers."

Every single company should decide what their tolerance for risk is," he said. The thrifter strategy makes sense until a big problem like the blackout occurs. "If they need it, it's sure nice to know it's there," he said.

More and more, the choice is not theirs to make. Government regulations of financial industries, for example, increasingly require substantial efforts aimed at ensuring stability in an emergency. And in many cases, customers are demanding to see proof that a business is ready for trouble before they will award it a major contract or place a company within its supply chain of manufacturing, he said. Today, he said, risk involves "the whole ecosystem" of commerce.

Still, despite last week's big scare, new customers have not started banging down the doors, said John Shields, executive vice president of Telehouse, a data center and disaster recovery company in New York that works largely with the financial services industries. Employees of Sumitomo Bank, a client, walked from their Midtown Manhattan offices to the Telehouse offices near Wall Street, and found a building with the lights still on and the air-

**"you can't predict a disaster"**

**But you can be prepared !!!**

for many companies to plan before deciding to follow in Sumitomo's footsteps. It takes a little while to get

of so-called business continuity and disaster recovery firms, however, are already talking about increasing the scope of their contracts, said Richard Fleischman, founder of a disaster recovery firm in New York that bears his name. "I'd say 75 percent of them," he said, "have requested additional facilities and additional service."

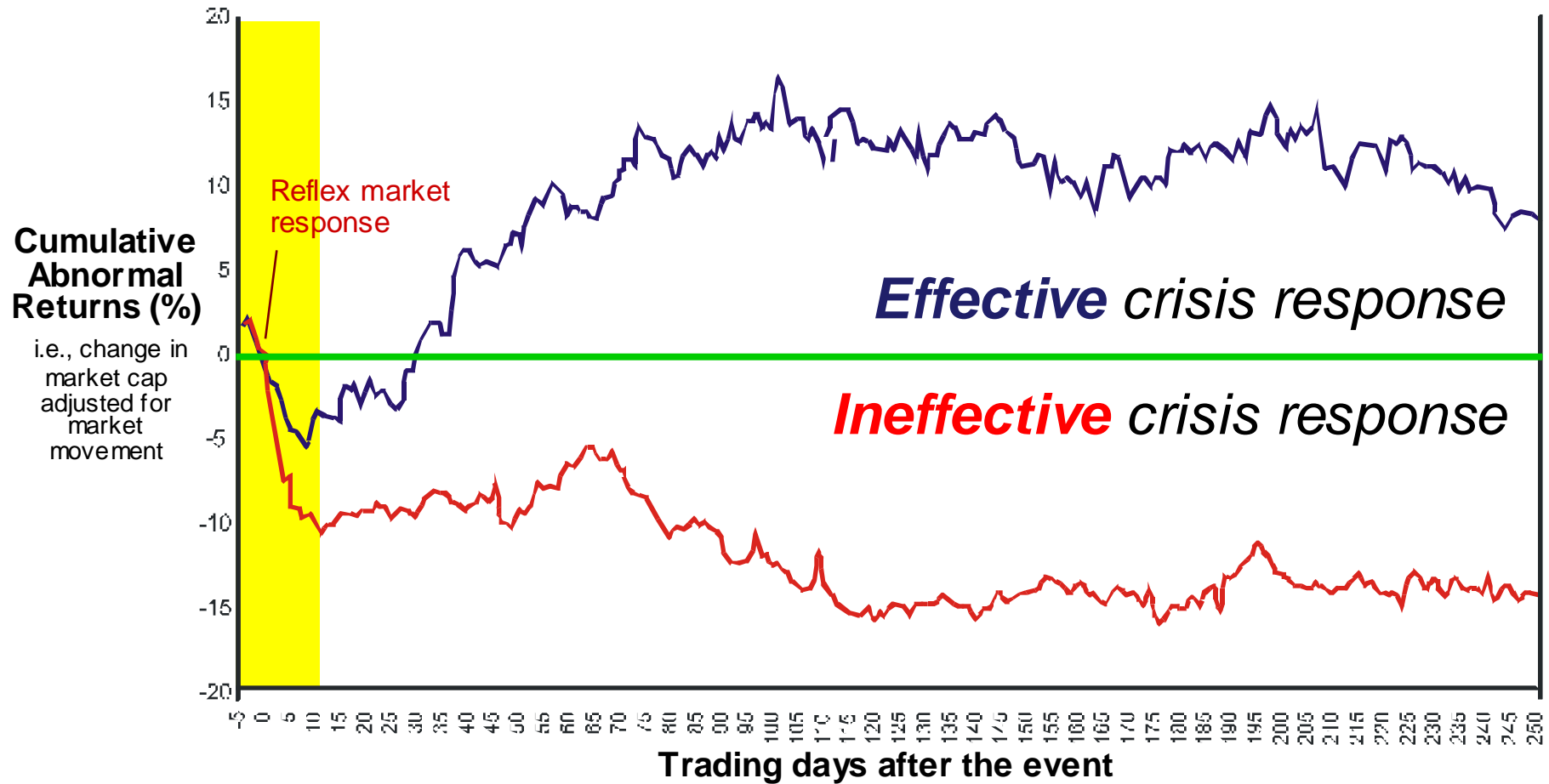
That is not surprising, but it is not always the case. Mr. DeMarco of I.B.M. said that some customers learn from experience, but seem to learn the wrong lesson. He described a corporate client that survived a major flood with the help of his company's disaster recovery services, and then declined to renew its contract for the next year. Mr. DeMarco said he was aghast. "Are you kidding?" he recalled asking. "We just saved your company."

The client, however, was unmoved. "We're in a hundred-year flood zone," Mr. DeMarco recalled him saying, "and it just happened."

**"minutes of downtime can cost millions of dollars."**

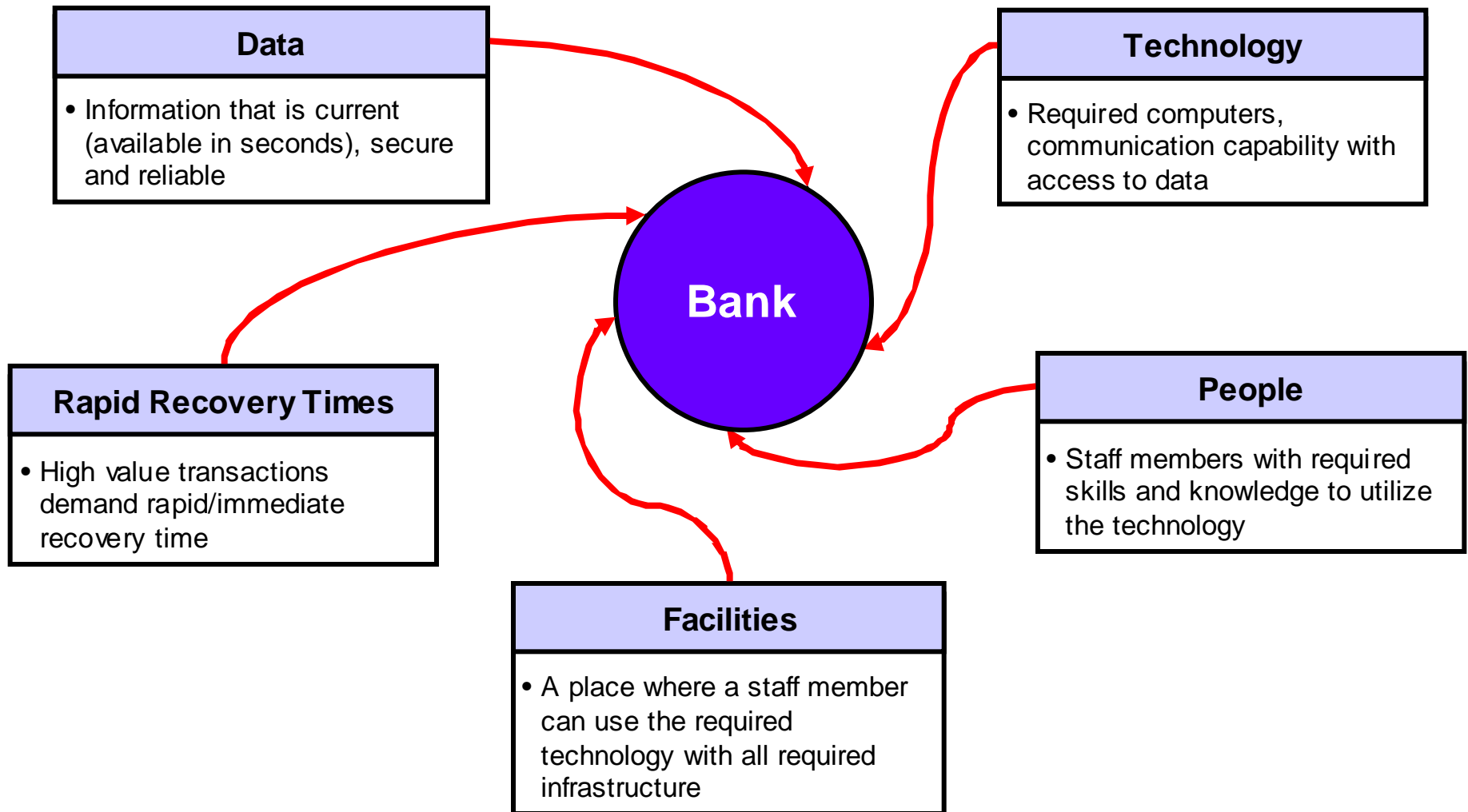
**Data recovery is only part of the solution;  
Physical infrastructure must be there in order to conduct business**

# How Your Company Prepares For and Deals With the Aftermath of Crisis Directly Impacts Shareholder Value



Planning has both short term and long term impact on your companies financial health

# Banks and Financial Institutions Have Unique Operating Requirements to Conduct Business



All of these dimensions **MUST** be in place to conduct business and **MUST** be a part of a world class business continuity plan

# Our Research Has Identified the Four Key Elements of Best Practice in Business Continuity Planning



Simulation Technology is the most critical aspect to achieving the best plan and is the most difficult to implement

# Why Is Simulation Technology Critical to Effective Business Continuity Planning in Banks?

- Disaster recovery planning is a highly complex problem with an enormous number of potential configurations

***For a bank with just 10 facilities,  
4000 people and 50 business groups  
did you realize that there are over  
2,000,000,000,000,000 recovery options!***

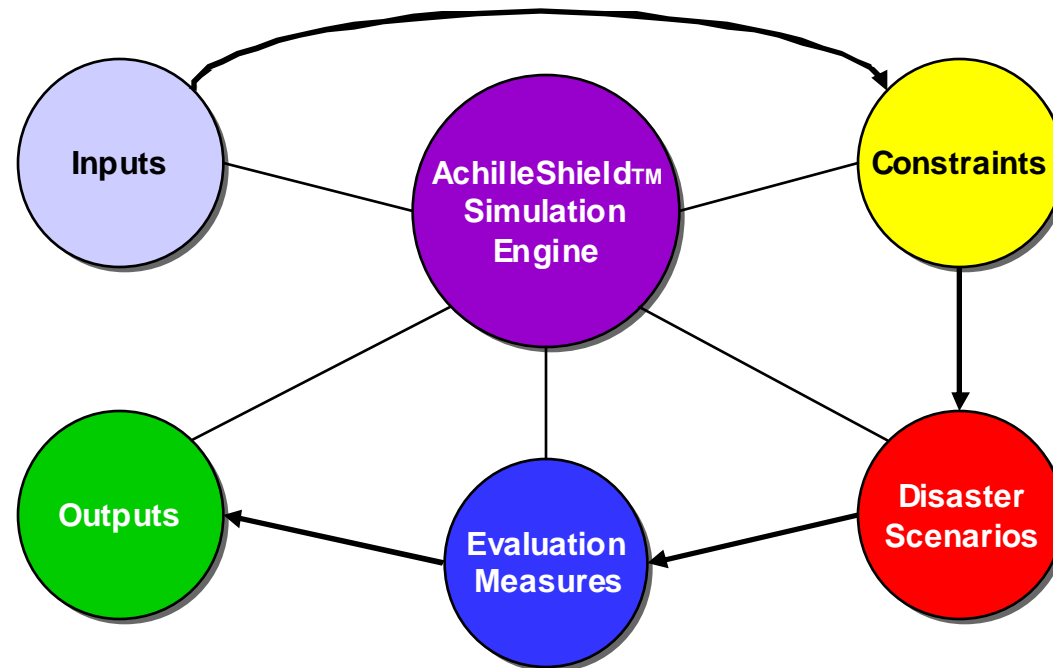
- The investments to achieve high levels of recovery capability could exceed hundreds of millions of dollars
- Determining how to minimize required investment costs and maximize recovery capability is impossible with conventional management tools/techniques

**AchilleShield™** business continuity planning simulation technology is the banking industry standard tool for developing  
***“The Best Business Continuity Plan”***

# AchilleShield™ Was Developed Post 9/11 Specifically to Analyze Disasters and Optimize Recovery Capability

## AchilleShield™ Core Technology

- Proprietary software simulation based on constraint optimization techniques and algorithms
- Simulates disasters and tests the organization's business recovery capability under a multitude of recovery configurations
- Optimizes recovery plans searching for the lowest costs to achieve required risk readiness levels





# AchilleShield™ Simulation Dashboard

## AchilleShield™

### Business Continuity Site Allocation Process Demonstration

#### Simulation & Optimization

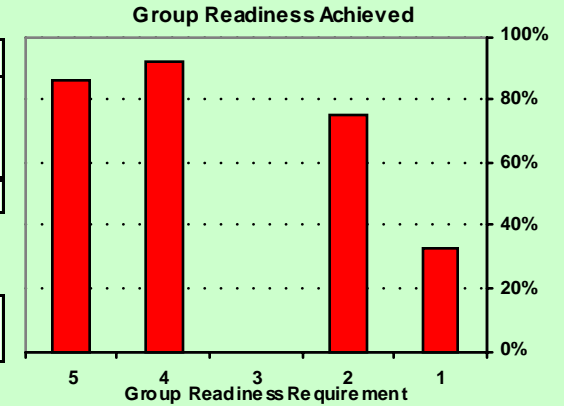
Goals	Goals	Constraint				Measure		
Readiness %	Investment \$	Collisions (From Same Site)	Assigned Seats	Missing Seats	Workers on Leave	Site Change	Quake Flood Risk	Mileage (Avg. + 1 STD)
Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets	Targets
Max	Min	0	434	0	114	100%	22	100

Search  
1  
Search Result

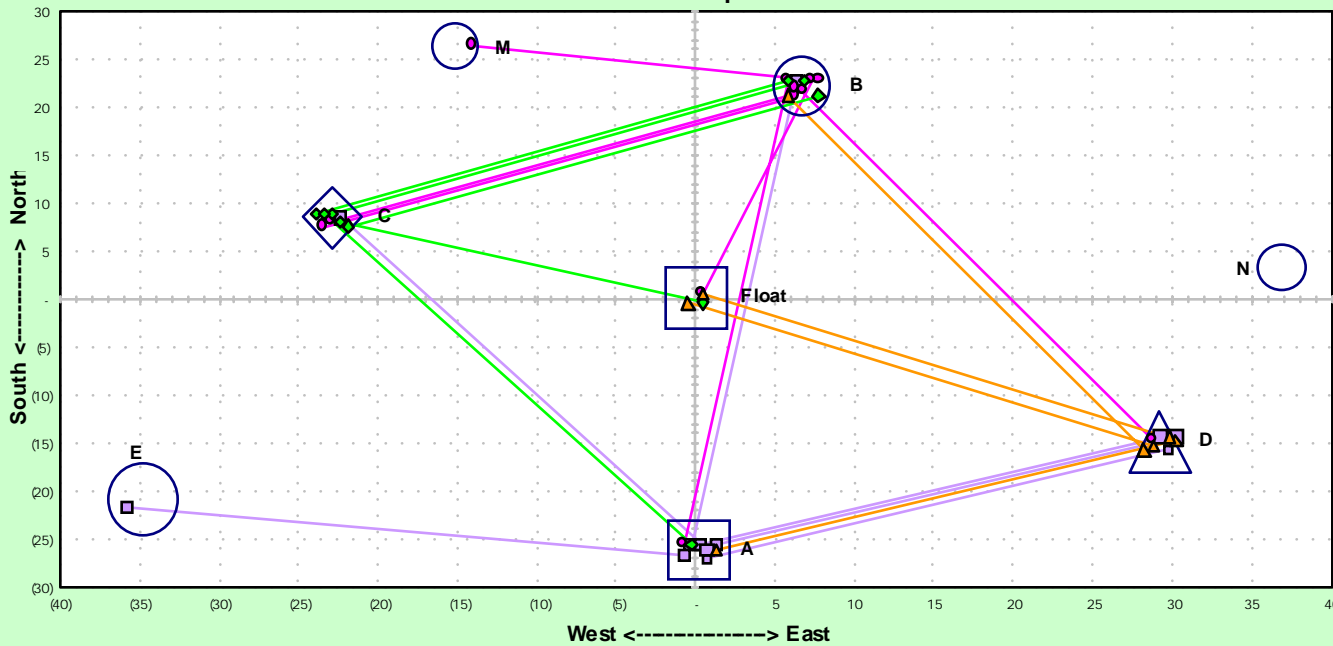
Baseline

100% Ready

Baseline Case	Readiness %	Investment \$	Collisions	Assigned Seats	Missing Seats	Workers on Leave	Site Change	Quake Flood Risk	Mileage
Baseline Case	64%	\$ 24,482,000	3	240	194	114	100%	68	39.89



Site Map



Active Sites	Capacity	Utilized
A 1 Existing	174	55%
B 1 Existing	167	75%
C 1 Existing	150	69%
D 1 Existing	124	61%
E 1 Owned Mirror Canddate	180	17%
F 1 Float	548	20%
M 1 Purchase Mirror Canddate	240	13%
N 1 Purchase Mirror Canddate	90	0%

Strategies		
1	1	Local Mirror Sites
2	1	Regional Mirror Sites
3	1	Remote Access
4	1	Send Home Non Essentials
5	1	Bumping
6	0	Lower Quake Flood Risk
7	0	Internal Sharing w/Upgrade
8	0	Multi Site Operations
9	0	Site in a Box

# What Are the Benefits of Implementing AchilleShield™ at Your Bank?

## AchilleShield™ Benefits

- Significantly reducing risk of business interruptions and lost income by millions of dollars
- Reducing disaster recovery / business continuity investment and operating costs (NOE) by millions of dollars
- Lowering your risk based cash reserves requirements based on the new Basel Capital Accord (Basel II)
- Improving corporate image and perception by customers and Wall Street
- Outsourcing business recovery planning simulation capability

Improving the ability of your organization to survive  
in today's business reality

# Why Partner With Osti & Associates?

- Osti & Associates (O&A) is a company whose focus is providing risk management planning services
- O&A is a company that is comprised of engineers, MBA's, real estate professionals and Ph.D.'s in operations research with the cross-functional skills required to deliver a comprehensive solution
- O&A has experience in working with regional, national and global banks
- O&A has delivered solutions for merger integration, facilities optimization and business continuity for large corporations
- O&A has developed a proprietary simulation technology - **AchilleShield™** designed to address business continuity for financial institutions that enables companies to maximize business recovery readiness and reduce costs
- O&A helped design the business continuity facility database search engine currently being by used by Wachovia Corporation

O&A's mandate is to help companies make critical decisions  
before a disaster

## Lessons Learned

- Senior management buy-in and support is required for making difficult investment decisions in business continuity
- Companies who are merging have tremendous opportunities to simultaneously deliver merger synergies and business continuity improvements by optimizing their facility networks
- There is no one optimal business continuity solution - tradeoffs must be considered - simulation allows this process to occur
- Although disasters have always occurred, the scrutiny of business continuity risks by customers, government agencies and insurers has increased dramatically since 9/11
- The updated / more rigorous Basel II will increase your cash reserve requirements unless you reduce operational risks now

How prepared is your company?

# Contact Osti & Associates to Find Out More About AchilleShield™

