

**ROI Considerations  
For BCP  
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**The Business Continuity Platform Company**

# What is ROI?

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For a given use of money in an enterprise, the ROI (return on investment) is how much profit or cost saving is realized.



*searchCIO.com*

# Incidents, Events and Disasters

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A/C Failure	Evacuation	Microwave Fade	Software Error
Acid Leak	Explosion	Network Failure	Software Ransom
Asbestos	Fire	PCB Contamination	Terrorism
Bomb Threat	Flood	Plane Crash	Theft
Bomb Blast	Fraud	Power Outage	Toilet Overflow
Brown Out	Frozen Pipes	Power Spike	Tornado
Burst Pipe	Hacker	Power Surge	Train Derailment
Cable Cut (Power)	Hail Storm	Programmer Error	Transformer Fire
Cable Cut (Fiber)	Halon Discharge	Raw Sewage	UPS Failure
CO Fire	Human Error	Relocation Delay	Vandalism
Condensation	Humidity	Rodents	Virus
Construction	Hurricane	Roof Cave In	Water (Various)
Coolant Leak	HVAC Failure	Sabotage	Wind Storm
Cooling Tower Leak	Hardware Error	Shotgun Blast	Volcano
Corrupted Data	Ice Storm	Shredded Data	
Diesel Generator	Insects	Smoke Damage	
Earthquake	Lightning	Snow Storm	
Electrical Short	Logic Bomb	Sprinkler Discharge	
Epidemic	Lost Data	Static Electricity	
Erased Tapes	Low Voltage	Strike Action	

# Measuring ROI

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## Financial - Traditional Metrics

- The payback method
- The accounting rate of return of investment (ROI)
- The cost-benefit ratio
- The net present value
- The profitability index
- The internal rate of return (IRR)

# Measuring ROI

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## Financial - Resources:

- Laudon, Kenneth C. and Jane P. Laudon, *Management Information Systems, Managing the Digital Firm, 8<sup>th</sup> ed.*, Upper Saddle River, NJ: Peason Education Inc. (2004).
- Atherton, Micahael, [Darwinmag.com](http://Darwinmag.com), “*ROI is a Matter of Setting Priorities - And remember, it's not just about the technology,*” January 2003.
- Sadhwani, Dimple and Gunjan Samtani, [Web Services Return on Investment](#), “*Working out what you're Getting out of Web Services,*” August 2002.

# Measuring ROI

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## Financial

- The payback method
  - It is a measure of the time required to pay back the initial investment of the project.
  - Weaknesses: ignores the time value of money, the amount of cash flow after the payback period, the disposal value and the profitability of the investment.

# Measuring ROI

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## Financial

- The accounting rate of return on investment (ROI).
  - Approximates the accounting income earned by the investment.
  - Weakness: can ignore the time value of money; however can be adjusted (the present value function on most spreadsheets will perform this conversion)

# Measuring ROI

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## Financial

- Cost-Benefit Ratio

$$\frac{\text{Total Benefits}}{\text{Total Costs}} = \text{Cost - benefit ratio}$$

# Measuring ROI

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## Financial

### ➤ Net Present Value

- The NPV calculation determines the present value of the return and compares it to the initial investment
- Takes into account its cost earnings and the time value of money.

# Measuring ROI

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## Financial

### ➤ Profitability Index

- It is calculated by dividing the present value of total cash inflow from an investment by the initial cost of the investment.
- Used to compare the profitability of alternative investments

# Measuring ROI

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## Financial

- Internal Rate of Return (IRR)
  - A variation of the net present value.
  - Is the interest rate that equates the present value of an income stream with the cost of the investment.
  - Once a company knows the rate, it can compare it to rates it could earn by investing money in other projects.

# Measuring ROI

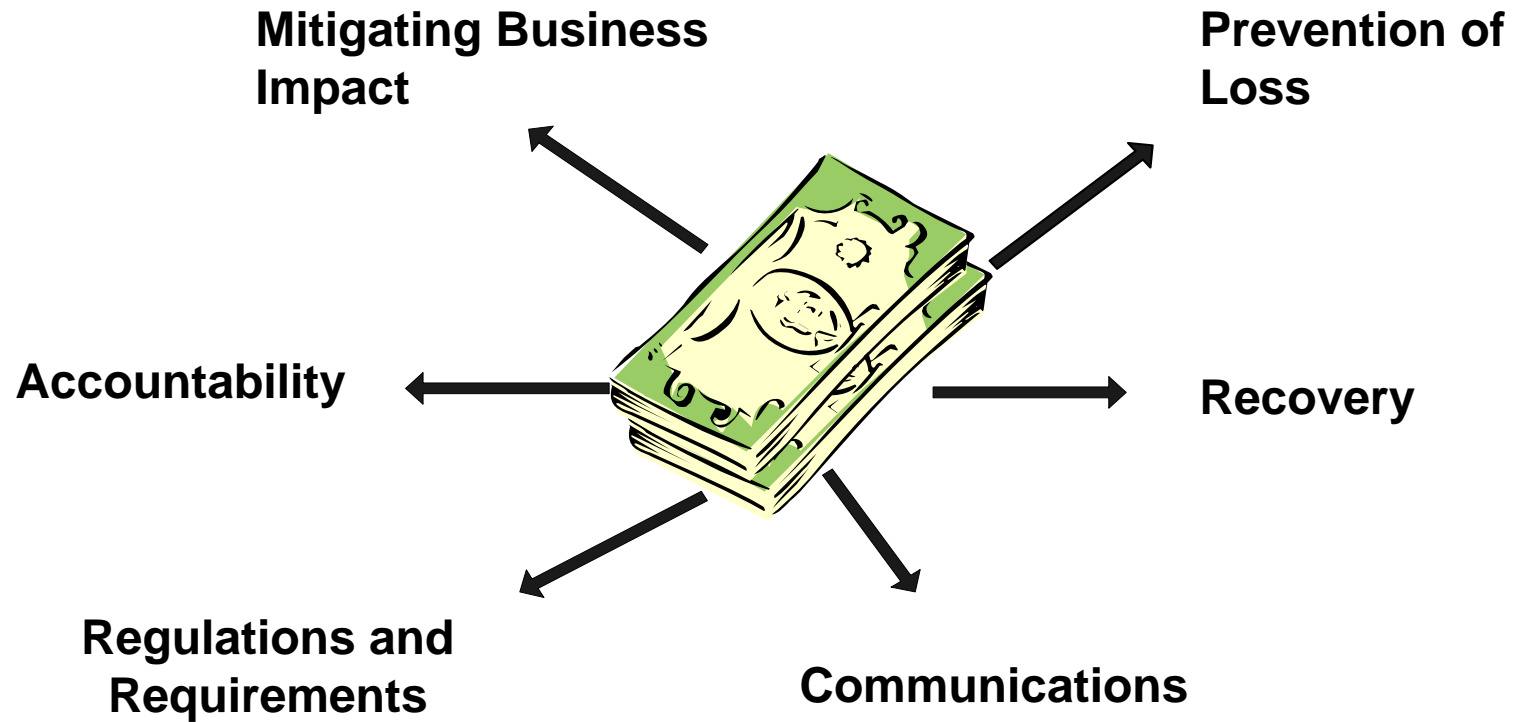
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**Benefits**

**Costs**

# Benefits of BCP

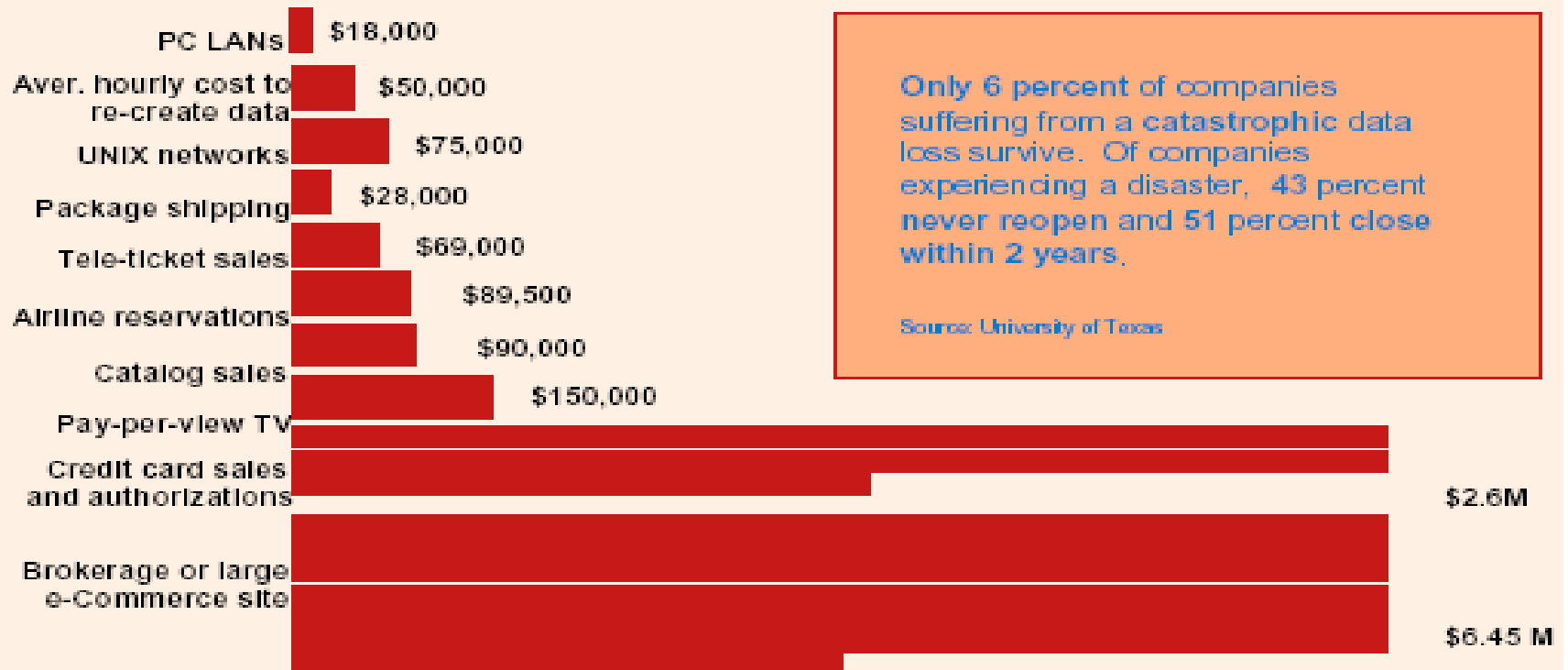
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# Benefits of BCP

## The Cost of Downtime

The average financial impact per hour of interrupted computer operations



Only 6 percent of companies suffering from a catastrophic data loss survive. Of companies experiencing a disaster, 43 percent never reopen and 51 percent close within 2 years.

Source: University of Texas

Sources: Contingency Planning Association Research; Strategic Research Corp., 1998

# Benefits of BCP

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**The International Red Cross**, says the economic cost of natural disaster has skyrocketed. In the 2 past decades direct economic losses from natural disaster multiplied five fold to US \$629 billion in the US.

**Munich Re**, the world's largest re-insurance agency reports:

- 2004 – Disaster related loss in US was \$145 Billion
- 2003 – Disaster related loss in US was \$65 Billion

Hurricane Katrina	Aug. 2005	Gulf Coast	\$200B (est)
Floods	July 2002	South Texas	\$1B
Tornadoes	April 2002	Ohio Valley	\$1.7B
World Trade Center	Sept. 11, 2001	NYC	\$200+ B

# Benefits of BCP

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- › **80% of companies that do not recover from a disaster within one month are likely to go out of business.**  
*(Vericenter; Risk Mngmnt Solutions, Bernstein Crisis Mngmnt)*
- › **75% of companies without business continuity plans fail within three years of a disaster** (*"Blindsided", T. Blythe, CEO, Crisis Management International*)
- › **Catastrophic data loss** (*University of Texas Study*)
  - 43% of companies never reopened
  - 51% of companies closed within 2 years
- › **Average impact of a system shutdown**
  - ½% of market share every 8 hours
  - 3 years to recover ½% of market share
  - One year of consequences for every 6 hours of downtime
  - Within the first 5 days after a disaster a company can lose ½ % of annual revenue

# Benefits of BCP

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## Business Impact Analysis

Objectives *(DRI International - revision date: Aug. 2000)*

- › **Assess Impact of Outage**
- › Determine Time Criticality of Business Processes, Functions, Depts., and workareas as related to Total Organization Function
- › Determine Time Critical Application Systems, Data and Telecommunications
- › Determine Required Availability Time(s) (Recovery Time Objective) for *Functional Departments*

# Cost of BCP

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## Building a Business Continuity Plan

*DRI International - revision date: Aug. 2000)*

- Pre-Planning
  1. Project Initiation and Management
  2. Risk Evaluation and Control
  3. Business Impact Analysis
- Planning
  1. Developing Business Continuity Strategies
  2. Emergency Response and Operations
  3. Developing and Implementing Business Continuity Plans
- Post-Planning
  1. Awareness and Training Programs
  2. Maintaining and Exercising Business Continuity Plans
  3. Public Relations and Crisis Communications
  4. Coordination with Public Authorities

# Cost of BCP

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## Creation

- BIAs (interviews, surveys)
- Gather supporting information
- Development of Plan (Teams, Responsibilities)
- Developing Recovery Strategies, ie., alternate sites, offsite storage
- Distribution of Plan components

# Cost of BCP

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## Maintenance

- Collecting Updates
- Incorporating Updates
  - ✓ *Minor*
  - ✓ *Major - might have to redo creation stage*
- Seek Approvals
- Distribution of Updates

# Cost of BCP

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## Testing

- Test Coordination
  - ✓ *Pre-test activities*
- Test Documentation
  - ✓ *During Test: document milestones, problems*
  - ✓ *Post-test: Post-mortem documentation*

# Cost of BCP

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## Disaster Management

- Coordination
- Communication
- Recording / Documentation
- Execution of Plan
- Management of Recovery
- Restoration
- Post Mortem

# Cost of BCP

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## Audit

- Internal / External
- Post Mortems
- Documentation for Insurance and other requirements

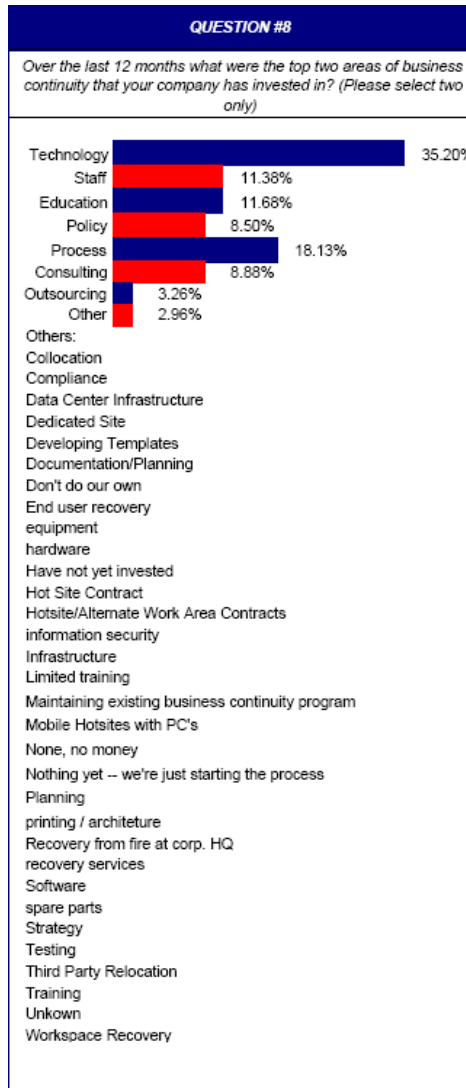
# Cost of BCP

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Don't forget about...

Communications

# Cost of BCP



**Continuity Insights & Hewlett-Packard, "Executive Business Continuity Study – A Study of Evolving Trends in Business Continuity." (2005).**

## The Sample:

- **831 usable responses**
- **Variety of industries**
- **Approximately 65% respondents are in BCP or IT**

# Measuring ROI

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## Other Ways:

- More Informal will do
- Have to do
- Intangibles outweigh hard-dollar savings
- Strategic Fit
- Business Benefits
- Efficiency and effectiveness

# Measuring ROI

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## Ensuring Success:

- Part of the process
- Consider your stakeholders
- Company goals
- The people

# Conclusion

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## DRJ Survey

- › More than 60% of businesses have identified BCP as priority
- › 50% have allocated to BCP \$250k annually
- › 75% identified as cost benefit

## Post

- › \$1 spent on preparedness is \$7 saved in disaster.