



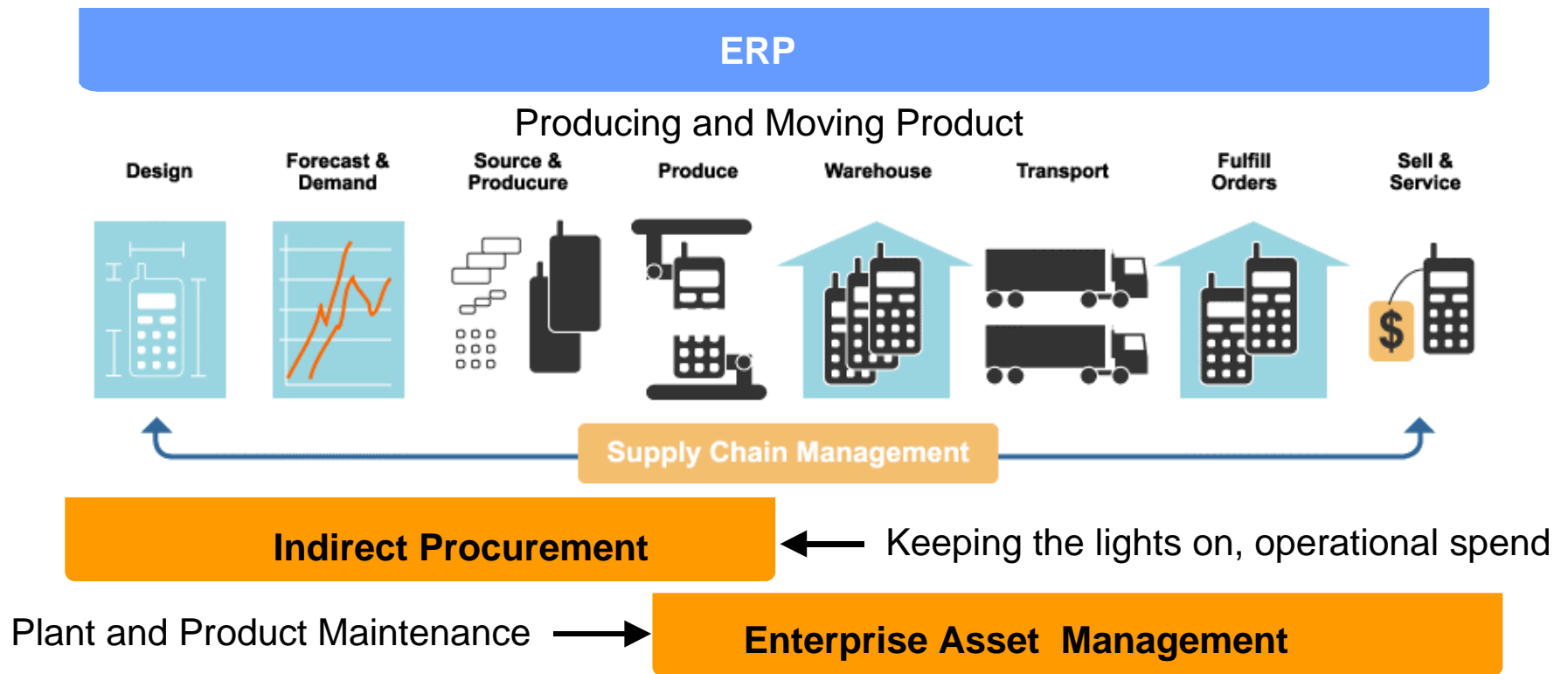
Business Continuity and Resiliency Services



Economic Costs of Business Interruption to the Supply Chain

Port Continuity Conference
May 18th, 2007

The supply chain process touches all aspects of a companies operations



That is why it is important to ensure its continuity.

A Supply Chain is Only as Strong as its Weakest Link



- ❖ *Continuity has to be applied across the entire value chain, across borders, and integrate an ongoing awareness in every single point of interaction with the goods.*

Key Drivers

There are many key drivers behind the intense focus on business continuity.

1 More potential threats of disaster

There is a growing exposure to risk from both natural and man-made disasters.

- **More intense natural disasters**
- **A rapidly aging lifeline infrastructure**
- **Increasing terrorism**

Complex disruptions to business have occurred throughout modern history with devastating impact on corporations globally:

- Hurricane Katrina
- South Asia tsunami
- SARS flu outbreak
- September 11 terrorist attacks
- Anthrax and other chemical threats
- London, Madrid and Bali bombings
- Ice Storm
- 2003 Blackout
- Current Pandemic threat and associated risks to human capital

Key Drivers

2 More potential harm from any single disaster

Our marketplace and business environment are now increasingly complex, so any disruption has a greater impact on your business operations and supply chains.

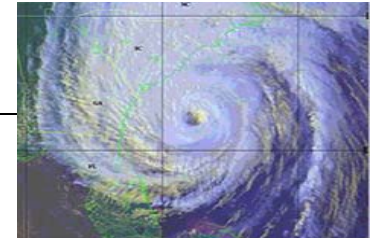
Key challenges in today's environment:

- Globalization of business operations and travel.
- Insurance coverage limitations.
- Critical facility consolidation.
- Changing social and financial standards.
- Government regulations and issues.
- Greater responsibility and span of control for key employees.
- Departmental silos, incentives, measurements.
- Brand reputation and competitive health.

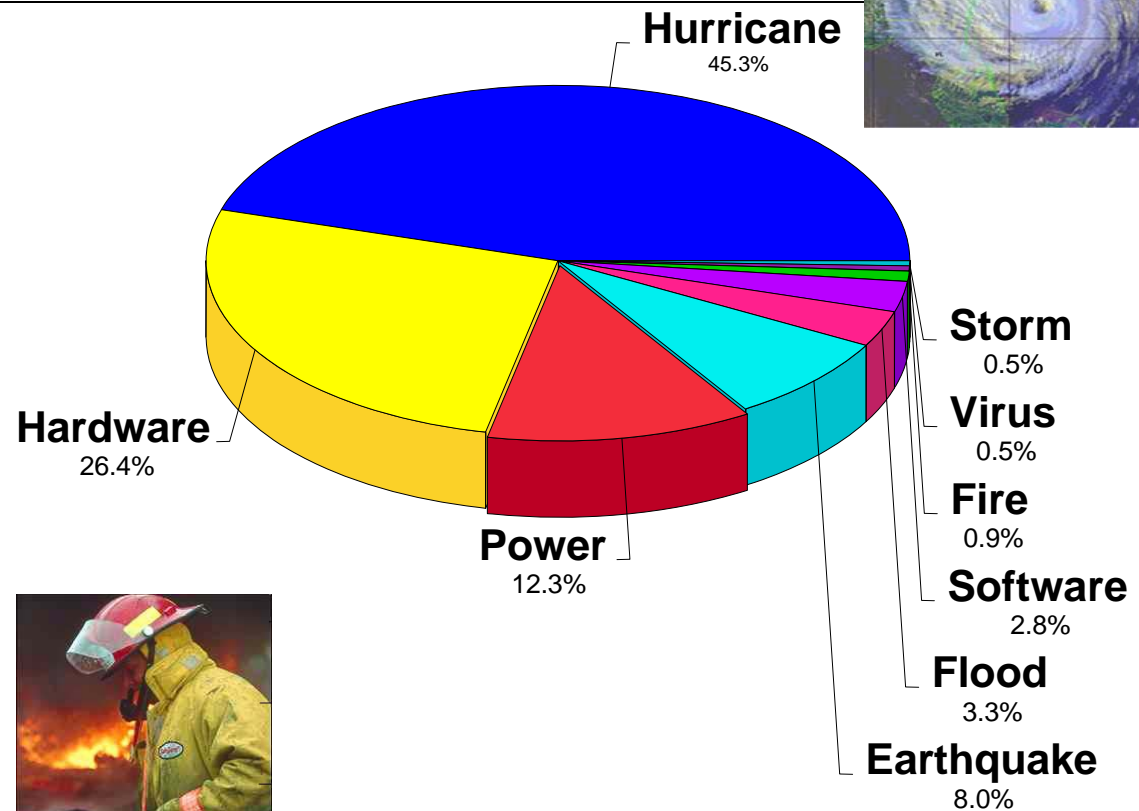
What might cause a disaster?

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

Without mitigation threats can turn into real disasters.



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



Source: IBM BCRS
Total Recoveries: 400+

Source: University of Texas

Cargo crime – current trends and facts

- Accurate records on cargo theft are almost impossible to find.
- Current industry and specialist observer estimates place the loss through cargo theft at between \$25 billion and \$120 billion a year
- 85% of all business security losses are attributed to the loss of product in transit.
- Between 80% and 85% of cargo thefts involve inside information.
- The high profit potential of high-tech cargo thefts is attracting more sophisticated international criminals.



Supply Chain Interruption - the negative impact

Financial impact

- Interruption to cash flow
- Loss of market
- Loss of sales
- Potential increase in insurance premium
- Increased administrative costs

Operational impact

- Damage to reputation (with customers and within the industry)
- Tension in relationships with customers and suppliers
- Staff frustration and loss of morale
- Loss of brand image

Business Continuity Process



IBM Actions to Improve their Supply Chain

Internal Security Actions

Early Adoption of Government Anti-Terrorism Trade Programs

Supply Chain Security education and training for import compliance and security personnel

Updated Asset Protection corporate standards

Risk Assessment database for security monitoring and analysis of IBM facilities

Empty trailer / container / conveyance inspection

High level security seals on 'stuffed' trailers / containers / conveyances

Electronic door sensors on trailers transporting product between U.S. and Canada

Global supply chain readiness assessment

Supply Chain Security language in supplier contracts

Onsite security inspections of high risk suppliers



Partners in Protection (PIP)
Canada



Business Anti Smuggling Coalition
(BASC)
Mexico

Key Elements of Supply Chain Continuity

- Effective supply chain management program, door to door
 - By starting with focus on security, have infrastructure in place to influence or manage the entire process
- Effective Risk Assessment protocol to identify single points of failure, critical focus areas, and mitigation strategies
 - Understand context of risks / threats, local flavors, key relationships with internal groups or suppliers, and how those relationships can be affected by a crisis
- Senior Management and Business Group commitment
 - Corporate-level processes and coaching, but need each group to leverage their expertise and experience to their functional area
- Integrated response capability
 - All business groups engaged in crisis management planning
 - Key service groups linked to response and continuity efforts
- Drill, Drill, Drill