IBM Global Services

IBM Disaster Recovery Services – Continuity Planning Assessment and Virtual Workplace Continuity

Mark Young – IBM Global BCRS Sales

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Potential causes of significant workforce disruption

- Events that can prevent key personnel from commuting to the normal office site include:
  - Outages (power, water, telecommunications, local infrastructure)
  - Transportation issues, including transit strikes
  - Labor unrest
  - Natural disasters
  - Human-caused disasters
  - Pandemic events
A gap exists in levels of preparedness for the workforce

Power Outage: 88% of enterprises prepared
Data Center Outage: 70% of enterprises prepared
Workforce Disruption: 13% of enterprises prepared

Only 13% of enterprises today are prepared for a major disruption in workforce operations

** Gartner EXP
** Society for Information Management
Continuity planning can address operational risk as well as audit requirements and workforce disruption is becoming increasingly scrutinized

- If your workforce were disrupted, what would be the business impacts on …
  - Revenue?
  - Brand?
  - Customer satisfaction?
  - Your supply chain?
  - Research and development?
  - Employee productivity?
  - Compliance?

- Are you prepared with substantive plans and technical solutions for …
  - Workforce disruption, with scenarios, impact and gaps defined?
  - Keeping current plans up-to-date?
  - Maintaining employee status and priority business functions?
According to health experts around the world, and discussed here, we may soon be at great risk for a new flu pandemic or other workforce disruption.

**Critical assumptions:**
- A new flu pandemic could break out soon.
- It is expected to have global impact and all countries need to be prepared.
- The flu virus could become highly transmissible and cause widespread sickness and death.
- There are likely to be significant shortages of vaccines and antiviral medications.
- Significant disruption to economies, international and national infrastructures, and society in general, may occur.

An influenza pandemic is caused by the global outbreak of a new virus that causes illness and spreads easily from person to person, and for which people have no immunity and there are no vaccines immediately available.
An Example of a potential workforce disruption: Pandemic Wave – planning makes the difference!

1. Delay disease transmission and outbreak peak
2. Decompress peak burden on infrastructure
3. Diminish overall cases and health impacts
A pandemic’s impact on human resources can significantly impact business operations for an extended period of time.

- Expect staff absences up to 40% during a pandemic.¹
- Expect multiple waves of infection, each lasting up to eight weeks.
- A pandemic could last many months and may contain peaks followed by periods of reduced illness.
- There could be government-ordered reduction of people at nonessential places of employment.
- Planning should include employees being unwilling or unable to work, even if they do not become ill themselves.

¹ Source: washingtonpost.com, "
The world is riskier than it used to be

- **Changing environment**
  - Expanding risk exposures
  - Increased global and regional interdependencies
  - Supply chain disruption

- **Heightened impact of business disruption**
  - Greater financial implications of downtime
  - Brand vulnerabilities
  - Data integrity requirements

- **More complex regulations**
  - Changing industry and regulatory standards
  - Geographic dispersal requirements
  - Varying regulations per country

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2 “Companies better prepared after Hurricane Katrina; Disaster helped them plan for the worst,” *Chicago Tribune*, September 3, 2006.
To help drive revenue, organizations must align IT with business goals and processes and considering a workforce disruption is becoming a key risk.

- **Business continuity planning is key to supporting IT and business goals, because it can help:**
  - Drive top-line revenue and protect brand reputation by reducing the risk and duration of downtime
  - Mitigate the risk of noncompliance with business continuity regulations
  - Promote effective employee communication and collaboration to drive innovation
  - Improve workplace productivity even during a disruption
  - Enable continuous customer service
Business continuity isn’t just about recovering IT assets

- In the event of a pandemic, damage to your facilities or a disruption in transportation:
  - Will you know which employees are available to work?
  - Will you be able to communicate with employees and the public?
  - Will your employees have access to data and applications?
  - Will your employees be able to work from home or from another remote location if they can’t reach your facilities?
  - Will you be able to support your remote and mobile workers?
  - Will you have access to contact information for key customers or suppliers?

*IBM Pandemic – related services helps you develop a strategy TO keep your workers working, even when they can’t reach your facility.*
IBM began engaging with world medical organizations to assist from a humanitarian perspective

- **CHECKMATE** – IBM and the Scripps research institute. Conducting advanced biological research on influenza viruses and how they will mutate.

- **GLOBAL PANDEMIC INITIATIVE** – 20 health organizations, including the World Health Organization and the Centers for Disease Control. Using IBM research laboratories and promoting Interoperable Healthcare Information Infrastructure (IHII) and other advanced software technologies. Providing:
  - **STEM** – Spatio Temporal Epidemiological Modeler. (Models disease spread)
  - **Collaboration Centers** in: China, India, US, Israel, Japan, Switzerland
IBM takes disaster planning serious – and recommends the same to our customers.

- **Dedicated Vice President to lead global effort**
- **Integrates skills and expertise from Crisis Management, BCRS, Crisis Response, HR, Security, Communications, HR Global Well-Being, in all IBM geographies**
- **Planning Elements include:**
  - IBM’s senior leadership is dedicated to the global integration of preparedness planning.
  - Crisis Management Teams have been identified in each IBM operating geography, country and major location. These teams are undergoing specialized A/H5N1 training. To date, more than 50 training sessions have been conducted and additional exercises are ongoing.
  - Monitoring the spread of avian influenza A/H5N1.
  - Occupational health processes and procedures are being developed for employee and work place well-being related to pandemic influenza.
  - Reviews are taking place to enhance IBM’s ability to quickly transfer critical business and information-technology operations from one location to another, on demand.
  - Ongoing identification of core business services that should be kept in operation.
  - Rigorous assessment with field level plans
  - One of the world’s largest remote workforces already in place
The IBM Business Continuity team is actively developing important services to help our customer plan and prepare for any significant workforce disruption.

Two services that are available globally today will be discussed:

- Continuity Planning Assessment
- Virtual Workplace Continuity
Assessing current capabilities, plans and preparation to deal with a disruption is an important first step.

With an IBM Contingency Planning Assessment, IBM business continuity and crisis response specialists will:

- Provide an independent review of your current disaster response and business continuity program
- Provide an objective assessment of your ability to cope with a disaster, including the unique stresses of a flu pandemic
- Help you identify gaps and vulnerabilities
- Recommended action steps to help you plan and prepare to mitigate risks related to identified gaps

Based on…

- Industry best practices, standards and guidelines
- IBM Crisis Response Team hands-on experience managing disasters
- Suggested improvements to your policies, plans, operations and infrastructure
With CPA, IBM has developed a multifaceted evaluation covering the broad range of requirements to help maintain continuity in the event of a pandemic.

Your business will receive a broad-based review, focused on maintaining priority operations. This review will span key elements and functions across their organization, including:

- Company pandemic strategy and policy
- Executive sponsorship of pandemic planning
- Critical resource identification and tracking
- Communication and education plans for employees, customers
- Human resource planning and monitoring
- Employee impact and mitigation plans
- Proximity to healthcare facilities
- Supply chain impact and mitigation plans
- Government interface plans
- Linkages to crisis and business continuity plans
- Business function- and location-specific impact
- IT, network, security and workplace infrastructure continuity
- Pandemic plan testing, audit and maintenance
Customers can choose from two levels of service to meet their needs, for either high-level or in-depth analysis.

**CPA for Small Business**

- **High-level Contingency Planning Assessment designed for Small and Medium Businesses**
  - Interview-based analysis leveraging IBM consultative questionnaire
  - High-level analysis and findings by a qualified IBM business continuity consultant

**CPA for Enterprise**

- **In-depth Contingency Planning Assessment designed for Enterprises**
  - In-depth interview-based analysis leveraging proven IBM methodology for interactive consulting
  - Review of existing plans and audits
  - Analysis and findings by IBM team of business continuity and crisis response consultants
  - Use of government and industry standards and IBM’s own lesson’s learned from previous global Crisis response efforts.
  - Optional critical site walkthrough(s) for infrastructure and network risk assessment
IBM Contingency Planning Assessment

**Average Deal Size:**
- Contingency Planning Assessment for Small Business has a typical range of $10-45k US Dollars.
- Contingency Planning Assessment for Larger Enterprises is targeted towards the Large Enterprise client and is priced between $50-150k US Dollars.

**Scoping and Pricing Estimation:**
- High-level = Single campus and limited interviews expected. Increased interviews or larger workshops will move the price for a high-level assessment from $10k towards $45k.
- Larger enterprises that will benefit from documentation review and physical verification of key planning components will want the enterprise service.
- Increased # of datacenters, campuses, global operations, # of employees and sophistication or complexity of current continuity plans will move the pricing basis from the $50k range towards the $150k range.
IBM Contingency Planning Assessment - SCOPE Summary

IBM Responsibilities
- Activity 1: Project Initiation
- Activity 2: On-site Interviews
- Activity 3: Site Walkthrough and Informal Briefing
- Activity 4: Contingency Planning Assessment for Enterprise/SMB Report

Areas Reviewed
- Assess Strategy and Implementation for Continuity
- Assess Protection of Human Capital and Emergency Preparedness
- Assess Pandemic Communications and Education Plans
- Assess Client Understanding of Impacts from a Pandemic Perspective
- Assess the extent issues are considered in the Corporate Governance model
- Assess Crisis Management capabilities from a Pandemic perspective
The IBM Maturity Index Model is used to quantify each major area of inquiry and scrutiny

Located in the engagement model technique papers, the following matrix is used to rate each response in both the SMB and ENT assessment models.

1 = Unfocused
There is nothing currently in place. The client either has no intention to implement anything or the client’s expectation is that they will figure things out when the time comes with unpredictable results.

2 = Aware
General awareness of pandemic planning but not fully understood or endorsed across the organization. There is little understanding of the need.

3 = Capable
Pandemic Planning is defined and understood by most and reflects a priority focus. It includes the need to understand pandemic planning from an end to end process (policy, program, response capability and regular review and maintenance). Documented plans are in place.

4 = Mature
There is understanding of the requirement and agreement by all areas within the organization. It includes consideration of internal and external dependencies as they relate to pandemic planning and response. Documented plans are in place, have been tested with updates applied according to gaps and exposures identified during the testing process.

5 = World Class
The requirement is understood, agreed to and promoted by all areas within the organization and reflects a priority focus in terms of pandemic preparedness and business continuity. Plans are in place, have been tested over a number of years, regularly maintained and audited with satisfactory results. It is probably unlikely that any organization will be at this level of maturity.
Summary of Results:

XXClient has focused most of its pandemic planning and response efforts in the area of Human Capital Planning, but major gaps exist in the areas of Communications and Education, Impacts, Governance and Plan Linkages.
## IBM Disaster Recovery Services for workplace recovery – virtual workplace continuity

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<th>Assessment, strategy and design (CURRENTLY AVAILABLE)</th>
<th>Implementation (FUTURE)</th>
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<td>▪ Validation of client's requirements for a virtual workplace</td>
<td>▪ Active directory work</td>
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<tr>
<td>▪ Workplace continuity strategy development</td>
<td>▪ Telephony integration</td>
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<tr>
<td>▪ Define business continuity plan updates for virtual workplace policies and procedures</td>
<td>▪ Addition of groups and regions</td>
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<tr>
<td>▪ High-level architecture design for a virtual workplace solution from independent vendors (such as Citrix)</td>
<td>▪ Operationalization of scenarios</td>
</tr>
<tr>
<td>▪ Develop a high-level macro design for virtual workplace continuity planning</td>
<td>▪ Lightweight Directory Access Protocol (LDAP) integration</td>
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<td>▪ Load-notification engine</td>
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<tr>
<td></td>
<td>▪ USB stick and server provisioning</td>
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**Currently available with this offering**

Later phases of this offering; this information is provided to describe the intended development direction only.
IBM Disaster Recovery Services for workplace recovery – virtual workplace continuity

- A consulting offering tailored to your specific requirements
  - Assess your existing plan for strengths and workplace continuity vulnerabilities
  - Identify the components of a comprehensive plan
  - Develop a prioritized approach to help close any gaps
  - Outline a high-level solution for workplace continuity
  - Help identify key technologies for the solution to help enable:
    - Emergency notification and content
    - Virtual access to desktops
    - Remote access and collaboration services
    - Monitoring of available employees during a crisis
  - Provide high-level architecture and design services

*Virtual workplace continuity from IBM can be applied incrementally. So you start where you are and use only the services you need.*
Virtual workplace continuity from IBM: how it works

**STEP 1:**

Initiation and kickoff capabilities

- Level-set objectives, roles and responsibilities
- Review project methodology
- Establish documentation procedures
- Identify interview participants

Get everyone on the same page
Virtual workplace continuity from IBM: how it works

STEP 2:
Requirements definition

- Within predefined scope, facilitate planning workshops
- Interview key staff
- Identify key components of business continuity
- Assess current IT disaster recovery plans
- Document findings

Know where you stand
Virtual workplace continuity from IBM: how it works

STEP 3:
Technical strategy
development capabilities

- What needs to keep going during a disruption?
- Who needs continuous access?
- Which technologies will keep your workplace running?
- What do you already have in place?
- What can you do? Identify strategies
- Develop, validate and document your chosen strategy

Create a plan
Virtual workplace continuity from IBM: how it works

**STEP 4:**

High-level solution design capabilities

- Create a high-level design for workplace continuity
- Define required updates to your existing business and IT continuity plans
- Validate and document the final design

*Design a solution*
Virtual workplace continuity dovetails with other business continuity services from IBM

- **Additional services:**
  - Workplace recovery (dedicated, shared, mobile and quick-ship)
  - Business continuity program management
  - Business continuity and disaster recovery planning, design and architecture
  - IBM Crisis Management Services
  - Contingency planning assessment—a pandemic service
Virtual workplace continuity is geared toward your needs

- **We can help you …**
  - Evaluate and update your business continuity plan to establish effective provisions for maintaining contact with your employees
  - Enable employees to keep working during a crisis
  - Prioritize access and communication requirements to maintain key business functions, roles and personnel
  - Identify and monitor available employees during a crisis
  - Identify and implement technologies that support your continuity plan
Potential business benefits of virtual workplace continuity services from IBM

- Obtain an independent assessment of your plans to help demonstrate preparedness and corporate responsibility
- Help safeguard your brand reputation during a disruption
- Support compliance with regulations regarding continuous business operations
- Reduce costs by centralizing workforce continuity management
- Streamlined recommendations for improving existing continuity plans can make updates to existing plans more efficient and on-target
Why IBM?

- **Comprehensive set of integrated business continuity services, including pandemic planning**

- **Global presence**
  - Business continuity offerings available in 177 countries
  - Over 154 global resiliency centers in 55 countries; over 8 million square feet of total floor space for disaster recovery, with 40,000 seats equipped to replicate the work environments of key personnel

- **Expertise**
  - More than 1,300 business continuity consultants in all industries
  - Providing disaster recovery services for over 10,000 clients
  - Over a decade of experience in crisis management, responding to 70 crisis events in 40 countries

- **Reputation and reliability**
  - IBM has helped 100 percent of its clients that have declared a disaster to recover from business disruption
Why IBM Disaster Recovery Services?

**Human Capital:**

Resiliency defined: an organization’s ability to respond and adapt rapidly to threats posed to its workforce.

A company with a Human Capital Resiliency plan will... …be able to protect their most valuable resources and maintain continuous operations in the event of a crisis.

...Incorporate Human Factors into IT continuity planning.

- Approximately 200 “vulnerability” assessments completed.
- Existing continuity services and techniques apply, but CPA adds in Human Capital Elements.
- Significant downstream services exist and are documented here and on SaleOne to help you consider next steps with your customers.
- IBM has dispatched teams to over 70 crisis responses in recent years and participates on government planning activities across multiple countries.
Additional information sources:

Additional Resources:

- [www.pandemicflu.gov](http://www.pandemicflu.gov) - US Government health and human services repository of pandemic information
- [www.cdc.gov/flu/avian/index.htm](http://www.cdc.gov/flu/avian/index.htm) - Centers for disease control and prevention avian flu repository
- [www.hhs.gov/pandemicflu/plan](http://www.hhs.gov/pandemicflu/plan) - US government pandemic influenza plan
- [www.who.int/](http://www.who.int/) - World health organization
- [www.acp-international.com/pandemic.html](http://www.acp-international.com/pandemic.html) - Association of contingency planners; collection of publicly available data
- [www.virus.standord.edu/uda/](http://www.virus.standord.edu/uda/) - Stanford history of the 1918 flu (earlier avian) and related links

Other topics of interest:

- IBM Interoperable Health Information Infrastructure (IHII)
- WHO Fact sheet (basic starting place, find at www.who.int, above)
- CDC business checklist (find at www.cdc.gov, above)
For additional information

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