

Business continuity and resiliency services from IBM

Helping business stay in business



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Executive summary

How do you know if your organization is proactively prepared for—and able to flexibly respond to—unplanned events? Does your business possess the resilience it needs to rapidly react to potentially costly man-made or natural disruptive events? If the unthinkable should occur, discover how IBM can help protect your brand and potential revenue by helping you to:

- Assess your risks
- Develop a tailored business resilience strategy
- Safeguard your business-critical information while maintaining continuous operations
- Enable a virtually complete recovery, should disaster occur

Today's enterprise must be highly resilient and able to anticipate multiple risks.

With supply chain interdependencies, increasing regulatory requirements and geographically dispersed businesses encompassing everything from traditional storefronts to online operations, organizations are facing intense pressure to improve performance, maintain continuous availability and ensure data integrity. Areas of concern that organizations need to focus on include enterprise and work area risk, availability of critical data and business applications, IT stability, recoverability of IT infrastructure, data backup and disaster recovery. They also need to determine the constantly changing governmental and industry regulations associated with business continuity that apply to them and have a plan in place to manage compliance. Meeting these demands in a global economy means today's enterprise must be highly resilient and able to anticipate multiple risks. At the same time, organizations should be prepared to withstand unexpected disruptions of all types while remaining poised to take advantage of new opportunities. Most disruptions are caused by infrastructure outages or human error, but they can also be the result of random power outages, natural disasters or international events. Clearly, any of these disruptions can be costly and undermine your ability to maintain IT operations. Unplanned outages can also create far-reaching consequences that impact your long-term revenue stream, your brand and ultimately, your organization's survival. Forward-thinking leaders are experiencing a wake-up call, recognizing that the probability and types of risk to business continuity are higher than commonly believed, and they are taking steps to improve their resiliency capabilities. In other words, to help ensure a viable

future, adopting a smarter, proactive and comprehensive business resiliency strategy is nothing less than imperative. A more interconnected and intelligent approach allows your business to address the increased risk, complexity and cost of downtime. Business continuity and resiliency services from IBM can help your organization:

- Manage risk through an enterprise-wide resiliency strategy
- Lower costs through proactive incident response and reduced downtime
- Ensure resilient service delivery in a 24-hour, 7-day-a-week world
- Respond with speed and agility while minimizing risk exposure

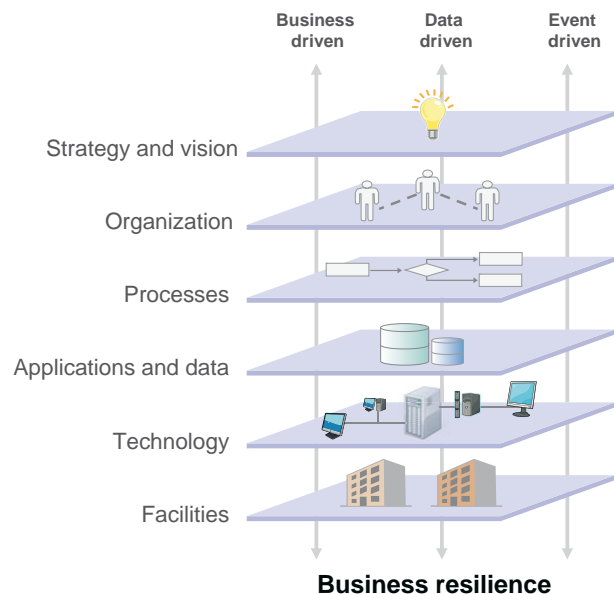
Determining your risk factors

Business resilience has become a top priority for both executives and stakeholders, and with good reason. An increasingly interconnected marketplace means that any enterprise, at some point, is likely to be vulnerable to risks beyond its control. Any number of these risks factors—whether down the supply chain or in another corner of the world—could jeopardize your business and its reputation. As an organizational leader, you cannot succumb to a false sense of security. You have worked too hard to build your business, and its reputation. You cannot afford to leave anything to chance when it comes to delivering excellent service and reliability to your partners and customers, as well as providing maximum value to investors.

To meet the uncompromising expectations of your clients, the infrastructure, data and people that comprise your business must be reliable, agile, resilient and secure. At the same time, you need the ability to seamlessly adapt to changing compliance

requirements for your local geography and for those around the world—or possibly face penalties. Furthermore, it is critical that you are able to quickly and efficiently recover from a vast array of multidimensional risks, should they become actual situations. And as the number and types of risks continue to grow, a robust business resiliency strategy is essential to fostering your company's future success.

Risk mitigation strategies



Your business must be resilient and able to recover from all types of disruptive events.



How can you address this complex business challenge and develop a resiliency plan that flexibly meets your organization's changing needs? You need an interdisciplinary, enterprise-wide business resilience strategy that proactively anticipates and effectively responds to all types of risks, including:

Business-driven risks. Affecting business continuity and strategic business operations, business-driven risks—including application outages or overload from marketing demand-generation campaigns—may create enterprise-wide ramifications that result in breaches in compliance, governance, availability, security and performance. They may also invite unwanted intrusions into critical business services. Left unaddressed without a business continuity plan, they cause intense concern for executive board members and other stakeholders. A robust resiliency solution

can help you protect your organization from this type of risk. It goes beyond simply restoring your IT infrastructure, to also helping keep your business continuously operating and easing management of compliance with industry and government regulations—so you can provide virtually anytime, anywhere accessibility to approved users.

Data-driven risks. Overlapping with business-driven risks, data-driven risks apply to all your data and are caused by a wide range of factors, including disk failure, corruption, viruses or even extreme data growth. Such factors negatively impact continuity as well as the infrastructure, processes, people and systems that keep your organization's data and information accessible for business operations, compliance audits and legal requests. To protect against data-driven risks, you need a solution that delivers efficient backup and quick retrieval of critical data and information. You need to index, search and retrieve archived information, whenever and wherever it is needed. You also need to make sure your data is managed continuously and is safe from viruses, theft and other types of loss.

Event-driven risks. Disrupting an organization's workforce, processes, applications or infrastructure, event-driven risks are caused by power outages, natural disasters, pandemics, fires, thefts and other IT disruptions, including those created by mergers and acquisitions. To mitigate these risks, your organization must be able to distribute operations beyond the area of immediate impact as well as implement an effective disaster recovery and crisis management plan. This strategy can keep your critical resources, networks, IT services and facilities safe and available to meet the recovery objectives of your business.

Building resilience into your business operations

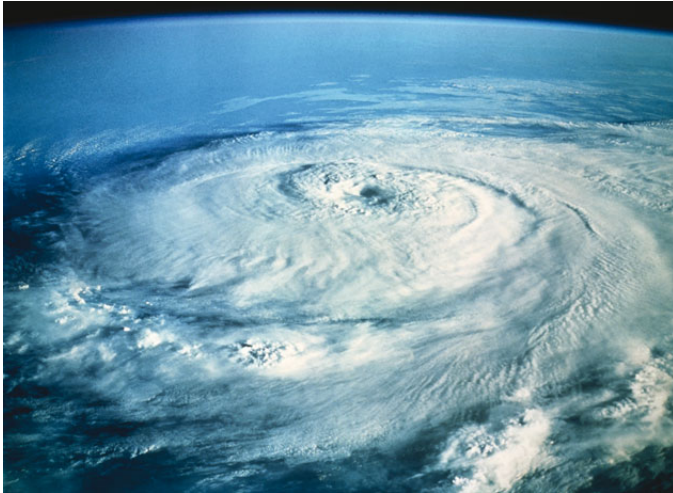
Business continuity and resiliency services from IBM can help you proactively identify, understand and manage operational risks so you can maintain continuous business operations, protect your brand image and remain a trusted provider to your customers and partners. Your business stays up, and you stay competitive—whether you are responding to a risk or maneuvering to adapt to changes in the marketplace. IBM services range from helping you to get started with business continuity planning to creating tailored availability, data protection, and disaster recovery solutions that are aligned with your unique business requirements. Utilizing the latest technologies, IBM can provide the breadth of solutions you need to develop an end-to-end resiliency strategy. With your particular business model, locations and requirements in mind, IBM can help design an effective business continuity plan and solution that is ideal for you. Plus, with local, regional and global resources in place, IBM can help you understand and take full advantage of the benefits of a business continuity plan. Our services can:

- Analyze the impact of a business disruption and the cost of downtime, then assess and address any gaps
- Determine the constantly changing governmental and industry regulations associated with business continuity that apply to you and help develop a plan for managing compliance
- Assess how you can reinforce your business processes so that when unexpected disruptive events occur, your customers and your partners remain in contact and your business keeps running
- Help ensure your data is effectively backed up and easily recovered



- Facilitate effective indexing, search and retrieval of archived information
- Enable your workforce to continue working in times of disruption
- Help your brand remain strong by leveraging IBM's industry-leading disaster response and recovery experience

Many service providers claim marketplace leadership or even global reach. But when it comes to integrating a solution that spans global technologies and vendors—one that takes both reactive and proactive strategies into account—no other provider has the combination of capabilities that IBM offers. We can provide access to hundreds of global business resilience centers and dedicated business continuity professionals worldwide, as well as the ability to put your critical personnel into as many



fully equipped work seats as necessary to keep your business running. IBM delivers credibility that comes from decades of experience maintaining continuous operations for our company and for businesses in nearly every industry—in every part of the world. That’s a message you can transfer to your customers, regulatory officials and supply chain partners who want to be confident that you’re well-prepared for contingencies.

IBM’s business continuity and resiliency services include:

- **IBM Resiliency Consulting Services** that assess, design, plan, implement and test your business resilience program and supporting infrastructure

- **IBM Managed Resiliency Services** that provide high-availability recovery solutions for mission-critical business processes
- **IBM SmartCloud Resilience Services** that enable cloud-based backup, restore and archiving of critical data, information and systems, as well as virtualized recovery of your physical and virtualized servers
- **IBM Infrastructure Recovery Services** that recover IT and business infrastructures, helping a company stay in business during a disruption

Developing an effective business continuity and resiliency strategy

You have to ask yourself and your team: *How well do we understand the risks to our organization? Have we fully identified them?* You also need to consider the actual cost of downtime to your business. How prepared is your business to continue to meet service level commitments in the face of adverse events? Do you have the IT skills, technology and expertise to develop a plan to handle myriad risks potentially coming your way? Can your business effectively comply with ever-changing customer contractual requirements, industry standards or government regulations? Is your business truly resilient?

You need an enterprise-wide business resiliency strategy that proactively anticipates and effectively responds to all types of risks.

Start with strategy—not technology



You need to develop a resiliency strategy aligned with your unique business needs.

IBM Resiliency Consulting Services

As part of our comprehensive approach, IBM Resiliency Consulting Services offers flexible approaches to help you architect a resiliency solution tailored to your unique business needs—from solution assessment and planning to design, test and implementation. We collaborate with you to provide a holistic assessment of risks across the layers of your business, starting with your strategy and vision, organization and human resources to business processes, technologies, applications and data, as well as your physical IT infrastructure and facilities. By helping to assess and diagnose risks and their root causes, along with specific prescriptive recommendations to address those

risks, you can begin to build a strong foundation for business resilience. Our experts enable you to realize value and benefits independent of technology, design or vendor by leveraging industry best practices and the IBM Business Resilience Framework, an architectural framework across six layers of your business that helps you meet specified business service level and risk tolerance objectives so you can accurately identify gaps for a more comprehensive, effective resiliency strategy and design. IBM's end-to-end approach helps you assess and plan for greater business resilience to create, deliver and implement a highly effective business resilience strategy and design for your organization. And with our ongoing services, we can continue to assist with managing your resilience solution—helping to continually ensure that your IT infrastructure and business stay aligned, agile and more secure.





Most companies lack the expertise to adequately assess, back up, store and protect critical data that is widely distributed across the enterprise.

IBM Managed Resiliency Services

What makes your business stand out in a competitive marketplace? Does your resiliency plan support your ability to maintain the availability levels required by your business? Can your business deftly handle a variety of potential threats to availability, including IT infrastructure stressors or human error? To thrive, your company must be able to offer extraordinary performance and deliver managed continuity or face disgruntled customers, partners and employees. You also risk losing your hard-won

customer base and potential revenue, and could end up with a dramatically diminished brand image. In addition to damaging your relationships with your customers, a failure to maintain service levels can cost you by impeding employee productivity and hindering your ability to smoothly meet changing compliance requirements.

Managing extreme data growth

Data is growing at explosive rates—growing from 281 exabytes* in 2007 to 1800 exabytes in 2012.

Designed to help reduce the frequency and duration of infrastructure outages and allow your organization, customers and partners to access information, communicate and run key business applications, IBM Managed Resiliency Services helps you maintain your changing service level objectives and continue critical operations to achieve ongoing business availability. Through IBM's consistent management—either full or partial—of your critical business processes, IT systems, operating environments and networks, you can experience reduced data loss, and application and system downtime while decreasing infrastructure complexity with better balancing of workloads. As a result, you gain an IT infrastructure that is equipped to better manage surges in demand, address regulatory compliance mandates and support governance—factors that can significantly minimize the financial impact of business disruptions. With your IT staff free to focus on core, revenue-generating business projects and innovation, you're better able to optimize existing

IT resources to meet and exceed IT availability and service level requirements. And by helping you avoid or reduce capital expense while monitoring and managing operational expenses and service levels, your company is empowered with enhanced agility to meet changing regulatory requirements and evolving business needs. This helps you move beyond merely defensively reacting to marketplace flux and instead, be positioned to proactively respond to change. IBM offers you the flexibility to select the services that provide the optimal balance of cost-effectiveness and high availability for your most critical business data and processes, as well as many options for less critical data and processes. As a trusted, financially sound IT leader, we can provide robust, proactive and event-driven managed services and products that enable your enterprise to avoid downtime, reduce recovery time following all kinds of outages and build a more resilient infrastructure to stand strong in any kind of economic environment.

IBM SmartCloud Resilience

IBM SmartCloud Resilience is a set of cloud-based managed services that can help you manage your data and email, wherever it's housed; enables you to quickly back up, restore, archive and maintain access to it on demand and with integrity; and to virtually recover both your physical and virtualized servers. Implementing an effective, cost-efficient resiliency plan based on your priorities for backup, retention and retrieval, IBM uses leading-edge automation technology to help you gain access to information virtually anywhere, anytime—within your extended enterprise, while providing nearly continuous monitoring and support. IBM offers robust onsite and remote data protection for



your data center servers, applications and databases. We also offer data protection for email, desktop and laptops to help automatically safeguard your data in many different scenarios, reducing your overall operational costs at the same time. You can select from a range of remote, onsite and hybrid data protection services that can help improve the efficiency and success rate of data backup and restoration. And with the experience in managing over 3,400 information protection clients with more than 138 petabytes of data, you can be confident knowing that IBM has the expertise and resources to safeguard your information.

Expanding disaster recovery to include data protection

A national grocery store chain needed to ensure that current production levels of key business platform operation systems would be available even in times of disruption or a disaster.

Business continuity and resiliency services from IBM helped improve recovery time to meet objectives by supplementing an already existing disaster recovery solution with remote data protection services. This solution allows the company to store system images in a vault in IBM's business resilience center in New York, utilizing and expanding on its existing services agreement with IBM for disaster recovery.

Benefits:

- Improved recovery time objectives and reduced cost associated with tape backup
 - Enhanced resiliency by incorporating data protection into the company's overall business continuity plan
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IBM Infrastructure Recovery Services

Is your enterprise reinforced to withstand and recover from not just the unthinkable but also the most common disruptions, like power outages? In recent years, heightened exposure to disruptive events—coupled with increasing government and commercial interdependencies—has made disaster recovery and crisis management a business imperative. As growing numbers of organizations face such situations, they are realizing the costly repercussions of not having key capabilities ready to deploy

when a situation occurs: repercussions that negatively impact the infrastructure, employees, customers, operations and day-to-day lives.

IBM Infrastructure Recovery Services can empower you to efficiently prepare for, respond to and recover from disruptive events—regardless of their size or scope, helping you to handle emergency situations and mitigate negative effects. IBM delivers vast experience and expertise to deliver a design and validate an effective plan that can help you meet your specific recovery objectives. Even if you've never experienced a particular disaster in your part of the world, it has probably occurred to one of IBM's clients in another locale. IBM supports more than 12,000 clients worldwide, so we've learned which procedures are most effective and are able to smoothly link them with your business processes, including those that connect you to your supply chain. We can help you track, assess and respond to local, regional and global disruptions that could affect your recovery plan. With more than 160 business resilience centers located around the world offering 5 million square feet of floor space and more than 40,000 work area recovery seats, we are poised to help you quickly get your business up and running again. If your facilities become damaged, IBM can provide the space, multivendor environment, and the equipment for your critical personnel. With sound planning and a prioritized response, you can keep your losses to a minimum and bounce back, ready for business as usual. By enabling effective recovery, including temporary work environments for critical employees that allow faster employee access to crucial applications and data, IBM enables you to respond faster. With IBM by your side, you can quickly and efficiently recover from disruptive events that could otherwise permanently damage your operations and brand reputation.

IBM's unparalleled experience is based on more than 50 years of business resilience and disaster recovery experience and more than 1,800 professionals dedicated to business continuity and resiliency, complemented by over 400,000 IBM employees and IBM Business Partners.

Meeting defined criteria for disaster recovery compliance

A large financial institution in South America needed to gain access to a third data center for disaster recovery purposes while also meeting the compliance requirements set by the Central Bank of Argentina regarding the location and distance of a disaster recovery site.

Business continuity and resiliency services from IBM delivered a solution based on an in-depth analysis to measure the bank's existing disaster plan against the standards of the Central Bank of Argentina. IBM implemented a disaster recovery solution supported by IBM's business resilience center in that region to fill the gaps in the bank's existing plans. The IBM team then implemented a work area recovery plan to enable key personnel to continue working in times of disruption.

Benefits:

- Improved recovery time objectives of less than 72 hours and recovery point objectives of up to 24 hours
 - Gained expertise from the business continuity consulting engagement
 - Complied with Central Bank of Argentina regulations
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Why IBM?

IBM is an experienced and innovative leader with specialized expertise in data protection, resiliency, high-availability replication, IT recovery, crisis management, business continuity and industry-specific solutions for your business. In tandem with our strategic partners, we offer a comprehensive portfolio of broad, deep offerings, facilities and resources in services, software and hardware based on consistent, standard, world-class methodologies and processes. With our extensive investments in infrastructure, combined with more than 1,800 dedicated business continuity professionals and over 160 business resilience centers located across 70 countries around the world, respected industry analysts have recognized IBM as a leader in business continuity and resiliency. Our unparalleled experience is based on more than 50 years of business resilience and disaster recovery experience. Using our vast business process and technology expertise experience, we help you design and implement a business resilience solution that meets your organization's needs. Our solutions are flexible, tailored to your business and financial goals as well as the regulatory and geographic requirements of any location while maintaining standardized timelines and methodologies to assure high levels of quality. By providing a comprehensive approach specifically designed to maintain your availability, protect your information and preserve your brand, we are able to address multiple types of operational risks. And by helping to ensure improved resiliency across all the layers of your business—including strategy and vision, organization and human resources, business processes, applications and data, and technologies and facilities—you can more effectively avoid, prepare for, and recover from virtually any disruptive event.

For more information

To learn more about gaining a world-class business continuity and resiliency solution for every layer of your business, contact your IBM sales representative, or visit the following website:
ibm.com/services/continuity



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* An exabyte is a unit of information or computer storage equal to one quintillion bytes.



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