


Helping protect profitability at every step

Business resilience





Business resilience

Understanding your risk landscape

How well does your company understand its supply chain and other business interruption risks emerging in the current operating environment?

Mismanaged exposure can cost you money and shareholder value. It can also prevent you from taking advantage of the opportunities that drive innovation and growth. The more you understand the risk exposures within your business, the more you can make informed decisions and prepare for these risks. Business resilience management provides the structure for dealing with risks systematically, holistically and successfully. By minimizing the negative effects of risk on your capital and earnings, business resilience is crucial for an organization to be better positioned against competitors.

Business resilience is supported by a risk management framework which identifies particular events or circumstances relevant to your business objectives, assesses them in terms of likelihood and magnitude of impact, and then determines a response strategy.

A resilient enterprise is better able to anticipate surprises, recover from disruptions, adapt to changing conditions and leverage emerging opportunities.

How business resilience can support your organization

- Minimize the negative impact of disruptions.
- Protect tangible and intangible assets.
- Reduce the cost of risk.
- Support continuity.
- Improve reliability towards your customers.
- Help to protect and increase profitability.
- Achieve compliance.

The challenges facing your business...

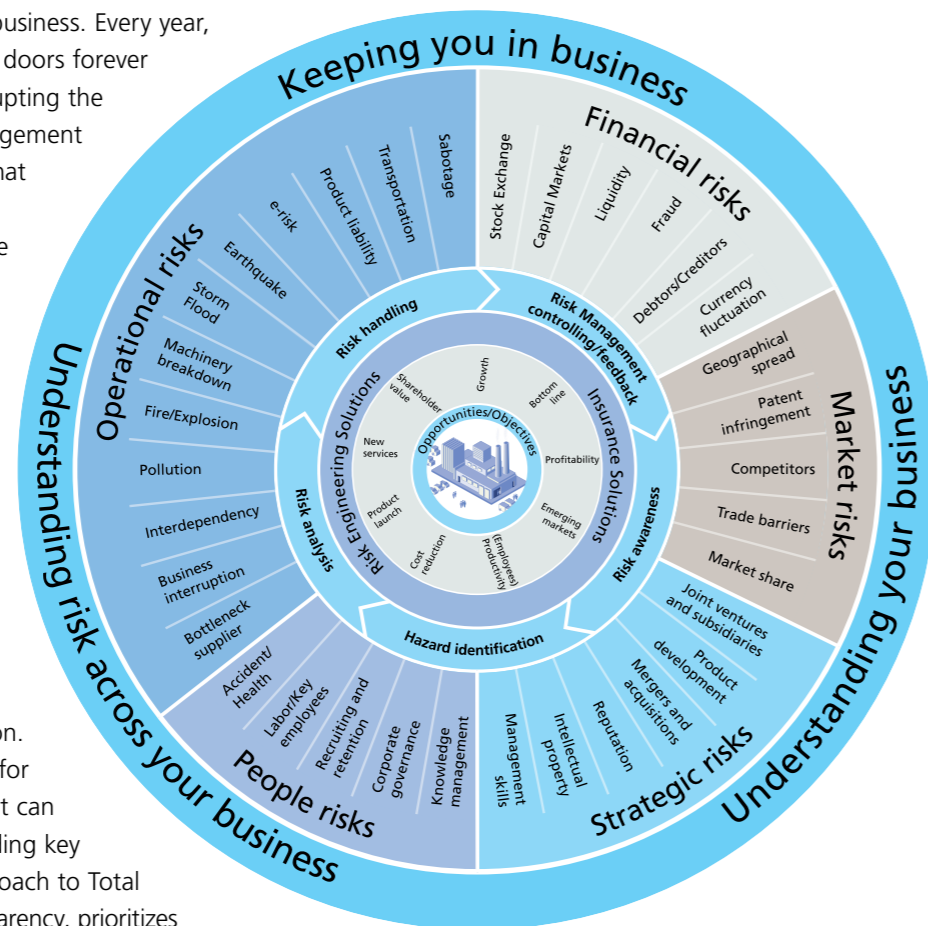
Are you aware of your key exposures?

In an intensely competitive environment, a permanent market presence is essential in order to satisfy customers and achieve a planned level of revenue and profit.

An interruption event can result in property damage, but it can also lead to productivity disruptions, which can pose a serious threat to the continued existence of a business. Every year, several thousand companies close their doors forever because of an unexpected event interrupting the flow of operations and for which management is unprepared to cope. It is estimated that after experiencing a disaster, 43% of companies never reopen and 29% close within two years*.

A solid business resilience framework helps you to identify your key exposures and risks relevant to your business objectives that can threaten your viability.

Zurich's Business Risk Wheel shows a 360-degree view of the many management challenges facing organizations today. The wheel's 'spokes' represent critical enterprise exposures which could lead to disruption. The inner circles indicate opportunities for embedding processes and solutions that can improve business resilience. Understanding key exposures starts with a structured approach to Total Risk Profiling that encourages risk transparency, prioritizes mitigation actions, and improves risk-based decisions.



The results of unpredictable events

Disruptions can cascade across product lines and geographic borders. A single disruption to your business can have multiple effects that can impact both the tangible assets of your organization such as property, environment, people and intangible assets, such as data security, knowledge management and brand reputation. Such damage can:

- affect your ability to hit corporate objectives
- erode goodwill and your brand integrity
- have a negative impact on share price and ultimately the value of your company
- lower employee morale.

The increasing complexity of your risk

Never before has the need to know your corporate exposures been more crucial to sustainable shareholder value. The current credit crisis has left corporations reeling over huge exposures that caught them unawares and caused adverse impact to their reputation, bottom line and even their very survival.

Some of the key issues to consider:

- Interdependency and supply chain.
- Increased networking between business partners, suppliers and customers.
- Corporate globalization and emerging markets.
- Emerging risks (climate change, natural hazards etc.).

Are you prepared to stay in business?

The true cost of business interruption

By failing to minimize potentially harmful events which could impact the ability to achieve corporate objectives, your business could be at a competitive disadvantage. The following cases offer a glimpse of the financial impact of business interruption.

A semiconductor plant producing chips for mobile phones caught fire due to a lightning strike. This caused severe problems for two of their customers who are major producers of mobile phone handsets.

One company managed the crisis relatively successfully with a business continuity emergency plan. The other company faced a major supply shortage resulting in loss of sales of at least USD 400 million and had to restructure their mobile phone division.

An international consumer electronic goods manufacturer/supplier experienced issues at a key system component plant, which resulted in a three month delay to a new product launch in Europe. This led to a reduction in profit targets from 130 billion yen to 80 billion yen.

A fire destroyed a factory that was the sole supplier of brakes to a major Japanese car manufacturer.

The production halt rippled through Japan's just-in-time supply chain, forcing another 18 plants to shut down for nearly two weeks. The total loss in sales was in the order of USD 325 million.

A petrochemical company suffered a three month delay to the start of a USD 2.8 billion oil project in South America because the delivery of the platform and rig fell behind schedule.

A millennium flood affected eastern Germany, Austria, Czech Republic and Slovakia with severe consequences for settlements and industrial areas. In eastern Germany alone, the flood created damage of over USD 11 billion.



An integrated approach to business protection

Business resilience is the process of planning, organizing and controlling the activities of your organization in order to minimize the effects of risk on your capital and earnings.

Business resilience and profitability is threatened from failure to properly manage strategic, market, operational, financial and other risks (e.g. emerging risks).

Our aim is to help you to achieve your business goals and objectives through a holistic and structured approach by:

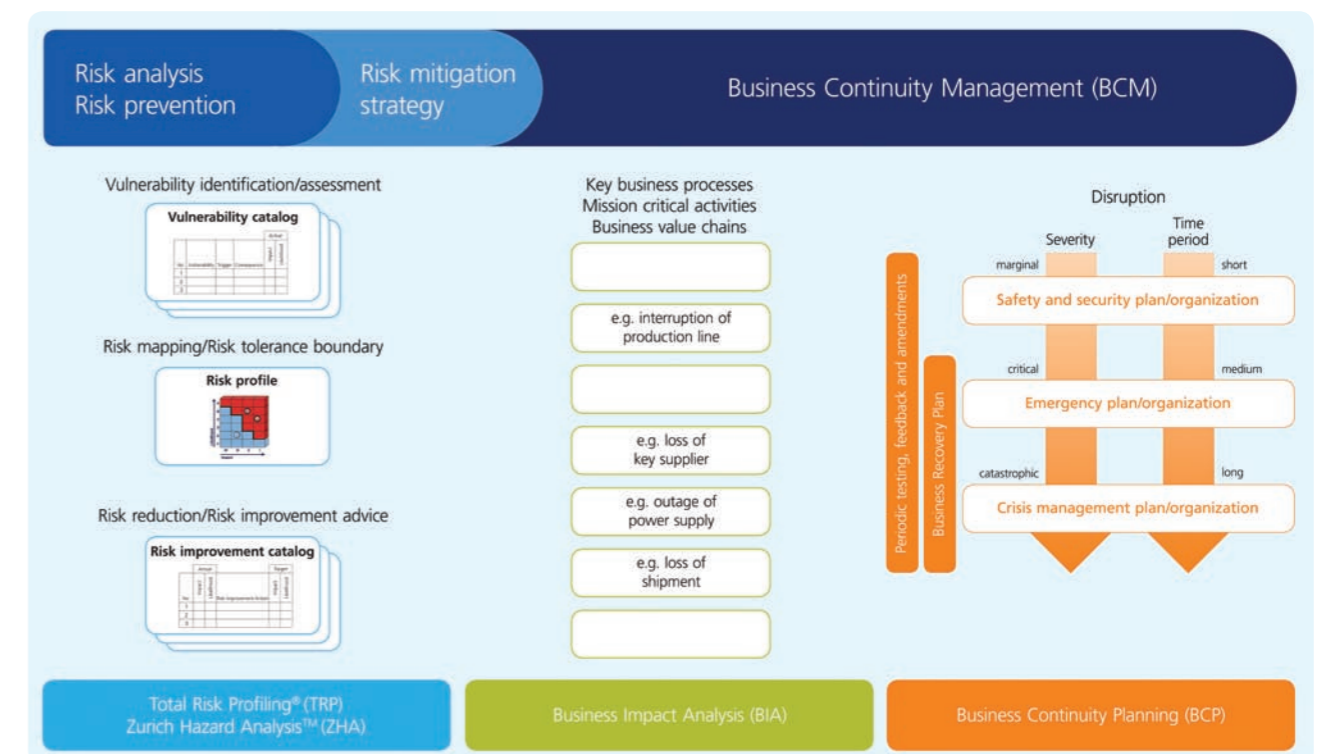
- understanding the business environment, mission critical activities and the organization's dependencies and relationships
- assessing the threats and vulnerabilities and how they impact on critical business outputs
- developing a business continuity plan supported by a set of risk prevention measurements and strategic continuity management.

The true value of business resilience

Integrating solutions like, Total Risk Profiling (TRP)[™], business impact analysis, supply chain assessment and business continuity planning into a business resilience program will protect your business and help you to:

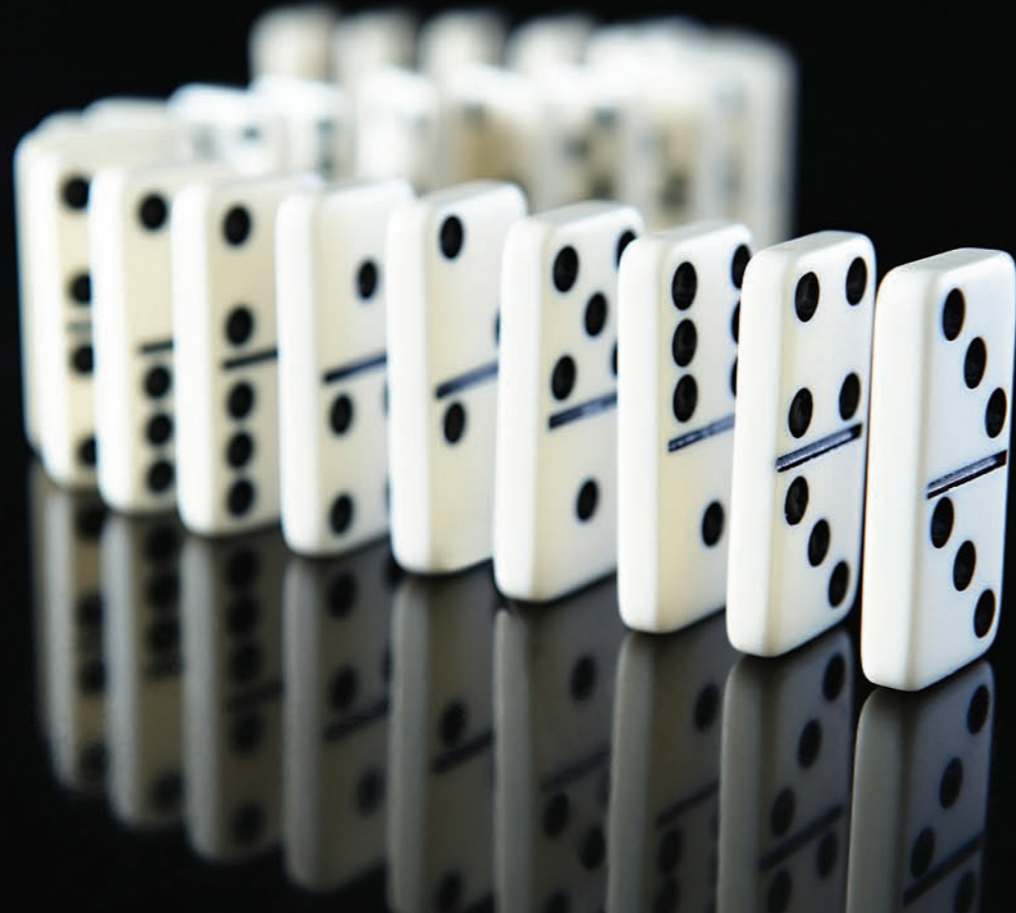
- protect the company's tangible and intangible assets
- minimize the total cost of risk
- limit damage to reputation or stakeholder value
- service and retain customers
- meet legal or regulatory requirements
- maintain creditworthiness
- prevent delays to or cancellation of projects, products or other strategic growth plans.

Our holistic approach

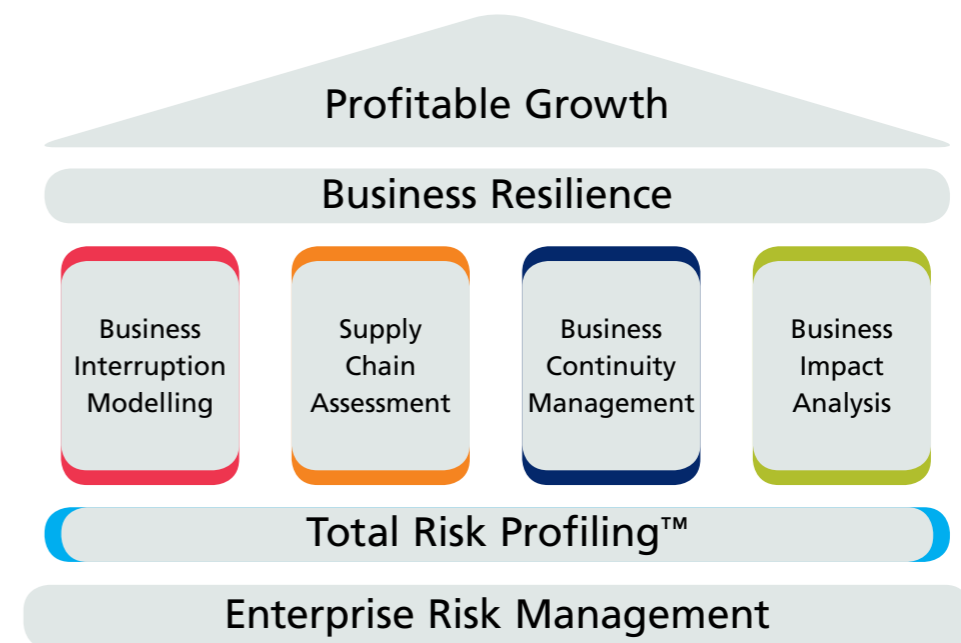


- A business resilience program is an investment in the future sustainability of your company.
- More than ever, companies are under pressure from shareholders, regulators, rating agencies and customers to demonstrate a robust process to optimize risk and reward.
- Implementing a business resilience program in an integrated and systematic way can enhance productivity and competitive advantage.
- By identifying and proactively addressing threats and opportunities, you can better reach your corporate objectives to create value.
- Zurich's business resilience services can integrate holistic risk management across your company that can strengthen your corporate risk profile and maximize profitable strategic growth.

Zurich can help your business to be more resilient



We seek to embed business resilience into your company's management framework, to facilitate continuous improvement of your risk profile and minimize the effects of risk on your capital and earnings.



Zurich HelpPoint®

We can help you achieve business resilience. Our global network of risk professionals are here to provide you with relevant risk insights, experience and knowledge to protect your business and reduce your cost of risk.

Zurich offers a proven risk profiling methodology and modelling skills. Our business resilience management services provide you with 360-degree solutions to help protect your profitability.

Total Risk Profiling™

Our Total Risk Profiling (TRP) process is a proven risk identification and prioritization tool developed from our expertise in hazard analysis. TRP is used within Zurich to help management identify, prioritize and develop action plans to manage our own business risks.

Features

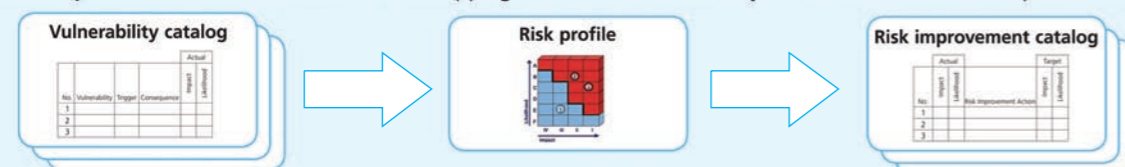
- Provides a structured approach to identifying, assessing and cataloguing vulnerabilities using Zurich proprietary tools i.e. Total Risk Profiling™ or Zurich Hazard Analysis™.
- Offers a workshop-based exercise, where a facilitator-led team develops a relative rating of a risk scenario.
- Explains the use of risk scenarios to break down risks into their components of; vulnerability/control, trigger and consequence.
- The team creates its own 'tolerance boundary' as an expression of its appetite for risk.
- Rates risks, which are then prioritized relative to each other without predefined impact or likelihood scales.
- Provides risk reduction and risk improvement advice, enabling a robust risk mitigation strategy.
- Action plans are then developed to improve the prioritized risks and bring them within the team's tolerance for risk.

Benefits

Other risk identification processes use a similar approach, through management interviews or plotting risks on a grid of impact and likelihood. However, there are key differentiators of the Zurich TRP process:

- Ensures an appropriate level of business engagement and support for the risk profiling process.
- Provides an opportunity to discuss multiple triggers with different consequences, helping the team to identify the true drivers of a risk, or even to define new risks.
- Avoids a voting or prioritization process, by developing the team's consensus view on a high priority risks. This builds team commitment to managing risk.
- Provides a foundation for determining the risk tolerance/risk appetite of the business.
- Shows efficient ways to manage risk escalation and prioritization of risk mitigating actions.
- Helps set the agenda for the enterprise risk management area or internal audit to monitor risks that fall just below the risk tolerance boundary.
- Provides a framework for future risk profiling and prioritization of risk mitigation measures.

Vulnerability identification/assessment Risk mapping/Risk tolerance boundary Risk reduction/Risk improvement advice



Business Interruption Modelling

Using Zurich's proprietary modelling software, our Business Interruption (BI) Modelling service assesses, in detail, the financial effects of possible scenarios that may threaten business continuity.

Our extensive experience in evaluating business interruption risks combines insurance, business management and modelling skills into a unique offering. BI Modelling not only takes account of direct effects but also, where applicable:

- effects arising from interdependencies with other sites or suppliers
- likely management decisions arising as a result of the incident or risk
- existing proven mitigation or recovery plans, (e.g. production transfer capability)
- contingency plan/recovery costs
- key customer dependency.

Features

- Flexible approach, which can build on existing processes or begin from scratch.
- Quick, expert evaluation of threats to key business processes.
- Rigorously analyzes all aspects of business resilience – a typical property/business interruption assessment rarely has the information or time to holistically assess sustainability.
- Quantifies the financial impact of an interruption to the internal and external supply chain, using state of the art BI modelling software.
- Builds a comprehensive framework for a study of the financial effects of disruptions across the value chain.

Benefits

- Builds a comprehensive framework for study and efficient analysis of BI effects.
- Ensures repeatable and consistent approach.
- Assembles and presents profit and loss exposure information for all disruptions in a single model to help data management and interpretation, especially when coupled with our supply chain assessment and mapping.
- Allows the customer to communicate risk issues in a more consistent and informed way, including better quality presentations to the insurance market or other stakeholders.
- Creates the basis for more informed strategic decision-making within the business (e.g. targeting resources for business continuity planning linked to profit impact).
- Supports risk transfer decisions and facilitates insurance premium allocation between lines of business.
- Acts as a strategic link between business continuity management and financial business performance thereby enhancing operating efficiencies.

Supply Chain Risk Assessment

The challenges of managing an increasingly complex network of suppliers can threaten business resilience and create new challenges for enterprise risk management.

Nearly 800 CEOs reported they did not achieve 2007 quarterly financial targets due to supply chain disruption (source – Procurement Strategy Council, 2007).

There are many factors that can influence the integrity of a supply chain. In 2007, on-time port arrivals were reported at a historic low of only 46%.

Some of the factors that need to be considered when assessing a global supply chain:

- **Supplier:** the financial viability of suppliers, their dependency on outsourced manufacturing, global sourcing, or their reliance on original equipment manufacturers, piracy, port blockade.
- **Environment:** issues of geopolitical instability, natural disasters, technology, security, and climate change.
- **Customer:** the changing tastes of customers, volatile demand patterns.
- **Manufacturer:** global manufacturing and supply constraints, distributed information and increased product complexity, raw material or component availability, transportation failures, physical damage.

There are an infinite number of disruption scenarios, but a finite set of outcomes. When a disruption happens, what matters most is your company's ability to respond. Supply chain risk analysis can help strengthen the weak links in the chain by helping to:

- increase understanding of the quality of your supply chain risk management to optimize your supply chain value
- identify the areas within your supply chain that are most vulnerable, and why
- quantify the financial impacts associated with disruptions involving particular supplies or suppliers
- identify and prioritize the improvement and mitigation efforts to your supply chain risk management processes to protect your profitability should the supply chain break
- enable you to really understand your total cost of ownership for goods and services so you can maximize shareholder value.

Supply Chain Risk Assessment and Mapping

Our supply chain risk evaluation, mapping and grading is based on an established Zurich methodology, designed to assess and quantify the broad areas of exposures and controls in the chain. The structured supply chain risk consulting process results in separate scores and recommendations for each supplier to facilitate unique mitigation.

Features

- Identifies and maps critical supplier and supply exposures in each country of operation.
- Establishes a multifunctional team (including risk management, operations, marketing, procurement, finance and others) to gather information for a supply chain workshop.
- The cross-functional team determines and maps business critical supplies and suppliers in a risk assessment workshop.
- Provides details on the profit and costs relating to each supply and supplier to be mapped.
- Calculates financial and interdependency information to evaluate potential loss scenarios.
- Develops and prioritizes potential improvements to supply chain risk mitigation.
- Provides a clearer view of options and risks if the supply chain fails.
- Reviews your mitigation plans in preparation for the risk and financial assessment workshops.

Benefits

Increasing supply chain resilience is a major component to improving enterprise sustainability and profitability. Zurich's assessment will expose and address vulnerabilities that could inhibit your company's adaptive capacity. Our supply chain consulting has many benefits to both your chain and your business.

- Facilitation and optimization of your supply chain activities, which are key profitability drivers.
- A comprehensive framework built for ongoing supply chain analysis, with a repeatable approach.
- Greater understanding of the supply chain vulnerabilities covering both likelihood and severity.
- Quantification of scenario-based financial impact figures for potential disruptions.
- Identification and prioritization of mitigation actions.
- Risk insights into specific aspects of the supply chain, including areas of residual risk.
- Increased transparency and rational supply chain decisions through risk understanding.
- Benchmark information for evaluating improvements.
- Proactive alerts of the risks faced, through development of a business continuity plan.
- Presentation of supply chain exposure information in a single data model, when using supply chain risk assessment result to feed our proprietary BI Modelling software and drive continuity plans.

Business Continuity Management

Business Continuity Management (BCM) has been defined as: “A holistic management process that identifies potential impacts threatening an organization, and provides a framework for building resilience with the capability for effective response to safeguard the interest of key stakeholders, reputation, brand and value creating activities”.*

A robust continuity management strategy moves your company from reactive to proactive, to improve opportunity for sustainability. The process begins with a business impact analysis:

Be prepared

Business Continuity Plan (BCP) development, in combination with our Total Risk Profiling, Supply Chain Risk Assessment, Business Impact Modelling, and Business Impact Analysis, gives you the opportunity to develop ‘fit-for-purpose’ business continuity plans within a comprehensive BCM process.

Business Continuity Plan Audit

Development of a BCP starts with an audit of existing recovery plans, to provide the basis for improvement. Our audit benchmarks business continuity management against standards and best practice, to yield a summary of the key performance gaps in an organization’s BCM process.

The BCP audit can:

- ensure continuity plans are fit for purpose
- assist in determining risk tolerance/risk appetite
- make it easier to achieve compliance with a raft of existing and future regulation
- provide an opportunity to demonstrate competence and resilience to key stakeholders. In an intensely competitive environment, a permanent market presence is essential in order to satisfy customers and achieve planned level of revenue and profit. An interruption event can result in physical damage but it can also pose a serious threat to the continued existence of the business.

BCP Development

It is in the interest of management, as well as of customers, employees, owners and investors to make efforts to avoid incidents with business continuity impact, or to manage them effectively when they cannot be prevented. A properly developed BCP will reduce the severity of an incident, even if the probability is unaffected. Zurich’s consultants will help you ‘plan to be prepared’.

Features

- Ensure that the BCP is appropriate for safeguarding the business in all loss scenarios from short to long term and marginal to catastrophic criticality, by the development of;
- Safety and security plans
- Emergency plans
- Crisis management plans, including media management
- An efficient, focussed process to develop plans for individual plants or sites in the minimum time necessary, based on an evaluation of the ‘GAP’ between recovery and customer loyalty.
- Where applicable, an introduction to third party software suppliers.

We recognize that not all companies have the same needs regarding the development of business continuity plans. Zurich has developed a range of solutions from basic awareness training with simple plan templates, through to a complete BCP development process. Our approach closely follows recognized international standards on BCP. It can be tailored around your internal corporate guidelines.

Benefits

- Minimises management time to develop a BCP.
- Easy to use templates make plan writing efficient.
- Maximises the opportunity for you to have more in-depth training and support in plan development.
- Provides an opportunity to demonstrate competence and resilience to key stakeholders.
- Make it easier to achieve compliance with existing and future regulations and standards.
- Allow communication of risk issues in a more consistent and informed way.
- Ensure a repeatable and consistent approach.

Business Impact Analysis

Not all losses can be covered by insurance. In the event of a major loss incident, the prime objective is to protect the business from the effects of damage or other unforeseen events and maintain resilience.

It is fundamental to prevent the events or at least mitigate their effects. In any case it is important to anticipate critical decisions. Zurich has a well-established approach that works across a range of different business sectors and geographies.

The purpose of a Business Impact Analysis (BIA) is to identify and quantify the systems that, when absent, would create a danger to the survival of an organization and to ensure that these systems receive the correct priority in any subsequent Business Continuity Plan (BCP).

Features

- Builds on supply chain mapping and BI modelling output.
- Creates an understanding of a disruption impact on:
 - key business processes
 - mission critical activities
 - business value chain.

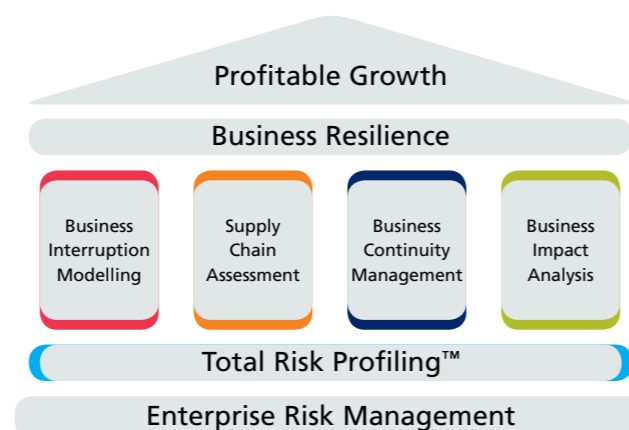
Benefits

- Enables prioritization of risk mitigation measures.
- Ensures that the right level of effort goes into safeguarding the business (i.e. BCP).
- Can help minimize uncertainty or doubt with regard to risk transfer evaluation.
- Rigorously analyzes all aspects of organizational resilience.

Profitable growth

Enabling business resilience means discovering and mitigating the dangers lurking within your business which could surprise and cost you dearly. Never before has the need to know your corporate exposures been more crucial to sustainable shareholder value.

The effective management of both business risks and opportunities has become an increasingly important part of capital efficiency and, ultimately, competitiveness. It is vital to establish multiple lines of defence to continually revalidate an organization's trade-off between risk and reward. Risk management should provide a 360-degree view of corporate resilience and sustainable growth opportunity. Zurich's Total Risk Profiling, Business Interruption Modelling, Supply Chain Assessment, Business Continuity Management and Business Impact Analysis will help you enable business resilience and ultimately protect your profitability.



For more information about **business resilience** please speak to your Zurich contact, your broker, or alternatively visit our website www.risk-engineering.com



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