

SF 80: Economic Recovery and Business Continuity Management (BCM)

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0	0	7	10	9	9	35

Example:

New York City: More than 23,000 businesses and non-profits employing 245,000 people were affected by Hurricane Sandy. The largest number of enterprises affected by Sandy was concentrated in retail and services. They had to face extensive damages to their inventory and equipment, the interiors of their spaces, and/or structural damage to their buildings. The Mayor's Office estimated the direct private losses in New York City due to Sandy to total approximately \$8.6 billion, of which up to \$4.8 billion were uninsured. The areas most seriously impacted were the Brooklyn-Queens Waterfront, the East and South Shores of Staten Island, South Queens, Southern Brooklyn, and Southern Manhattan. The New York City government launched several programs such as launching nine NYC Restoration Centers; tasking NYC Business Solution Centers to provide local services to businesses, nonprofits, and residents or Launching a loan and matching grant fund for impacted businesses and non-profits, capitalized with over \$25 million, in partnership with Goldman Sachs, the New York Bankers Association, the Mayor's Fund to Advance New York City, and the Partnership for New York City. These programs were launched almost entirely with City resources.

Singapore: The National Business Continuity Management (BCM) Programme is a \$30 million initiative over five years (launched in 2008) aiming at supporting the private sector in building economic resilience and competitiveness. Through achieving a BCM certification (Singapore Standard SS540:2008) private companies and SMEs can receive financial support up to 70% to defray part of the cost.

1. Differentiated description of the key field

Business continuity planning as a city's ability to effectively prevent and recover from both internal and external threats while maintaining competitive advantage and value system integrity is a central element in the overall resilience framework. This refers to any event that may have an impact on business operations such as supply chain interruptions and loss or damage of critical infrastructure (including machinery or computing/network resources). Usually, business continuity management encompasses five key elements:

1. Business impact analysis as to differentiate between critical and non-critical organization functions and activities.
2. Threat and risk analysis as to identify potential

risks which the system is most prone to, such as epidemic, earthquake, fire, flood, cyber-attack, sabotage (insider or external threat), hurricane or other major storm, utility outage, terrorism/piracy, theft (insider or external threat, vital information or material), random failure of mission-critical systems.

3. Identification of impact scenarios as the basis for a business continuity management plan. That includes a cost-benefit analysis of possible emergency management plans. For instance, a typical building loss scenario will encompass all the critical functions of the building and the possible cascade effect such a scenario would have.

4. Process Development, including the creation of detailed crisis management processes and procedures, the definition of alert stages as well as escalation steps once an incident occurs.

5. Test: this element is absolutely crucial, as it encompasses detailed plans on how to resume business process and get back to a functioning status in the aftermath of a crisis situation.

In the case of business continuity management there exists a standard framework defined by the ISO. The ISO 22301 specifies requirements to plan, establish, implement, operate, monitor, review, maintain and continually improve a documented management system to protect against, reduce the likelihood of occurrence, prepare for, respond to, and recover from disruptive incidents when they arise. The requirements specified in ISO 22301:2012 are generic and intended to be applicable to all organizations, or parts thereof, regardless of type, size and nature of the organization. The extent of application of these requirements depends on the organization's operating environment and complexity.

As this standard is valid on a global scale, it will be highly interesting to see how it will be implemented in the various countries. However, a few general observations that can be made today already highlight the different stages the analyzed cities are in. Undoubtedly, the concept of business continuity has been initiated and is most matured in the U.S. as well as the UK. On the other side of the spectrum, only a very limited number of large German companies have so far implemented a comprehensive BCM structure as outlined above, hardly any small and medium size companies are willing to invest the resources to implement such as concept.

In Asia, on the other hand, especially in cities prone to extreme climate/geological effects such as Tokyo (earthquakes) and Singapore (Monsoon), BCM is a crucial element for local businesses who for the most part have already experienced tremendous economic losses and infrastructural damages as a result of absent BCM measures in the past. On top of that, within their regional markets, a solid BCM process can also be an important competition advantage in relation to other big regional urban players such as Hong Kong, Beijing, etc.

2. Reference to sustainability:

Within the developed world, a continuously functioning economic sector is the backbone of an urban population's well-being. In view of an urban age where the movement of goods and people, the processing and dissipation of information data or the management of processes happens in real-time and at enormous speed, the factors time and space seem to be relativized.

Evidently, only a small disruption of these highly inter-connected processes and links which cascades into many other sectors always has the potential to result in extreme economic, hence societal damage as major supply-lines may be cut, the access to basic needs may lead to tremendous human damage. Undoubtedly, the impact of such disruptions on the societal and business processes of the cities of tomorrow is likely to continue to increase. Therefore, innovative ways and means to help business to better absorb the shocks from and even better recover from an adverse event is a crucial field of activity on the path towards more sustainable urban systems.

There are two additional side effects crucial for the social and the economic pillar of the sustainability equation:

First, a quick recovery of a business after a disruption ensures a limited use of additional (physical, financial, human) resources that need to be invested

Second, a quickly functioning business after a shocking event contributes to the societal stability of a community, ensuring the economic and psychological comfort of employees as well as a city's administration responsible for the operational well-being of the population.

3. Relevance to industrial sectors?

Mobility:	Middle
Energy:	High
Production & logistics:	High
Security:	High
ICT:	High
Water infrastructure:	High
Buildings:	High
Governance:	Middle

Brief description of the high level of importance:

Business continuity management is highly relevant for those sectors responsible for critical infrastructures or operations and which are particularly prone to natural or man-made disasters or accidents. Especially those sectors fulfilling a sensitive function for others, i.e. most prominently the energy sector, have the potential to exacerbate the consequences of a disruptive event by not having BCM procedures in place.

4. Impact (positive & negative)

Positive:

- The economic consequences of a disastrous event can be lessened.
- Well-structured incident management processes allow the companies to save important resource during and after a crisis situation
- If the majority of a city's businesses implement BCM standards, the city is much more quickly able to assess damages and losses right in the direct aftermath of a crisis situation
- If systemic risks and threats can be minimized through BCM standards, one major sustainability imperative (using fewer resources for future generations) can be much better achieved because redesigning and rebuilding damaged or destroyed infrastructure is much worse than having to deal with minor refurbishments.

Negative:

- There is no doubt, establishing such measures will cost some money and companies will have to be willing to invest these resources. However, the overall cost-benefit analysis will show a positive balance towards this step.
- A possible risk may include a certain indifference of decision makers within businesses with respect to threat scenarios or risks that are not specifically covered by the BCM framework.

5. Implementation measures:

Based on the observed experiences, in most cities it seems that only a regulatory initiative by governments will effectively push businesses to more actively engage in this process.

Key global consulting firms are already engaged in helping larger corporations to design and implement BCM frameworks. However, especially small and medium-size enterprises need to see the beneficial business case for themselves to invest resources in such a framework.

6. Actors: Who can shape things?

First and foremost the businesses themselves. However, the regulatory framework facilitating this development needs to be provided by national policy-makers and even more importantly, assisted and guided by the relevant national standardization organizations.

7. Prerequisites:

- A legal framework, suitable for the different national contexts, needs to be established
- Incentives need to be created for SME's to also implement such BCM standards. For instance, insurance premium reduction models could be applied as in the US.
- an awareness has to be created among urban business

leaders, opening their minds towards the longer-term benefits of such investments into BCM measures

8. Obstacles/barriers:

The observed experiences in the various cities show that there seem to be two major drivers that are responsible for pushing, or, in the case of Germany rather impeding, a broader implementation of this framework:

- First, a regulatory framework seems inevitable when intending to achieve an average increase in the economic sector's resilience rather than only having a few large corporations willing to invest the money
- Second, so far only few cities with a unique exposure to extreme effects of natural phenomena (Tokyo and earthquakes, storms in New York, floods in Copenhagen) are likely to implement a comprehensive set of BCM measures
- Third, there is a general lack of awareness among business leaders in a city what the entire chain of effects of a disruptive event may have on their business as such a systemic risk mapping in most cases does not exist

9. Indicators:

In a first step an absolute figure of companies already having implemented BCM measures within a city (then compared to another city) would already be of great help. However, based on the nature of the cause, getting such information would be extremely difficult. As in the example of New York, an analysis of post-crisis reaction of businesses, which acted in a concerted way and proved how their BCM measures were effective, can be of tremendous help in deriving key lessons learned for other cities.

10. Special features/remarks: