The Japanese Experience of Public-Private Partnerships for Disaster Reduction & Propagation of Business Continuity Planning (BCP)

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Disaster Reduction Activities by the Corporate Sector.
Why are they necessary?

① Interruption of smooth provision of goods/services will cause economic loss: necessity for BCP
② Corporate Citizenship: as a member of community
③ Who should be responsible for the safety of employees and customers in offices, shops and factories?


1995 Hanshin-Awaji(Kobe) Earthquake, damage to factories
2000 Tokai Torrential Rains, suspended automobile parts manufacturing
2001 World Trade Center 911Terrorist Attack in NY, quick resumption by backup office
2004 Niigata-Chuetsu Earthquake, damage to electronic parts manufacturing

Stronger interest by the Business Community for Disaster Risk Reduction
“Business Continuity Planning Guideline 1st Edition” Published by the special committee under the Central Disaster Management Council, August 2005
Paradigm shift in Japan after 1995 Hanshin-Awaji (Kobe) Earthquake

Most of the initial search & rescue done by family members and neighbors.

How can we encourage disaster preparedness at community level?

Importance of building safety re-recognized.

Who owns the houses and buildings?
Who can take care of safety inside the house or in the office?

Business Continuity Planning is important for reducing economic loss.

Who decides on BCP of companies?

Importance of Pre-disaster measures re-recognized.

Pre-assessment for each possible large scale earthquakes & floods.
Disaster reduction strategy based on pre-assessments.

Government centered disaster reduction  Multi-stakeholder approach to disaster risk reduction

Call for a Nation-Wide Movement for Disaster Reduction Actions

Self-action
Mutual-action
Public-action

Self-help action by individuals, families and companies
Mutual-help action at neighborhoods and local communities
Public-action by governments
How can we promote this Nation-Wide Movement for DR?

- Involve various local groups in disaster reduction
  - Community Groups & Community Center Managers
  - Junior Chamber of Commerce Chapters
  - Parent & Teachers Associations
  - Local Shop Unions
  - Consumer Cooperative Unions, etc.

- Provide various opportunities for disaster education
  - In Elementary & Secondary Schools
  - At Social Education Facilities & Public Libraries

- Develop various methodologies to attract different people
  - Open a new portal website for sharing methodologies & knowledge
  - Start “Ichi-Nichi-Mae (the day before the disaster) project” for personal disaster experience sharing for awareness

- Involve the Corporate (Business) Sector

My Company was hit by a Disaster!

- The Customers, the Bankers will come to express sympathy and encouragement.

  Immediately after and

  One week after → What for?

  to identify the likely resumption time.

  (This is a real story in the case of 2004 Niigata Chuetsu Earthquake.)

- For the Customer “Will the supply of product resume within acceptable timeframe?” If it is not likely, the Customer will look for alternative supplier.

- For the Banker “Is it worthwhile to lend funds for recovery?” If not the banker will withdraw.

Necessity for Business Continuity Planning
Business Continuity Planning

Target BIT for Strategic BCP and Decision Making

- Set the target for BIT based on the characteristics of the business.
  - 3 days?
  - 7 days?
  - 2 weeks?
  - 1 month?
- How competitive is the business? Where are your rival companies?
- What are the alternative methods for shortening the BIT?
- Quantification of the BIT risk reduction.
- How much does these alternative methods cost?

Strike the Balance!

Comparison between cost & BIT risk reduction!
Modern Enterprises are not stand alone. They are dependent on Supply Chains for operations. “Just in Time” procurement is based on the assumption that SC functions without interruption. What if SC halts? Example in 2011 Great East Japan Earthquake & Tsunami

- One automobile microchip computer manufacturer suffered serious damage.
- This manufacturer had global dominant share with sophisticated technology.
- Automobile manufacturers follow “Just in Time Inventory System”.
- No extra stockpiles of microchip computers in automobile factories.
- Many automobile assembly lines worldwide halted for more than one week!

Quantitative Risk Analysis with due consideration of Supply Chains

- Possibility of individual nodes hit by earthquake events & BIT of individual nodes by damage level
- The combination by supply chain patterns → BIT of the Supply Chain System
Strategic Policy Targets for Disaster Reduction of the Corporate Sector in Japan

Background:
Pre-Assessment of Tokyo Inland Earthquake Damage published in 2005
Worst case economic damage 112 trillion yen (20% of GDP!)
Strategic Plan to reduce economic damage to 40% less by 2015 (in 10 years)

Strategic Policy Targets to achieve this strategic plan
- Seismic strengthening of
  buildings (75% → 90%)
  pillars of artery roads & highways
  piers of major ports (55% → 70%)
- All of large-scale companies to implement their own BCP
- Half of medium-size companies to implement their own BCP

How can we encourage companies to implement their own BCP?
- Propagation of BCP Guidelines & Checklists
- Policy Incentives
- Create a sense of common practice to have BCP
- Outreach to partners

Propagation of BCP in Japan

**Publish Set of BCP Guidelines & Checklists**
2. Checklist for Business Continuity Guideline
3. Sample models of Business Continuity Plan
4. List of the issues for self-evaluation regarding "Corporate Disaster Reduction Activities"
5. Sample reports for public relations on Corporate Disaster Reduction Activities

**Policy Incentives**
Special Low-interest Loan by DBJ
followed by local banks
Shiga Bank, Kyoto Bank

**Create a Sense of Common Practice**
- Japan Business Federation
  Committee on Risk Management
  • Encourage business unions to form their own BCP guidelines

**Newly Organized a Non-Profit Organization BCAO**
Annual BCAO Awards to highlight Best Practices by companies, business unions, local public-private-partnerships

**BCP Guidelines for Medium & Small Business**
THE TOKYO CHAMBER OF COMMERCE AND INDUSTRY
Special Low Interest Policy Loan by DBJ
(government policy loan since 2006, negotiated by S.Nishikawa)

Mechanism of the Corporate Loan Program for Disaster Prevention

- Corporate credit risk assessment, collateral evaluation, etc.
- Planning and management (preparing BCP, etc.)
- Risk support measures (measures to prevent secondary damages, etc.)
- Preparing facilities to reduce the effects of a disaster (earthquake resistance diagnosis, repairs, etc.)
- Back-up system (information systems, etc.)

DBJ
Efforts "excellent" [Policy rate 1]
Efforts "superoxcellent" [Policy rate 2]

Loan approval
Financing: Up to 60% of the cost of the eligible project

Central Disaster Prevention Council (Cabinet Office)
Independent conforming evaluation system
Self-Evaluation Survey for Corporate Disaster Prevention Measures

1st Financing Case: The Yasuda Warehouse Co., Ltd.

- In April 2006, DBJ provided financing to the Yasuda Warehouse Co., Ltd., as the first project under this program.
- Yasuda has a long-standing disaster management system.
- Forming the basis for the system is a disaster management committee with members from across the company.
- Using a hosting service, the company has established back-up facilities and data for its information systems, which are key to inventory management in the warehousing business.
- The projects financed by DBJ loans include the renovation of an aging warehouse owned by Yasuda in Yokohama, and the creation of back-up information systems.

Positive side-effects: The stock price of Yasuda increased after this news of this loan.
The grant of this loan served as a good indicator of reliability and low-risk of the recipient company. Other companies who were granted enjoyed similar trust from the stock market.
This loan became so popular because it served as an indicator of reliability.

Low Interest, However because of the prevailing low interest in the market, the actual difference was only ~0.1%
Finance by local bank for DRR in their region
the case of Shiga Bank

**Background**

The fate of local bank depend on the prosperity of their home region.
If the regional economy is to collapse by a disaster, the local bank would diminish.
Strong recognition that the local bank "is on the same ship" with local companies.

**Action**

Shiga Bank survey of local companies' preparedness
Only 10% were prepared!!!

Shiga Bank began to encourage their corporate clients’ BCP through a four-step program, named “acknowledge”, “consider”, “implement”, and “support”. Value added service

**Evaluation**

Shiga Bank made the difference from Mega-Banks
Awarded 2007 BCAO Grand Prix Award

Inspired by this success, Kyoto Bank also started

Interest rates are set by taking into account client’s disaster preparedness.
DBJ considers themselves to be "something different" from other mega-banks
How do these efforts pay?

Formulation Status of BCP of Japanese Companies
(implemented/under implementation)

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<th></th>
<th>Large-scale companies</th>
<th>Medium-sized companies</th>
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<td>35.3%</td>
<td>58.4%</td>
<td>72.3%</td>
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Special Low Interest Loan lending by DBJ (2006 to 2012 F.Y.)

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<th>Number of companies granted</th>
<th>Total of low interest loan</th>
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<td>102</td>
<td>92 billion yen</td>
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Laureates of BCAO Awards
- The Development Bank of Japan (awardee of 2006)
- Lawson Company (awardee of 2011)

featured in the World Economic Forum Global Risks 2012 Seventh Edition

Implementation of Business Continuity Plan (BCP) enabled quick resumption of companies after 311 Tsunami in 2011

Convenience Store Chain quickly resumed retail service by mobile truck shops

Medical waste recycling company resumed operation in 2 days, critical service for hospitals
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③ Who should be responsible for the safety of employees and customers in offices, shops and factories?

④ Who can apply the latest scientific & technological findings for disaster risk reduction to everyday life?

- Structural Engineering, Seismic Base Isolation, Early Warning Systems
- Emergency Communications
- GIS Mapping Systems etc.
and many more

Application of Latest Technologies by Companies for Disaster Reduction in Japan

Automated systems approach for saving lives by minimizing human errors.

- Microchip controlled Gas Meter for all household
- Safety mechanism triggered by earthquake stronger than JMA 5 scale will automatically shut down gas supply
- No city fires in Sendai by earthquake
Real-time **Earthquake Early Warning** issued 8.6 seconds after the first quake

- Primary Pressure wave travels much faster than the Secondary Shake wave
- Japan Met Agency issues EEW and is aired on TV, Radio and cell phones
- Protect yourself before the main shake comes!

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**NHK Broadcasting on March 11**

**14:46 Emergency! Earthquake Early Warning**

Live coverage of National Diet Session was being aired. Suddenly the special alarm sound sets off and the special screen broke in.
Tohoku Shinkansen (Bullet Train) immediately stopped by primary-wave sensors located along the coastline. No derailment, No fatalities, No injuries.

27 Shinkansen were in service between Tokyo and Shin-Aomori. 2 Shinkansen were running at maximum speed 270km/h near Sendai. P-wave detected, electricity immediately cut off, 9-12 seconds before the first S-wave. Emergency brake. Maximum S-wave reached 70 seconds after the first detection, Shinkansen was already slowed down below 100km/h. Safe Stop!

Create a win-win with Business Risk Reduction = Reliability & Quality

Thank you for your attention!