Disaster Recovery・Business Continuity at the Great East Japan Earthquake 2011

Oct.2011

Tsukasa Makino
Tokio Marine & Nichido Fire Insurance Co., Ltd

First of all..

- We would like to express our sincere appreciation for the best wishes, donations, rescue operations and assistances extended from all over the world. Those assistance and sympathy brought wholehearted encouragement not only to the disaster victims, but also to all the people in Japan.

ありがとう

Overview

Tokio Marine & Nichido Fire started its one of the largest projects in its history called "Bappon Kaikaku" (Business Renovation) in 2004.

The project include;
- *Simplify insurance products.*
- *Simplify and standardize business processes.*
- *Shift to cashless and paperless business processes.*
- *Renovate agency systems (web-based)*
- *Renovate Employee's systems (virtual desktop)*

The project was almost completed in 2010.

Originally the project aimed to provide the best quality of services to our customers.

After the Great Earthquake, it turned out that the initiatives in "Bappon Kaikaku" provided significant merits in our disaster recovery and business continuity.

Disaster Recovery & Business Continuity in Tokio Marine & Nichido

Overview of the Great East Japan Earthquake

Death : 16,103

Missing : 4,746

Completely Destroyed houses: 110,826

Half Destroyed houses: 134,379

Partly Destroyed houses: 134,379

As of 2011-07-28 15:00

❌ Epicenter

Fukushima Dai-ichi
Nuclear Plants(30km)

225km

Tokyo

Kyoto

Payment of earthquake insurance

- Number of claims paid： **685,431**

- Total amount：**￥1,145,193,938,000** （≒US＄140Billion）

（Total of insurance companies in Japan. As of Sept.14,2011　General Insurance Association of Japan）

Top 10 largest earthquake insurance payments

	Area	Date	Claims Paid (million yen)	
1	Great East Japan	2011/3/11	1,145,193	
2	Hanshin Awaji	1995/1/17	78,300	
3	Hiroshima-Ehime	2001/3/24	16,900	
4	Fukuoka	2005/3/20	16,900	
5	Niigata	2004/10/23	14,900	
6	Niigata	2007/7/16	8,200	
7	Fukuoka	2005/4/20	6,400	
8	Hokkaido(Tokachi	2003/9/26	6,000	
9	Iwate-Miyagi	2008/6/14	5,400	
10	Shizuoka	2009/8/11	4,500	

Source: Japan Earthquake Reinsurance

Tokio Marine & Nichido's immediate action

● March 11

14:46 : Earthquake erupted

15:20 : Checked network availability at data center and the whole Tohoku area.

15:33 Set up disaster countermeasure offices in headquarter and each disaster area

＜CEO's Order＞

✓ Pay claims as soon as possible!

✓ Converge workforce and let's have it almost done within two months!

Tokio Marine & Nichido's immediate action

- ## March 12
  Set up an "Earthquake Damage Contact Center" in the HQ building.
  (with 110 computer terminals)

- ## March 13
  Set up an "Earthquake Countermeasure Center" for Tokyo
    Metropolitan area in the annex building.
  (with 30 computer terminals)

Support for Tohoku area

- 1,600 staffs (8,800 in accumulate) were temporally assigned to Tohoku and other area from the branch offices across Japan to support claims payment and other works.

- Additional 1,800 PCs were deployed for support staff in a very short period.

- Many relief goods were sent including;
  - 23 truck-loads of goods
  - 32 diesel vehicles
  - 10 small motorcycles

Damage survey

- The survey staff, temporally came from all over Japan, conducted very intensive survey on the houses and household goods.

- They were trying very hard not to miss any cracks or damages that are payable in earthquake insurance.

- Also they listened to the customers' voices in length, knowing that listening to personal stories and sympathizing with them itself is a great relief to the customers.

How IT and new business process worked in the disaster

Virtual desktop; made deploying terminals for support staff easy

- Additional 1,800 PCs were deployed for 8,800 (in accumulate) support staff. It was done in a very short period, thanks to the "plug and use" features of Virtual Desktop.

- Support staff can sit anywhere and can use any terminal at the messy local operation room or contact center.

- Support staff come and go on a weekly basis, but terminals didn't need any maintenance.

- Support staff can use the same screen, e-mails, data files and other environment they were using at their original office. So they can continue their work, keep communicated with their office and agencies. That reduced their concern about their own job significantly, and enabled them to focus on the supporting work.

Virtual desktop – quick recovery

- Branch offices of TMNF at the coastal area suffered severe damage, including the lost or breakage of computer terminals.

- Fortunately, all the Employees' terminals were replaced with virtual desktop terminals in 2010, so all the data was securely stored in servers.

- Replacement of the destroyed terminals was very easy. Just "plug and use". All the data, settings were recovered instantly.

Helping agencies with IT

- Deployed 180 terminals to the agencies who lost their terminals in the earthquake and tsunami.

- As the agency system is a web-based system, policy data, customer data etc.. were stored in servers. So it was relatively easy for agencies to recover data.

- Dispatched three "Mobile Office" equipped with agency terminals and wireless modem.

- Agency system covers almost all the aspects of agency business. Agencies can continue their business using the agency system at the Mobile Office or our branch office, even if they lost their office entirely.
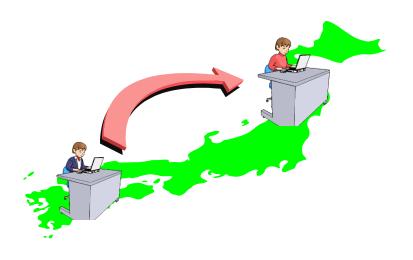
Simple and Standardized business processes

- All the business processes have been standardized in the course of "Bappon-Kaikaku". Support staff were able to do their work just as they have been doing at their office.

- All necessary information was stored in e-filing system and easy to find.

- Simplified business processes reduced the workloads of both support staff and their original offices, which enabled them to focus more power to damage survey and payment.
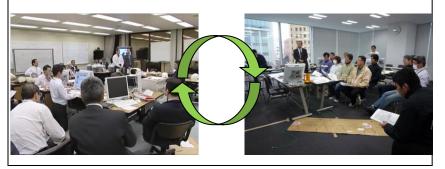
Cashless

- In the course of "Bappon", agencies quit receiving premium in cash. Instead, credit card, direct debit and convenience-store payment are used for premium payment. So, cash, receipts, passbooks, account ledgers were not kept in agency's office at the time of the disaster.

- All payment records were stored in computer systems of TMNF, credit card companies banks, or the central computers of convenience-store companies. It helped agencies to continue their business a lot.

- FSA requested insurance companies to grace premium payment for maximum 6 months for those who suffered from the disaster. TMNF was very fast to respond to it.

- "100% cashless" was the great advantage. It makes a big difference between 100% and 95%(for example), because even if the cashless rate were 95%, we would have to prepare business process and system for both cashless and cash.
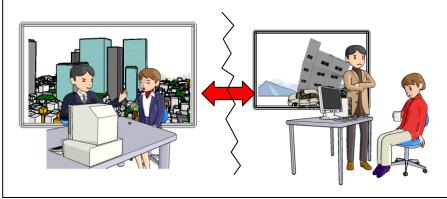
Communication by videoconference system

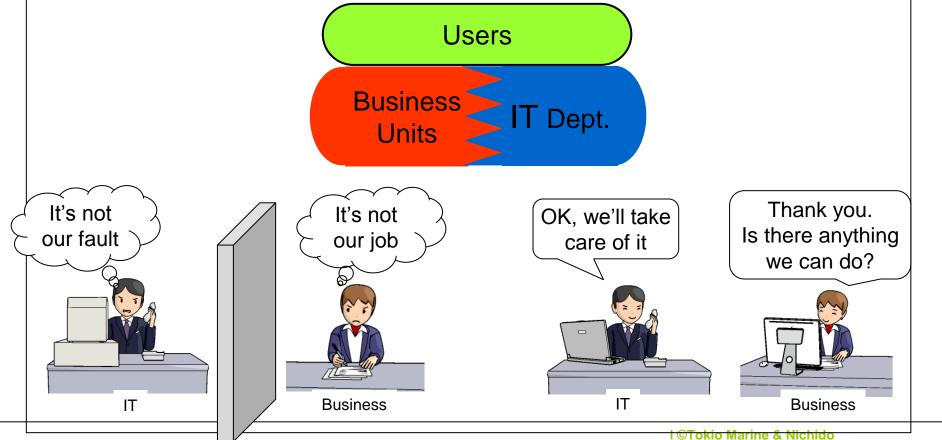| 2011 Great East Japan Earthquake	1995 Hanshin-Awaji Great Earthquake
• Videoconference played a very important role. • The regional headquarter of Tohoku area and the head office in Tokyo have been always connected by videoconference. • Video image enabled us to share the feelings and conditions of the people in the devastated area.	• Communication was made by telephone, fax and paper documents. • There was a "gap of feeling" between the employees in the devastated area and those in the headquarter and other part of Japan
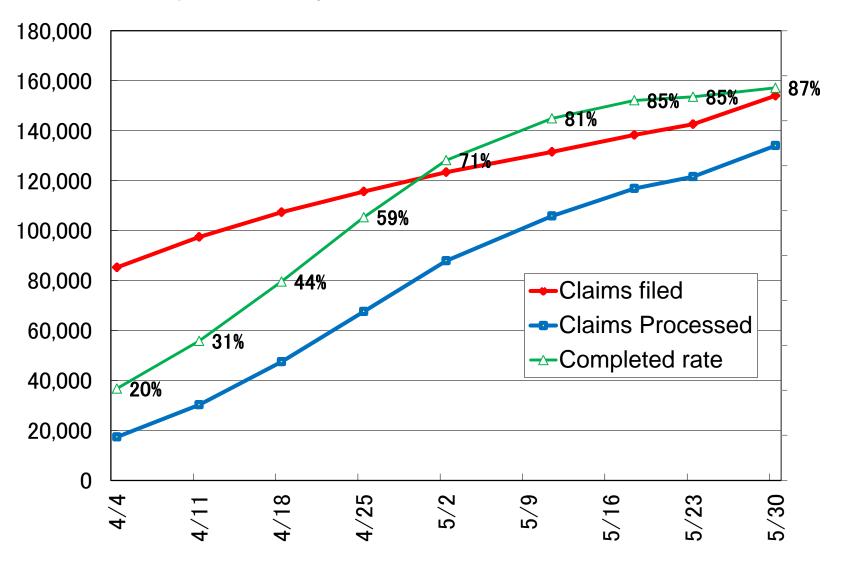
Cooperation of Business and IT

- Mutual understanding and collaboration among IT and Business units have been fostered through the efforts of "Bappon-kaikaku".

- There have been a lot of "thank you" words in conversations and e-mails, instead of "it's not our job" or "it's not our fault", etc..

Claims Processed ratio

We have completed nearly 90% of the claims within 2 months

Appreciation from customers and agencies
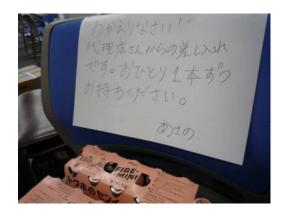
- We were motivated by receiving a lot of "thank you" voices and mails from our customers and agencies for our quick actions and warm-hearted help.

- We leaned that even if the customer's policy doesn't cover the loss and we couldn't pay claims, customers will appreciate if we hear their voice sincerely with sympathy.
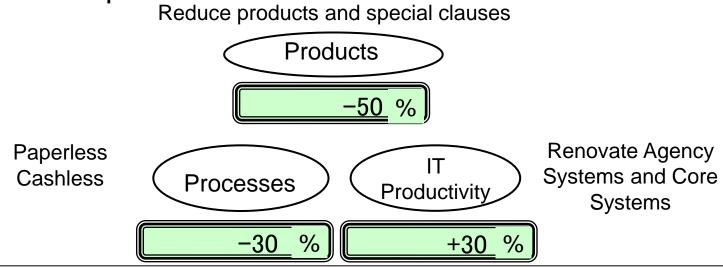
"Bappon Kaikaku" (Business renovation)
in Tokio Marine & Nichido

"Bappon Kaikaku (Business Innovation)" project

◆ Make all the business processes simple, speedy and comfortable by renovating insurance products, business rules and systems from the scratch.

◆ Started in 2004. Phase one went live in May 2008, changing 60% of the processes

◆ ¥65 Billion investment in total from 2005 to 2011

◆ 10,000k steps

Reduce products and special clauses

Products

−50 %

Paperless
Cashless

Processes

IT
Productivity

Renovate Agency
Systems and Core
Systems

−30 %

+30 %

For example..

More than 50 payment patterns

More than 100 payable types of claims expenses in Automobile Insurance

Over-wraps and exceptions among product lines and special clauses.

Bodily injury

Car Repair Fee

Lodging

Lawyer fee

Human Transportation Fe...

Rental Car Fee

Car Registration Fee

Car Transportation Fee

Travel Cancellation fee

Pay a,b,c in case of A

Pay c,d,e in case of B

But exclude b in case of C

Pattern	Install ment	Product			
		A	B	C	D
Annual-check off	1	Y	Y	Y	Y
Annual-collection	1	Y	Y		Y
Semi-annual-check off	2			Y	
Semiannual-Collection	2				
Quarterly check off	4	Y		Y	Y
Quarterly-Collection	4	Y			Y
Monthly-check off	12		Y	Y	Y
Monthly-collection	11		Y		Y
:	:	:	:	:	:
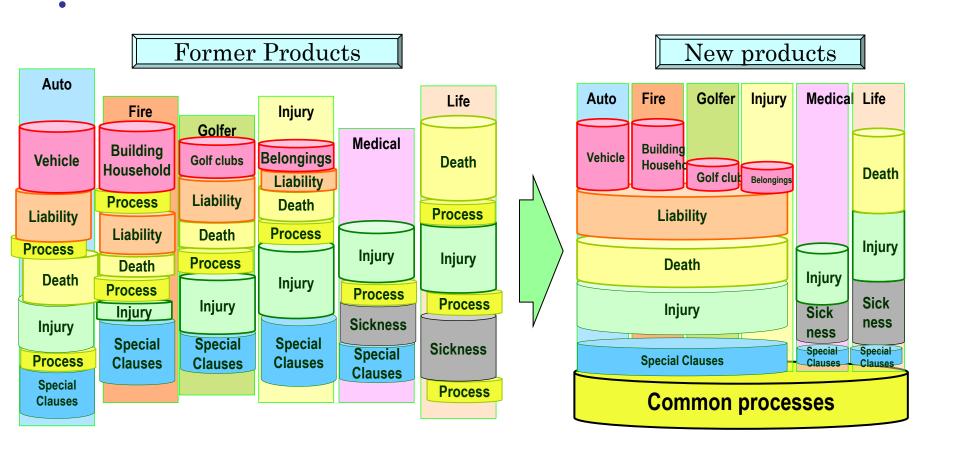
Illustration purpose only

Simplify and componentize insurance products
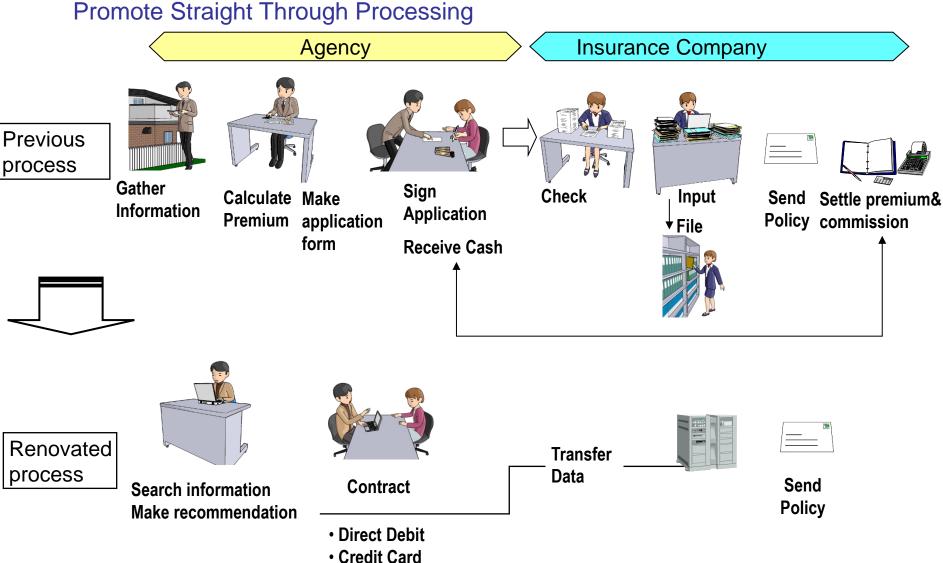
Adopt the structure where risk coverage is separated from processes to create common processes across product lines.
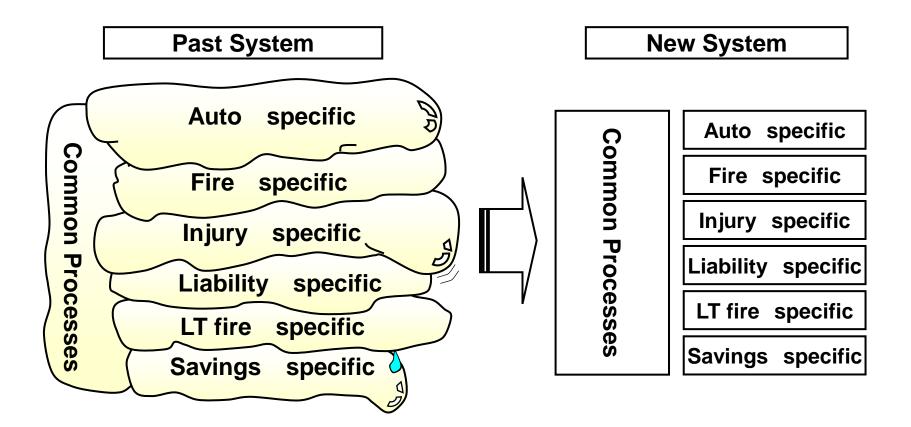
:Renovate Business Processes

Promote Straight Through Processing

Agency → **Insurance Company**

Previous process

- Gather Information
- Calculate Premium / Make application form
- Sign Application / Receive Cash
- Check
- Input → File
- Send Policy
- Settle premium & commission

Renovated process

- Search information / Make recommendation
- Contract
  - Direct Debit
  - Credit Card
  - Convenience Stores
- Transfer Data
- Send Policy
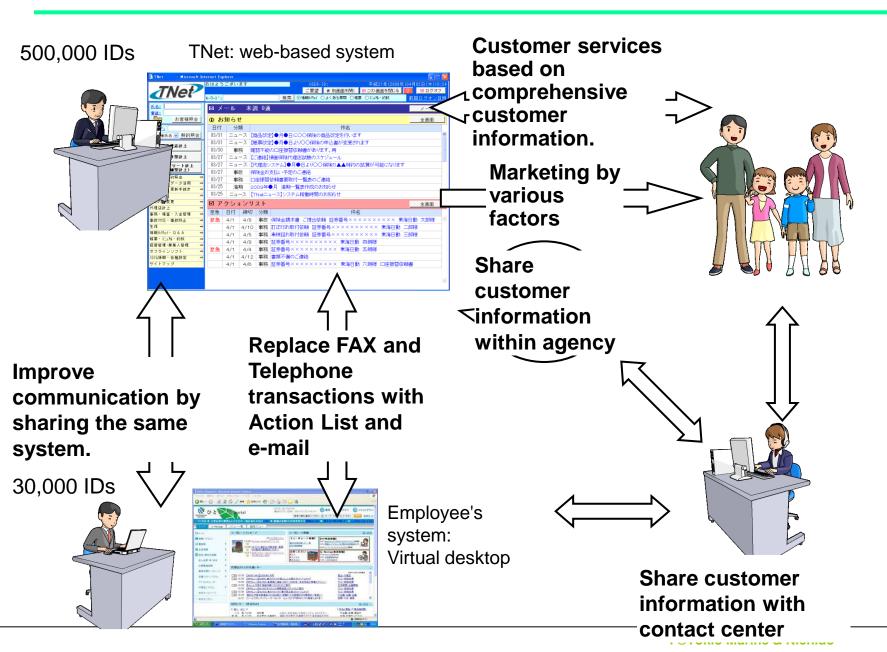
Renovate Computer Systems

Past System

Common Processes

Auto　specific

Fire　specific

Injury　specific

Liability　specific

LT fire　specific

Savings　specific

New System

Common Processes

Auto specific
Fire specific
Injury specific
Liability specific
LT fire specific
Savings specific

Initiatives in "Bappon": Renovate agency systems (TNet) and employee's systems

500,000 IDs

TNet: web-based system

Customer services based on comprehensive customer information.

Marketing by various factors

Share customer information within agency

Improve communication by sharing the same system.

30,000 IDs

Replace FAX and Telephone transactions with Action List and e-mail

Employee's system: Virtual desktop

Share customer information with contact center

Achievement: KPIs for "Bappon"

		Apr.2005		Mar.2010
1	Straight Through Processing	91.1%	→	99.1%
2	Cashless	42.1%	→	99.8%
3	Early Renewal	29.4%	→	72.5%
4	Agency System Penetration	60.4%	→	91.2%
5	Manual Reconciliation	350,000 (Mar.08)	→	70

※1～3r represents Auto insurance

Lessons learned

- Originally "Bappon Kaikaku" started as a renovation project aiming to simplify and streamline business processes, reducing cost and providing the best quality of services to our customers.

- ROI of this project was of course considered, but it was not regarded as the most important factor.

- To provide the best services to our customers, IT, Business units, agencies were united under the concept of "Bappon Kaikaku", which aims to renovate everything from the scratch and remove every barrier between them.

- "Bappon" project gave the hope for future and sense of unity among IT, Business, and agencies. Those were strengthened, rather than destroyed by the earthquake and tsunami and brought us a huge power to overcome the disaster.

- .We believe that the investment and efforts for "Bappon" is well rewarded