



BUSINESS CONTINUITY MANAGEMENT

The resilient organisation

28 April 2009

BUSINESS & TECHNOLOGY RESILIENCE ADVISORY

Living on the frontline



- Global risks bring new challenges
- Business continuity is evolving and responding
- The resilient organisation is the ultimate goal
- Flexibility and simplicity are key

21st Century risks – a new dimension

Economist Intelligence Unit: Catastrophe risk management survey November 2006



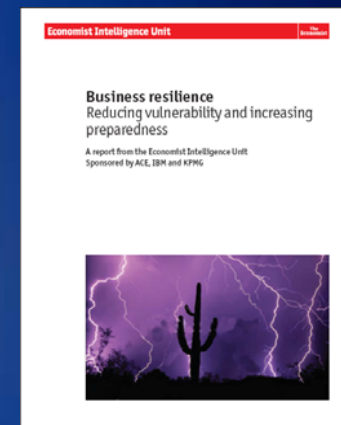
- Focus on high impact-low probability events ↑
- Communication and collaboration are weak links

Economist Intelligence Unit: Business resilience survey March 2007



- “Business as usual” threats remain
- Reputation is biggest concern
- Regulators are key external influence

World Economic Forum: Global Risks 2007



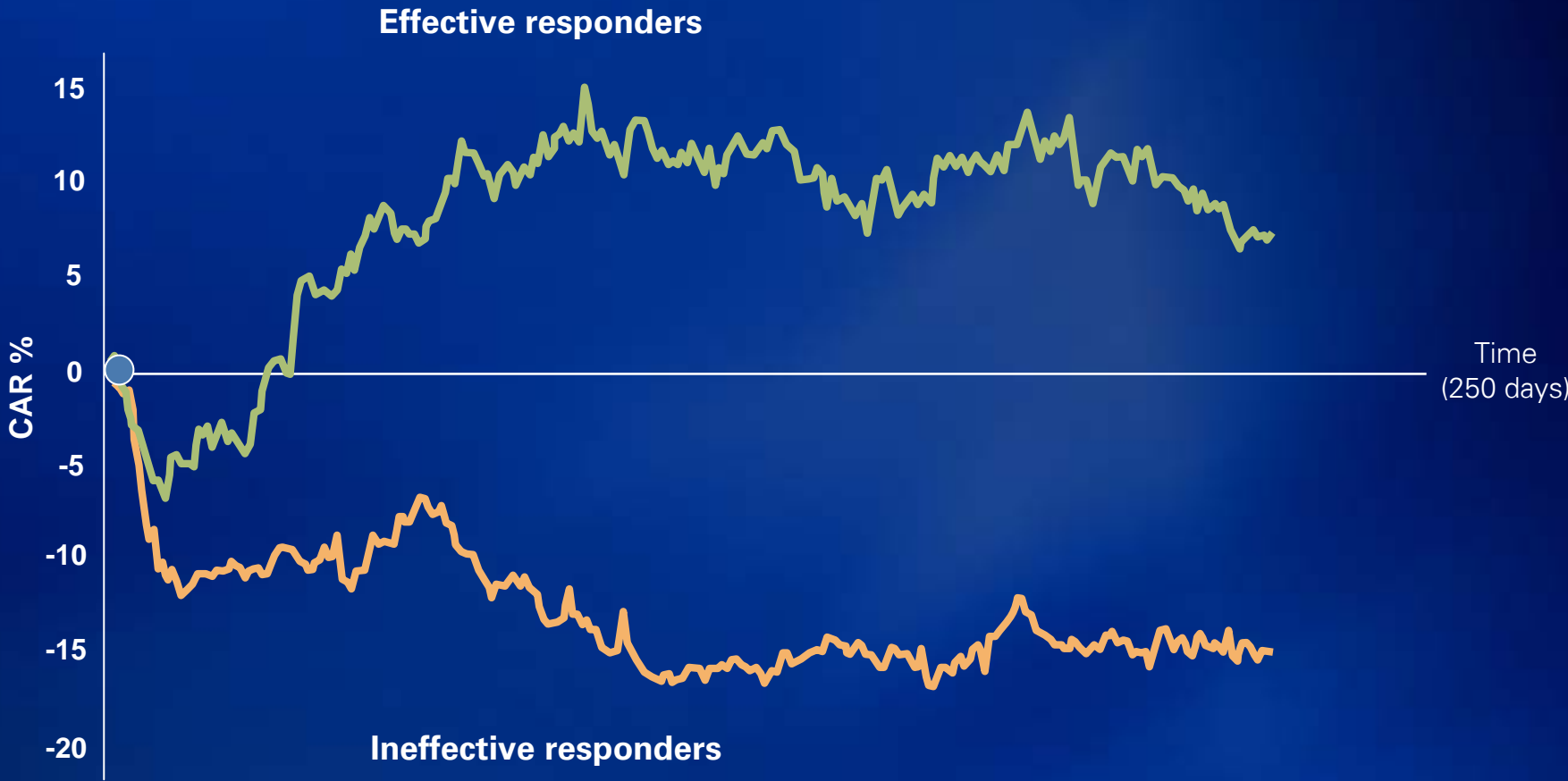
- 23 global risks
- Majority are ↑
- Interdependence matters

Living on the frontline

The World Economic Forum Global Risks Report identifies 23 global risks. Which of the following risks do you consider to be most important to your organisation in the context of resilience and business continuity planning?



Effective response and shareholder value



Source: Knight / Pretty 1996



The resilient organisation

Resilience

=

ability of an organization to absorb the impact of a major operational disruption and continue to maintain critical operations or services

The resilient organisation



- The human factor
 - *people come first*
- Diversity of options
 - *'one solution fits all' doesn't work anymore*
- Co-ordination with other parties
 - *competitive but co-operative*

The human factor

Ability to manage potentially devastating human consequences of events, while maintaining critical operations

| | | | |
|----------------------------|-------------------------|-------------------|-----------------------|
| Accounting for people | Location identification | Call out/SMS | Multi-channel comms |
| Communications | Multi-channel comms | Pre-prepared | Co-ordination |
| Roles and responsibilities | Negligence | Due diligence | Individual vs company |
| Human impact | Psychological effects | Personal elements | Absenteeism |
| Flexibility | Spikes in demand | Cross training | |

Diversity of options



Remote working

- Telecomms challenges – bandwidth, up during crisis, ... ? (both internal + of ext. suppliers)
- Investment in technology and equipment (security)
- Testing to create Business as usual conditions (company culture)

Diversity of options

Existing infrastructure - can it support the increased volumes of use and can it be relied upon during an emergency situation?

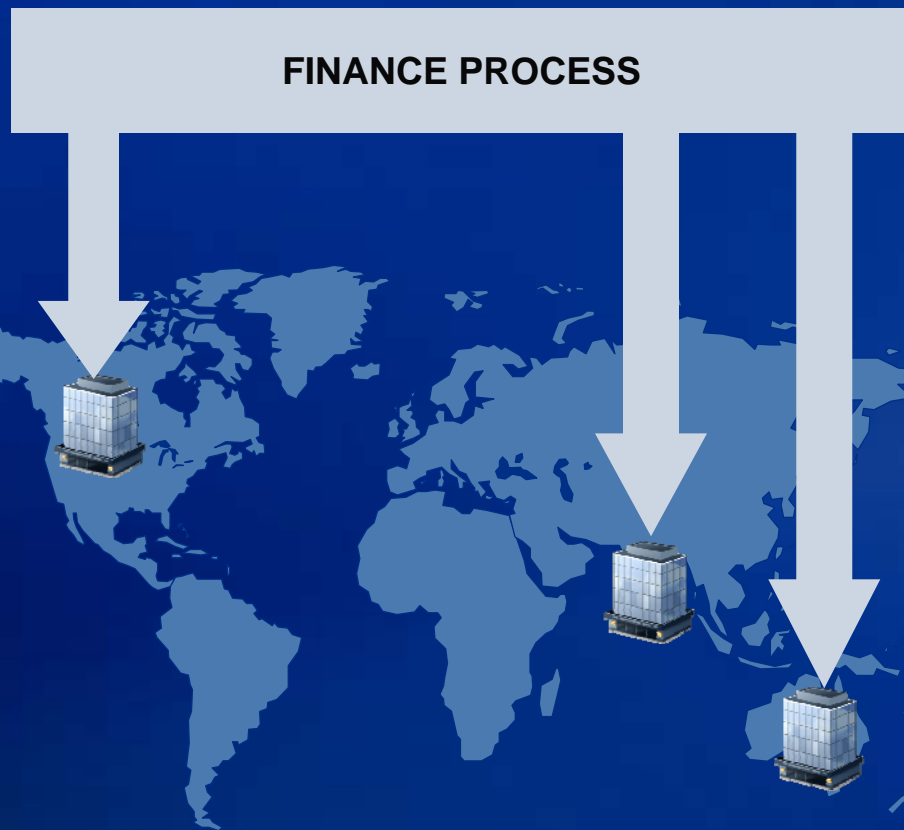
IT support functions – have these been checked to make sure they are geared up to handling the switch to remote working?

External suppliers eg. telecommunications companies – are they able to maintain their level of service provision?

Systems – do these need to be upgraded to provide additional capacity? If so, the lead times and costs will have to be taken into account.

IT licences held for the business and financial software – do the existing licences cover the eventuality of home-working or will new licences need to be purchased?

Diversity of options



Split site processing

- Larger scale processes
- Run from 2 or more geographical locations
- Workload transfer
- Infrastructure required
- Robust common processes

Diversity of options



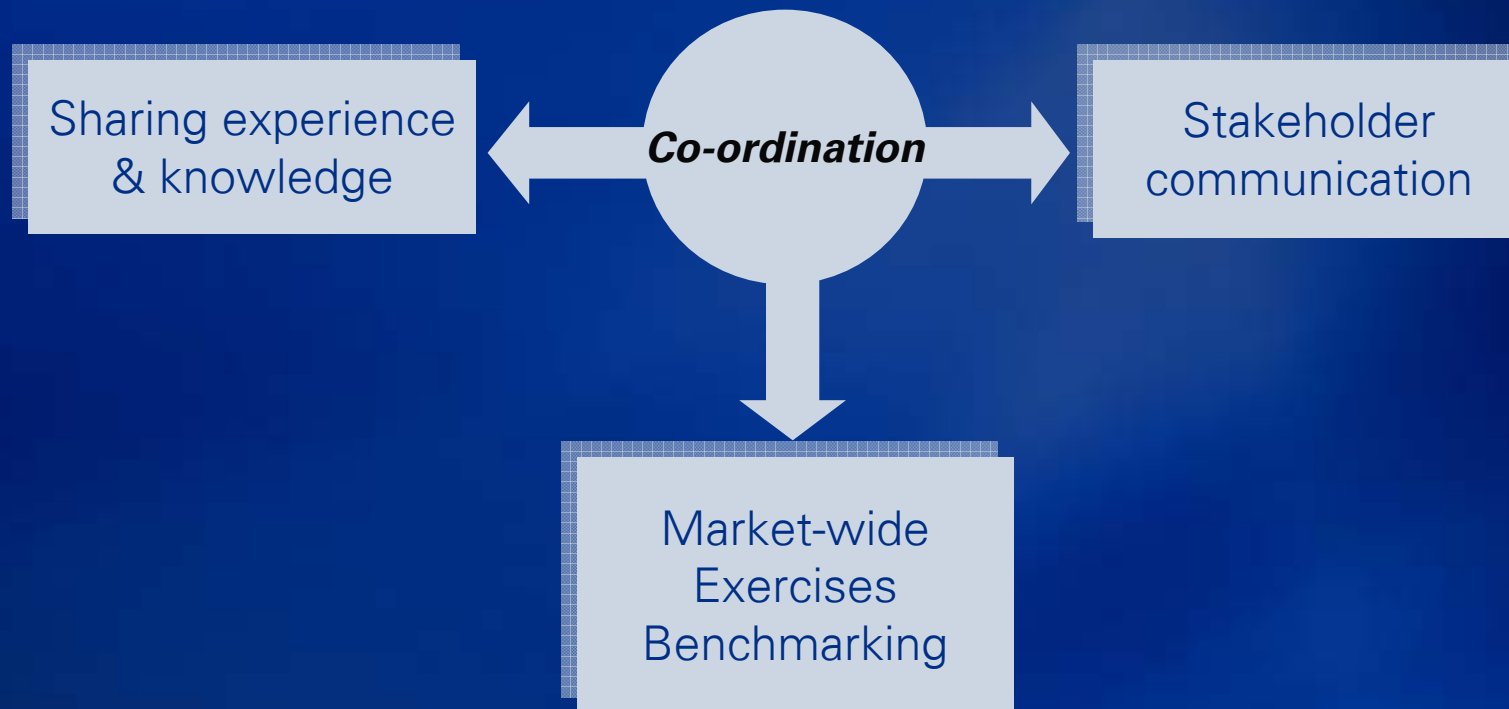
Transfer

- Move the work not the people
- Sustainability – often a short term measure
- Unique elements
 - Systems
 - Process
- Testing

The correct blend of a diverse number of recovery options is the central challenge for the resilient organisation

Co-ordination

No organisation is an island



Market-wide Exercises



Monetary Authority of Singapore Industry-wide Exercise, 2006

Key Facts



120 Participant organisations



4000 Individual participants



120 Observers from 70 organisations

- Facilitated from participants' own locations
- Opportunity to develop in-house exercises
- Simulated terrorist attack testing different responses:
 - Civil contingency and media responses; and
 - Financial markets and systems.
- GBP 1,500 – 15,000 participation fee, depending on size of market participation

Monetary Authority of Singapore Industry-wide Exercise, 2006

Learning points

- Co-ordination of response should be further developed
 - Civil authorities single point of co-ordination
 - Financial organisations should document critical dependencies
 - Financial organisations should work with the civil authorities to validate planning assumptions
- Greater focus should be given to people issues
- Crisis management plans and command centres should be reviewed
- The role of Association of Banks of Singapore was clarified

Participant feedback

An excellent exercise. The best and most realistic simulation [my organisation] have undertaken to date

It certainly illustrated the external [agencies] which would be heavily relied upon in such a scenario and their vulnerabilities

The role of the regulator was clarified in the event of the whole finance industry being impacted

Very realistic with real-time information making it useful to see how we respond to developments as they arise

Monetary Authority of Singapore Industry-wide Exercise, 2006

Delivering the exercise

- Participants operating from their own premises
 - Opportunity to exercise their own responses more thoroughly
 - In-house simulation cells set up to dynamically react to the scenario and create organisation specific content
- Free-form un-scripted decision making
- Variety of media



Monetary Authority of Singapore Industry-Wide Exercise “Raffles II”, 2008

Key Facts



147 Participant organisations



Over 9500 Individual participants



120 Observers from 70 organisations

- 2 interactive sessions
- 1 day practical drill
- 1 cluster session
- Simulated pandemic flu outbreak (increase to WHO phase 5 + 6; 10 week simulation in 6 hours) testing different responses

MAS IWE 2008 “Raffles II” – Press coverage

DISASTER PREPAREDNESS

Banks stay cool in fevered situation

Two-week-long nightmare scenario drill tests 140 firms

ESTHER FUNG
esther@inews.com.sg

JUST imagine: A flu pandemic has struck Singapore. Already, 29,000 people have died and the authorities are battling hard to keep public facilities running, including banks and other financial institutions.

Just how would Singapore's banks and financial institutions cope? All in a day's work, apparently, going by the cool way this nightmare scenario was put to the test on Friday morning as part of a two-week-long drill involving 140 financial institutions.

At selected branches, bank tellers and customer service personnel donned face masks and gloves. Others manned temperature counters at entrances, each staff member dressed in surgical overalls.

It was reminiscent of the Sars crisis of 2003, when people's temperatures were taken at public buildings and schools, to help spot fever, a symptom of Sars infection.

Friday's practical drill lasted until 11am. To reassure surprised customers, there were signs clearly posted at bank branches indicating that this was only a rehearsal.

Local insurance giant NTUC Income was among those taking part. "High rates of absenteeism, claims escalating, what are we going to do?" asked its chief executive Tan Suet Chieh, getting into the spirit of the exercise.

In such a scenario, Mr Tan said Income's death claims would go up by three or four times, but it would be able to cope with its



Practical flu pandemic drills like the ones at HSBC Building (above) and NTUC at Bras Basah (top) were carried out on Friday. PHOTOS BY FRANCIS ONG

business district, customers had their temperatures and names taken as part of the measures invoked to handle a "red-alert," which is one rung below the most severe crisis level – Code Black.

Banks said that 60 per cent of their staff would be absent during a "Code Red" scenario, and they would close some of their branches.

Basic services, like payments and withdrawals would still be available.

At financial institutions including The Central Depository and banks in the central

financial obligations.

"We do stress-testing financially to see what we can endure, and the actual scenario is quite serious," said Mr Tan, who calculated that Income might have to cope with 6,000 death claims, at a cost of about \$400 million.

The drill, initiated by the Association of Banks in Singapore (ABS), was aimed at testing the financial sector's measures of its operational response plans, collectively as an industry. The institutions will send a report detailing their operations to ABS next Thursday when the exercise ends.

NTUC Income, whose flagship branch at Bras Basah Road was manned by staff wearing face masks and using hand sanitisers, also had a quarantine

area available for any customers showing signs of fever.

Tan said, "It is a sobering and frightening exercise." But it appeared to go well, as he said: "Before this, I'd say Income was 30-per-cent ready, but now, I'd say we're 80-per-cent ready."

At financial institutions including The Central Depository and banks in the central

04 焦点新闻 联合早报 2008年9月6日 星期六

流感袭击金融区？

140家金融机构展开演习有备无患

中央商业区内140家金融机构昨开展流感演习，测试本地银行、证券行、保险公司等金融机构应对流感爆发情况的能力。

在这项代号“莱佛士演习II”（Exercise Raffles II）的演习中，参与的金融机构分别在位于莱佛士坊、瑞顿道和滨海湾的分行假设全岛进入红色警戒状态，为流感疫情扩散到社区进行演练。

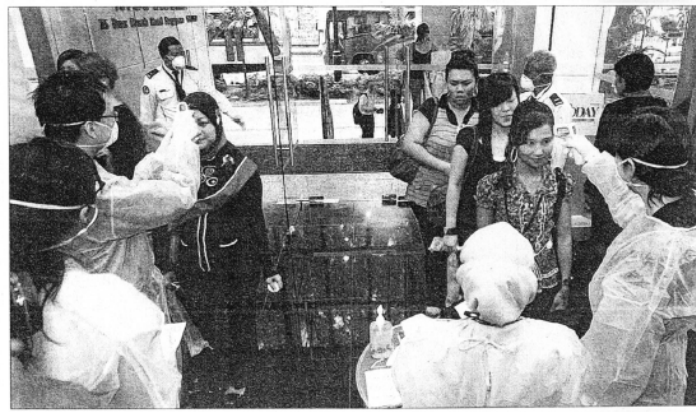
要如何在大量员工缺勤的情况下维持运作？需要接触公众的客户服务办事处又需做怎样的防疫措施？参与机构的职员“全副武装”、带上口罩，在入口处的体温检查站进行

筛检，学习如何确认并隔离那些有发烧症状的公众。

发起这项演习活动的是新加坡银行公会（ABS），协办机构包括内政部及金融管理局。

这是本地金融业者第二次举办演习，第一次是在两年前，当时模拟的是当恐怖分子袭击本地金融商业区时的紧急状况。当年有超过100家金融机构的4000人，参加了该项历时三小时半的演习。

参与演习的职总英康总裁陈诺杰指出，要是没有这次演习，工作人员或许只做好30%准备，现在经过演练，他有信心大家至少有80%准备。



参与流感演习的金融机构安排穿上防护配备的职员，在入口处的体温检查站学习如何确认并隔离有发烧症状的公众。（何炳耀摄）

money.

THE STRAITS TIMES SATURDAY, SEPTEMBER 6 2008 PAGE C2

This is not a clinic – it's a bank

Over 140 financial institutions take part in nationwide drill to test flu-pandemic readiness

By GABRIEL CHEN

AN ALARMING scene unfolded outside some banks here yesterday: banking staff with face masks and thermometers taking the temperatures of customers before they entered the premises.

Fortunately, this time it was only a drill – but one aimed at ensuring that a catastrophe such as a flu pandemic will



At POSB's Bras Basah branch, bank personnel – from bank manager to counter staff – wear face masks as part of a simulation of a flu pandemic in Singapore. ST PHOTOS: FRANCIS ONG

(ABS), were arguably the most "visible" part of a two-week exercise, from Aug 29 to Sept 10, 2008.

"If we detect high temperature, we'll put you in an isolation room where we'll have a doctor check you out."

for this," Madam Ong said firmly. NTUC Income's chief executive Tan Suet Chieh said high levels of staff absence, up to 60 per cent, were identified during their scenario planning.

As an insurer, the hours spent in planning departments was not just a simulation exercise, but also a learning exercise. "We learnt that some of our staff might not be able to commute from Johor Bahru, as they live alone," he said. Director Ong-Ai Boon said a practical drill can be summed up in three words – good, heartening and helpful. st.com.sg



MAS IWE 2008 “Raffles II” – Sessions

- The exercise was delivered from the Central Command Centre where the exercise management team was housed
- The storyboard, questionnaires, scenario injects and video media were presented to the participants through an exercise website, SMS, phone and email.



- Absenteeism rates at various DORSCON levels were also simulated based on pre-defined criteria
- Participants reacted and responded from their own premises based on scenarios and injects from the Exercise Command and Control Centre and with the assistance of Red Cell Facilitators

MAS IWE 2008 “Raffles II” – Cluster Session

- Participants shared experiences, identified issues and sought to strengthen functional response to pandemic scenario collectively across the industry
- Sessions were open and informal without assessment and rating of participants’ responses.
- Facilitated sessions focused on issues drawn from the earlier IWE interactive sessions and practical drill
- Participation from the MAS, MHA, medical experts and utility/service providers

Thank you



Dirk De Maeyer

Manager Advisor

IT Advisory – Information Protection
& Business Resilience

Phone: +32 2 708 4707

E-mail: ddemaeyer@kpmg.com