Crisis Management Plan and Skills to Formulate It

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Crisis Management Plan

- The earliest CMP?
- It wasn’t raining when Noah built the Ark
Crisis and Other Similarities

- Crisis: 1425, from Gk. krisis “turning point in a disease” (a moment during a serious illness when there is the possibility of suddenly getting either a lot better or a lot worse)

- Risk: more emphasis on ex-ante

- Disaster: occurring suddenly and causing great loss

- Hazard: can foresee but unavoidable danger or risk
Crisis

- Crisis: turning point
- 危機 = 危(Danger) + 機(Opportunity)

- Two kinds of risk:
  - Pure Risk vs. Speculative Risk
Key features of Crisis

- Low Probability
- High Impact
- Uncertainty/ Ambiguous causes and effects
- Different Perceptions
- Difficult to Perceive
Antonym of “fail”?

- But, what is the opposite of “Fail”?
- Is it “Success”?

- Nobel Peace Prize winner Elie Wiesel:
  - The opposite of love is not hate, but indifference.
Antonym of “fail”?

- Michael E. Raynor (Strategic Dilema)
- A puzzling fact: determinants of high achievement are also the ingredients of total collapse.

- The opposite of success is not fail, but mediocrity.
Why “Risk Taking” Important

- Conquerors become kings and the defeated become traitors
- The winner is right because he wins and the loser is seen as wrong, regardless of truth.

(What we can do?)
Why “Risk Taking” Important

- Chairman of TSMC -- Morris Chang:
- One of the most important standards for a manager is “risk taking”
Why Crisis Management Difficult

- **Herd effect**, A repeated slander makes others believe
- Being successful is easy to explain (nothing wrong), but fail…
- Successful experiences does not guarantee future success
- Innovation create its own risk (IT → Hacker)
- Planning can seldom keep pace with changing
- Frog in cold water gradually heated up
- **Difficult to evaluate** performance of Crisis Management
A says: There is a tiger outside. B says: There is a tiger outside. C shouts: There is a tiger outside ....

- Mark Twain:
- A lie can travel halfway around the world while the truth is still putting on its shoes.

- Ancient Chinese fable:
- Three people spreading reports of a tiger makes you believe there is one around.
Why success?

- Tolstoy’s Novel--Anna Karenina

- begins with one of its most quoted lines: “Happy families are all alike; each unhappy family is unhappy in its own way”
Why copying other’s strategy might not succeed

- Copying strategy $\neq$ Copying product, technology (Legal risk!)

- Competition and Innovation

- (Why company fail? Evolutional view)
Why CMP

- Li Ka Shing -- Richest person in Asia:
  - More than 80% of my time is thinking
  - “what if I fail”
Wy plan

- Old saying:

- if you fail to plan, you're planning to fail
Three aims for CMP

- To create:
  - an overall crisis management culture of the team (not entity, firm, enterprise company)
  - escalation rules (what, when, how?) for members
  - a crisis management team
Common Features of a Crisis

- The situation materialises unexpectedly
- Decisions are required urgently
- Time is short
- Specific threats are identified
- Urgent demands for information are received
- There is sense of loss control
- Pressures build over time
Common Features of a Crisis

- Routine business become increasingly difficult
- Demands are made to identify someone to blame
- Outsiders take an unaccustomed interest
- Reputation suffers
- Communications are increasingly difficult to manage
Institute of Management Accountants
Categories of Crisis

- Financial Impacts:
  - 1. Opportunity Cost (Opportunity Benefit?)
  - 2. Increased trading/ operating cost
  - 3. Loss of revenue
  - 4. Losses due to physical damage or injuries
  - 5. Capital value reduction
  - 6. Increased expenses during recovery period
Categories of Crisis

- Non-Financial Impacts:
  - 1. Corporate reputation, brand or adverse publicity
  - 2. Legal, contractual or regulatory liabilities
  - 3. Delivery standards
  - 4. Intellectual property, knowledge and data
  - 5. Political interest and comment and regulatory attention
  - 6. Stakeholder confidence and goodwill
  - 7. Staff morale and well being
  - 8. Loss of management control
Phases of Crisis

- 1. **Pre-Crisis**: Preparedness (more related to Risk management)
- 2. **During-Crisis**: Emergency response
  - 2.1 Non-Acute Crisis
  - 2.2 Acute-Crisis: After the crisis is known outside the entity

- why Pre→Acute: underestimate, overestimate, not aware, intentionally ignore
Phases of Crisis (2)

- Steps to manage acute crisis:
  - 1. Taking charge quickly
  - 2. Establish the fact
  - 3. Tell your story (Spokesperson)
  - 4. Fix the Problem
Phases of Crisis (3)

- 3. Post-Crisis
  - 3.1 Recovery: Efforts are made to achieve early recovery and reduces vulnerability and future risks
  - 3.2 Rehabilitation: Assist long term recovery
  - 3.3 Reconstruction: Construction of damaged infrastructure and enabling sustainability
Basic Elements of CMP

- Coverage page
- Introduction
- Acknowledgment
- Rehearsal dates
- Crisis management teams
- Crisis management teams (CMT) contact sheets
- Crisis risk assessment
Basic Elements of CMP

- Gap analysis
- Priority list
- Incident report
- Proprietary information
- CMT strategy worksheet
- Secondary contact sheet
- Stakeholder contact sheet
Basic Elements of CMP

- Business resumption plan
- Crisis control center
- Crisis communication plan
- Post-crisis evaluation
- Constraints and flexibility of CMP
- Validation and modification of CMP

Notice: Be Flexible
Risk Assessment

☐ Volatility?
☐ Probability?
☐ Standard Error?
☐ Sensitivity?
☐ ……
Quantitative Techniques

- Probabilistic Techniques
- Value at Risk
- Cash Flow at Risk
- Earnings at Risk
- Loss Distributions
- Back-Testing
- Non-Probabilistic Techniques
- Sensitivity Analysis
- Scenario Analysis
- Stress Testing
- Benchmarking
Risk Assessment

- Identification: Event

- Estimation:
  - Probability 、 Impact

- Evaluation:
  - Perceivability 、 Controlability
Risk Assessment

- Identifying possible event and estimating probability an impact.
- **Databank** need to be established.
- Collected from outside.
- Collected from inside
- (Near-miss? Risk Amnesty?)
Risk Assessment

- Probability x Impact ( = Expect Value)

- Probability x Impact x Perceivability

- Probability x Impact x Perceivability x Controlability (Cost)
Risk Appetite

Exceeding Risk Appetite

Within Risk Appetite
Risk Appetite

Target risk-return profile

- Venture Capital
- Trading
- Hotel Operations
- Corporate Financing
- Fibre Optics
- Minerals
- Fertilizers
- Pipelines

Current State

Target State

Capital at Risk

Return
Value at Risk

Procedure for estimating the probability of very serious losses exceeding some specified proportion based on a statistical analysis of historical or simulation data of correlations, and volatilities in some periods
## Operational Value at Risk

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<td>0.3</td>
<td>10,000</td>
<td>0.3</td>
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<td>0.2</td>
<td>100,000</td>
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0.7 (Expected Value) 13,600 (Expected Value)
## Operational Value at Risk

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<th>First time loss</th>
<th>Second time loss</th>
<th>Total loss</th>
<th>Prob.</th>
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<td>1,000</td>
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<td>100,000</td>
<td>200,000</td>
<td>0.002</td>
</tr>
</tbody>
</table>
## Operational Value at Risk

- **Loss distribution**
  - **Total loss** | **Prob.**
  - 0          | 0.5
  - 1,000      | 0.18
  - 2,000      | 0.072
  - 10,000     | 0.09
  - 11,000     | 0.072
  - 20,000     | 0.048
  - 100,000    | 0.03
  - 101,000    | 0.024
  - 110,000    | 0.012
  - 200,000    | 0.002

- **Expected Loss:** 402.7  
- **99Percent:** 110,000  
- **Value at Risk:** 109,597.3
Stress Testing

☐ The nearworst scenario if:

☐ Increase in product manufacturing defects.

☐ Movement in a foreign exchange rate.

☐ Movement in price of an underlying factor on which a derivative instrument is based.

☐ Increase in interest rates on the value of a fixed income investment portfolio.

☐ Increase in energy prices affecting the cost to run a manufacturing plant.
## Qualitative Risk Assessment

<table>
<thead>
<tr>
<th>Rating</th>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Insignificant</strong></td>
<td>No measurable operational impact to the business</td>
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<tr>
<td>2</td>
<td><strong>Minor</strong></td>
<td>Minor degradation of operations or service delivery</td>
</tr>
<tr>
<td>3</td>
<td><strong>Moderate</strong></td>
<td>Substantial degradation of operations or service delivery</td>
</tr>
<tr>
<td>4</td>
<td><strong>Major</strong></td>
<td>Significant degradation of operations or service delivery</td>
</tr>
<tr>
<td>5</td>
<td><strong>Catastrophic</strong></td>
<td>Widespread and total degradation of operations or service delivery</td>
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</table>
## Qualitative Risk Assessment

<table>
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<th>Rating</th>
<th>Category</th>
<th>Description</th>
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<tbody>
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<td>Insignificant</td>
<td>Financial loss &lt; 1% Earnings or operating budget equivalent</td>
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<tr>
<td>2</td>
<td>Minor</td>
<td>Financial loss &gt;1% Earnings or operating budget equivalent</td>
</tr>
<tr>
<td>3</td>
<td>Moderate</td>
<td>Financial loss &gt;3% Earnings or operating budget equivalent</td>
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<tr>
<td>4</td>
<td>Major</td>
<td>Financial loss &gt; 5% Earnings or operating budget equivalent</td>
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<tr>
<td>5</td>
<td>Catastrophic</td>
<td>Financial loss &gt; 10% Earnings or operating budget equivalent</td>
</tr>
</tbody>
</table>
Priority

☐ 1. An art
☐ 2. Risk Appetite
☐ 3. Cost Benefit Analysis
☐ 4. Synergy
☐ 5. Emergency and Time Constraint
☐ 6. Regulation
☐ 7. Reputation
☐ 8. Reducing Transaction Cost
Why Probability Matters

- If your capital and your competitor are the same (20:20)
- The probability making your competitor bankrupt (Risk of Ruin)?
- When your winning probability is 40%, 50%, 60%:
  - 40%?
  - 50%?
  - 60%?
## Why Probability Matters

<table>
<thead>
<tr>
<th>Prob.% of winning</th>
<th>Prob.% let him/her bankrupt</th>
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<tbody>
<tr>
<td>40</td>
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<tr>
<td>43</td>
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<td>69</td>
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<tr>
<td>52</td>
<td>83.21</td>
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<td>54</td>
<td>96.11</td>
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<td>57</td>
<td>99.63</td>
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<tr>
<td>60</td>
<td>99.97</td>
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</table>
Why Probability Matters

What if the proportion of your capital and your opponent is 20:100
Your winning prob. each time is:
46%
48%
50%
52%
54%
60%
The Prob. let him/her bankrupt (Risk of Ruin)?
Why Probability Matters

46%: 0%
48%: 0.03%
50%: 16.67%
52%: 79.83%
54%: 95.95%
60%: 99.97%
Why Probability Matters

- What if your opponent’s capital is “infinity”

- SME vs. Super Giant
## Why Probability Matters

<table>
<thead>
<tr>
<th>Capital</th>
<th>Your winning Prob. for each time</th>
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</thead>
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<tr>
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<td>51</td>
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<tr>
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<td>3.92</td>
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<td>30</td>
<td>69.89</td>
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<tr>
<td>50</td>
<td>86.47</td>
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</table>
Risk Reaction (Response)

- 1. Identify options (right to abandon)
- 2. Assess options
- 3. Prepare and implement treatment plans
- 4. Analysis and evaluate residual risk

- Perceivable risk
- vs. Inherent risk
- vs. Residual risk (Inherent risk – controlled risk)
- Is controlled risk = controllable risk?
## Impact vs. Probability

<table>
<thead>
<tr>
<th>Probability</th>
<th>Impact</th>
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</thead>
<tbody>
<tr>
<td>Low</td>
<td>Share</td>
</tr>
<tr>
<td></td>
<td>Accept</td>
</tr>
<tr>
<td>High</td>
<td>Medium Risk</td>
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<td></td>
</tr>
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</table>

- **Share**: High Impact and Medium Risk
- **Mitigate & Control**: Low Impact and Medium Risk
- **Accept**: Low Impact and Low Risk
- **Control**: High Impact and High Risk
IDENTIFY RISK RESPONSES

- Assessment of risk exposure

- Options available:
  - Accept = monitor
  - Avoid = eliminate (get out of situation)
  - Reduce = institute controls
  - Share = partner with someone (e.g. insurance)

- Residual risk (unmitigated risk – e.g. shrinkage)
Response Strategies

- Emergency Responses: the criteria for activation, duration and stand-down of the immediate (emergency) response are defined.

- Continuity Responses: The criteria for activation, duration and stand-down of the continuity response are defined.

- Recovery Response: The criteria for activation, duration and stand-down of the recovery response are defined.

- Alignment: Plans are aligned and integrated with each other such that there are no conflicts in response, resource requirements or timings.
Testing(Validating, Rehearsing) the Plan

- Desktop review
- Desktop scenario test
- Notification and call-out communications test
- Live scenario tests
- Business recovery tests (closing down or removal of access…)
- Plan activation
- Governance issues (post activation governance)
Early Warning System

- Design the warning system
- Validate the warning system
- Calibrate the warning system
- Sensing the precursors
- Transmission of raw data
- Processing of Data. Alert recognition of an impending crisis
- Dissemination of warning
Early Warning System

- Difficulties to prove a good EWS
- Because of warning, nothing bad happen – ex. something has been fixed
- Because warning, it’s a self-fulling – ex. Banks recall loans
Calibration

☐ Flip 6 coins sequentially, it comes to ?

☐ A: H H H H H H
☐ or
☐ B: H H T H T H

☐ Which scenario is more possible?
Real Risk and Imaginary Risk
Calibration

- Peter Drucker: No measurement, no management

- Einstein

Not everything that counts can be counted, and not everything that can be counted counts.
Calibration

- Calibration vs. Sharpness

- People easy to be overconfident
- If I predict tomorrow’s X stock price is between 60 to 80, and you predict 68 to 72. I have more calibration than you. You have more sharpness than me.
Sample Calibration Test: (90% confidence interval)

1. In what year was William Shakespeare born (Lower bound? Upper bound?)
2. How many inches long is a typical business card (Lower bound? Upper bound?)
3. The internet was established as a military communications system in what year (Lower bound? Upper bound?)
4. ……
Calibration

☐ Sample Calibration Test: (True/False, Confidence that the answer is correct)

☐ 1. The ancient Romans were conquered by the ancient Greeks. (T/F, 50% 60% 70% 80% 90% 100%)

☐ 2. There is no species of three-humped camels. (T/F, 50% 60% 70% 80% 90% 100%)

☐ 3. A gallon of oil weighs less than a gallon of water (T/F, 50% 60% 70% 80% 90% 100%)

☐ 4. ......
### (Soochow Gambling Task)

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<tr>
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<th>B: Bad Decks</th>
<th>C: Good Decks</th>
<th>D: Good Decks</th>
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<td>-650</td>
<td>1050</td>
<td>650</td>
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Crisis Communication Plan

☐ What Drives the Plan?
☐ • Your organization’s goals
☐ • The vision as expressed in the mission statement
☐ • Your organization’s values and beliefs
Crisis Communication Plan

- Typical Communication Goals
  - Enhancing visibility and reputation
  - Planning for crisis management
  - Generating positive media coverage
  - Changing attitudes or teaching new skills
  - Generating public support
  - Fund raising
Crisis Communication Plan

☐ Seven Critical Elements

d. Understand your target **audience** and how to reach it

☐ 2. Research **past** media coverage and public opinion about your issue

☐ 3. **How** communication is to take place

☐ 4. Determine key **messages** to be communicated

☐ 5. Determine key **materials** to be produced

☐ 6. Obtain **resources** for staff and equipment

☐ 7. Develop written work **plan**
Crisis Communication Plan

☐ Developing **Key Messages**

☐ • A phrase of 4 to 10 words you want to see in every story

☐ • Produce 3 or 4 key message points

☐ • Imagine the headline

☐ • Review, revise and repeat
Crisis Communication Plan

- Developing Effective Materials
  - Strong visual identity
  - One page fact sheet
  - Press kit
  - Brochures
  - Videos, slides
  - Reports, bios
  - Newsletter, news stories
Crisis Communication Plan

- Assessing Resources
  - Assess staff time and in-house services
  - Arrange for training if necessary
  - Designate a communications leader
  - Develop a budget
Crisis Communication Plan

☐ Develop Written Plan
☐ • Create time lines, calendar of events, priorities
☐ • Assign tasks
☐ • Review progress, enforce or revise deadlines
☐ • Reassign tasks as needed
## Crisis Communication Plan

### Critical Activity

1. Initial Response

- “I don’t know” vs. “My colleagues and subordinates are reporting to me”
- Tell the truth as it is known
- Facts beyond question
- Actions being taken
- Acknowledgments of emotions/psychological needs
Crisis Communication Plan

Critical Activities:

2. Lines to take

- Database
- Book
- Wallchart (large poster)
- Message board
Crisis Communication Plan

- Identifying Target Audience

- List your stakeholders
- What do they like to read or watch
- Obtain demographic info from media
- Don’t forget internal audiences
Crisis Communication Plan

- Message options:
  - Fully apology
  - Corrective action
  - Ingratiation
  - Justification
  - Excuse
  - Denial
  - Attack the attacker
Crisis Communication Plan

- What does people want to see?
  - Acceptance of responsibility
  - Willingness to take positive steps
  - Empathy to stakeholders
Crisis Communication Plan

- Who matters and how will they be contacted?
  - Ministers
  - Officials
  - Political parties
  - Sponsors
  - Voters
  - International allies
  - Tax-payers
  - Manufacturers
  - Politicians
  - Health professionals
  - Pharmacists
  - Academics
Crisis Communication Plan

- **Who** matters and **how** will they be contacted?
  - Patients
  - Shareholders
  - Stock-markets
  - Regulators
  - Congress man/woman
  - Senior executives
  - Experts
  - Employees
  - The public
  - Customers
  - Consumers and lobby groups
  - Lawyers
  - The media
  - ?
Crisis Communication Plan

- Tasks of Spokesperson(s):
  - 1. Pleasant on Camera
  - 2. Answer question effectively
  - 3. Present crisis information clearly
  - 4. Handle difficult question
Crisis Communication Plan

☐ Idea Spokesperson:

☐ Polite and patient
☐ Well-informed and authoritative
☐ Accurate and reliable
☐ Articulate
☐ Available
☐ Trustworthy
☐ Evidently committed to the process
Crisis Communication Plan

Methods of communication:

- Telephone
- Hotlines
- Interviews
- New Releases
- Conferences
- Emails
- Enquiry desks
- Web site
- Mobile offices
- Facebook
- ……
Crisis Communication Plan

Media demands

Accuracy and simplicity
Statistics which are explained
Context of information
Comments from highest authority
Some controversial elements
Both sides of the issue
Speed, speed and speed
Case 1 (Classical One)

In Chicago in the fall of 1982, an unknown person tainted Extra-Strength Tylenol capsules with 65 milligrams of cyanide, causing the deaths of seven people. Tylenol was perhaps Johnson & Johnson’s most famous and trusted brand. Suddenly, Chicago police were roaming the streets with bullhorns warning people not to use Tylenol. The national news media was advising consumers to stay away from the pain reliever. At the time, advertising experts were predicting that Johnson & Johnson would never sell another product under that brand name. As it turned out, however, rumors of Tylenol’s death were greatly exaggerated.
Case 1 (Classical One)

To show consumers that it was more concerned with their safety than their bottom line, Tylenol immediately advised the public **not to take** any kind of Tylenol product until the source of the tampering could be determined. It also **voluntarily recalled** about 31 million bottles of Tylenol—every single capsule in circulation, representing a retail value of more than $100 million—and immediately **stopped advertising** the brand entirely. The **affable CEO**, James Burke, appeared in television ads and at news conferences informing consumers of the company's actions. The result was universal praise from media analysts. In addition, as Tylenol capsules were the only ones found to be tampered with, Johnson & Johnson exchanged the capsules for Tylenol tablets, which were considered safe.
Case 1 (Classical One)

Once the public had been reassured that Johnson & Johnson had done everything in its power to insure their safety, the company set out to reestablish the trust the public had in the safety of the Tylenol brand. The key element of this process was Johnson & Johnson’s development of taper-resistant / childproof packaging. This packaging was introduced less than four months after the deaths. At the time, most over-the-counter medications could be opened by anyone. Today, the packaging developed by Johnson & Johnson is practically the standard. As a result of Johnson & Johnson’s swift and effective crisis management, which stressed public safety and transparency instead of corporate profits and damage control, Tylenol is today one of the leading brand names in pain relievers.
Case 1 (Classical One)

- Johnson & Johnson was again struck by a similar crisis in 1986 when a New York woman died on Feb. 8 after taking cyanide-laced Tylenol capsules. Johnson & Johnson was ready. Responding swiftly and smoothly to the new crisis, it immediately and indefinitely canceled all television commercials for Tylenol, established a toll-free telephone hot-line to answer consumer questions and offered refunds or exchanges to customers who had purchased Tylenol capsules. At week's end, when another bottle of tainted Tylenol was discovered in a store, it took only a matter of minutes for the manufacturer to issue a nationwide warning that people should not use the medication in its capsule form.
Case 1 (Classical One)

- For Mid-term and Long-term Crisis:
- Johnson & Johnson’s Strategy: Real Option
- JJDC (Development Corporation) is a specific example of the general phenomenon of CVC (corporate venture capital)
- JJDC create 4 options:
- Cresting Option, Preserving Option, Exercising Option, Abandoning Option
Case 1 (Classical One)

☐ Success outcome:
  1. Swift reactions reinforced company reputation for integrity
  2. Stakeholders reported high degree of trust
  3. Product did not suffer in long term

☐ Failure outcomes:
  1. Perpetrator was never identified
  2. Future attempts cannot therefore be precluded
Case 2

- **PN Corporation** was established in Taiwan expertise in Networking and Wireless products. In 2002, PN became the largest analog modem manufacturer in the world and captured over 10% of market shares. Pro-Nets stock has started trading at Taiwan OTC Market in December 2003.

- Products include IP Camera, Wireless LAN, Ethernet Switch, Network Adapter, DSL/Cable Router, ADSL Modem, Fax Modem

- After financial Tsunami…
Case 2

- EPS
- 2004: 0.14
- 2005: -0.9
- 2006: 1.41
- 2007: 0.14
- 2008: 2Q -0.59, 3Q -0.7, 4Q -1.03
- 2009: 1Q -0.54, 2Q -1.16, 3Q -0.16, 4Q -0.39
- 2010: 1Q -0.29
Case 2

- Stock price
- 2004: 10.35
- 2005: 12.4
- 2006: 10.5
- 2007: 9.67
- 2008: 8.22
- 2009: 12.35
- 2010: 12.5
Case 3

- Asian Pacific Financial Corporation (APFC Ltd.) established on October 2005

- Major business: financial Counseling and System Implementation

- Crisis: financial position and whisper (rumor?)
Innovation of Crisis Management

- After Financial Tsunami, what can be done in a Regional SME Crisis Management Center

- Building Data Bank for:
  - 1. Micro Finance
  - 2. Supply Chain Risk Early Warning System
  - 3. Credit Information (JCIC in Taiwan)
  - 3. Credit guarantee
  - 4. Credit Insurance (Micro Insurance)
  - 5. Valuation for Intangible Asset
Financial Crisis Management

- **Myth**: Is SMEs more dangerous than Large companies?
- For each one, it could be right.
- But considering SMEs as a whole, it is wrong.
### Asset Correlation among Various Total Asset Groups (France)

<table>
<thead>
<tr>
<th>Risk Categories</th>
<th>SME&lt;1M€</th>
<th>SME 1 - 7 M€</th>
<th>SME 7 - 40 M€</th>
<th>Large Companies &gt;40 M€</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (low)</td>
<td>0.79%</td>
<td>2.95%</td>
<td>2.79%</td>
<td>1.5%</td>
</tr>
<tr>
<td>2</td>
<td>0.12%</td>
<td>1.95%</td>
<td>1.56%</td>
<td>0</td>
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<tr>
<td>3</td>
<td>1.55%</td>
<td>0.61%</td>
<td>0.71%</td>
<td>4.39%</td>
</tr>
<tr>
<td>4</td>
<td>1.34%</td>
<td>0.95%</td>
<td>0.57%</td>
<td>2.79%</td>
</tr>
<tr>
<td>5</td>
<td>1.53%</td>
<td>0.98%</td>
<td>0.37%</td>
<td>2.77%</td>
</tr>
<tr>
<td>6</td>
<td>1.78%</td>
<td>1.47%</td>
<td>0.82%</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>2.67%</td>
<td>2.08%</td>
<td>2.07%</td>
<td>0</td>
</tr>
<tr>
<td>8 (high)</td>
<td>2.71%</td>
<td>2.79%</td>
<td>10.72%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1.54%</td>
<td>0.97%</td>
<td>0.49%</td>
<td>2.21%</td>
</tr>
</tbody>
</table>
Asset Correlation among Various Total Asset Groups (Germany)

<table>
<thead>
<tr>
<th>Risk Categories</th>
<th>SME &lt;1M€</th>
<th>SME 1 - 7 M€</th>
<th>SME 7 - 40 M€</th>
<th>Large Companies &gt;40 M€</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (low)</td>
<td>0.00%</td>
<td>0</td>
<td>0</td>
<td>1.21%</td>
</tr>
<tr>
<td>2</td>
<td>1.86%</td>
<td>1.33%</td>
<td>0.57%</td>
<td>2.51%</td>
</tr>
<tr>
<td>3</td>
<td>1.52%</td>
<td>1.29%</td>
<td>0.24%</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>2.21%</td>
<td>1.42%</td>
<td>6.52%</td>
<td>1.61%</td>
</tr>
<tr>
<td>5</td>
<td>3.18%</td>
<td>2.02%</td>
<td>0.25%</td>
<td>0.75%</td>
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<tr>
<td>6</td>
<td>1.21%</td>
<td>0.62%</td>
<td>0.25%</td>
<td>0.49%</td>
</tr>
<tr>
<td>7</td>
<td>3.97%</td>
<td>1.97%</td>
<td>0.57%</td>
<td>1.69%</td>
</tr>
<tr>
<td>8 (high)</td>
<td>2.71%</td>
<td>2.62%</td>
<td>2.03%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1.23%</td>
<td>0.79%</td>
<td>0.14%</td>
<td>1.45%</td>
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</table>
### Asset Correlation among Various Total Asset Groups (Taiwan)

<table>
<thead>
<tr>
<th>Risk Categories</th>
<th>SME &lt;0.35 hundred million</th>
<th>SME 0.35 hundred million ~2.45 hundred million</th>
<th>SME 2.45 hundred million ~14 hundred million</th>
<th>Large Company &gt;14 hundred million</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(*)</td>
<td>6.78%</td>
<td>6.08%</td>
<td>13.75%</td>
</tr>
<tr>
<td>2</td>
<td>4.38%</td>
<td>15.64%</td>
<td>11.96%</td>
<td>10.00%</td>
</tr>
<tr>
<td>3</td>
<td>3.39%</td>
<td>9.37%</td>
<td>9.95%</td>
<td>3.95%</td>
</tr>
<tr>
<td>4</td>
<td>3.41%</td>
<td>4.96%</td>
<td>11.98%</td>
<td>17.08%</td>
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<tr>
<td>5</td>
<td>4.44%</td>
<td>4.94%</td>
<td>9.37%</td>
<td>10.84%</td>
</tr>
<tr>
<td>6</td>
<td>2.63%</td>
<td>4.48%</td>
<td>6.10%</td>
<td>(*)</td>
</tr>
<tr>
<td>7</td>
<td>3.79%</td>
<td>4.07%</td>
<td>5.82%</td>
<td>16.03%</td>
</tr>
<tr>
<td>8</td>
<td>3.54%</td>
<td>5.03%</td>
<td>5.91%</td>
<td>17.10%</td>
</tr>
<tr>
<td>9</td>
<td>3.74%</td>
<td>5.91%</td>
<td>4.83%</td>
<td>12.18%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2.22%</td>
<td>3.86%</td>
<td>4.90%</td>
<td>11.47%</td>
</tr>
</tbody>
</table>

(*): few sample
Financial Crisis Management

- So, the credit of SME is not big as most people perceiving.
- For example, the risk of Mullet roe company and Milk fish company can be offset.
Financial Crisis Management

- Macro factors: Exchange rate, Interest rate, Country Risk and Sovereign Risk
- Pay attention to Central Bank
- Consensus Forecasting
- Financial Instruments?
Financial Crisis Management

- Account Receivable Risk (Default Risk)
- Account Receivable Plan
- Dun & Bradstreet, Fair Isaac, Experian, TransUnion, PRBC…
- JCIC (in Taiwan)
- TCRI, CCRI (Taiwan Economic Journal)
- Inter-Industry Swap
- Know your customer’s customer
Financial Crisis Management

- Financial Instruments (Free or Cheap Lunch?)
- Short straddle:
  - Profit

![Graph showing profit vs. exchange rate](image)
Financial Crisis Management

- **Liquidity Risk Management:**
- **Gap analysis** for each day
Financial Crisis Management

- The importance of Financial Statement
- IFRS or IFRS SME or ?
- Pro and con for double (triple) financial statements
- Exception management purpose (Inside)
- Communication purpose (Outside)
Long term Crisis Management

- Olive Williamson: Why firm fails:
  - 1. Incentive intensity is not suitable
  - 2. Bureaucracy
Myths of Risk vs. Return

- One Period
  - Return
- Multi-Periods
  - Return
Good References

☐ COSO
☐ S&P
☐ ISO
☐ Institute of Management Accountants
☐ Standards Austria
☐ Basel II (operational risk)
COSO ERM Framework
Mandate (ISO 31000)

☐ – define and endorse the risk management policy;

☐ – ensure that the organization's culture and risk management policy are aligned;

☐ – determine risk management performance indicators that align with performance indicators of the organization;
Mandate (ISO 31000)

- align risk management objectives with the objectives and strategies of the organization;
- ensure legal and regulatory compliance;
- assign accountabilities and responsibilities at appropriate levels within the organization;
Mandate (ISO 31000)

- ensure that the necessary resources are allocated to risk management;
- communicate the benefits of risk management to all stakeholders; and
- ensure that the framework for managing risk continues to remain appropriate.
Final Questions?

- How to reduce the Crisis Management cost of SME, if we know the portfolio of SME risk actually smaller than Large companies?
- How to reduce the transaction cost?
- How to establish some SME databanks (security?)
- How to set up some financial statements standards
- How to set up some risk standards
- How to set up some intangible asset valuation standards
- How to form a early warning system
- How to build up a mutual benefit insurance system

- More researches and promotions are needed to let people that SMEs as a whole is safer than many large companies
New Industry and Business in the Near Future

- Nanometer
- Green Energy
- Eldercare
- …...
- Risk and Crisis Management
Two Things can be Considered Seriously

☐ 1. Tailor-made a Suitable SME Crises Management Plan for your Own

☐ 2. Crisis and Risk Management Data Bank and Platform

☐ 3. To Create your Company a New Business of “Crisis and Risk Management” for your industry
Thank for your listening