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A Reputational Risk Management Framework

Report prepared for The Geneva Association
and Macros Research

by Dr. Riccardo Bigio

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Preface

by Walter Stahel

The Geneva Association regularly houses young researchers, normally post grad students, working on a specific theme for a limited period of time, typically six or twelve months.

Riccardo Bigio has researched the subject of a Reputational Risk Management Framework during six months in the summer of 2006. His report is published on the following pages. Dr Bigio researched the subject independently, using the infrastructure of The Geneva Association and seeking the advice of its staff.

The previous students had been Andrew Koubatis and Jorge Yerena Schönberger, working on the subject of Vulnerabilities and Criticalities of Technical and Organisational Systems in the New Service Economy. Their report was published as a special issue of *Etudes et Dossier* (no. 280, March 2004).

Walter Stahel

A REPUTATIONAL RISK MANAGEMENT FRAMEWORK

Riccardo Bigio

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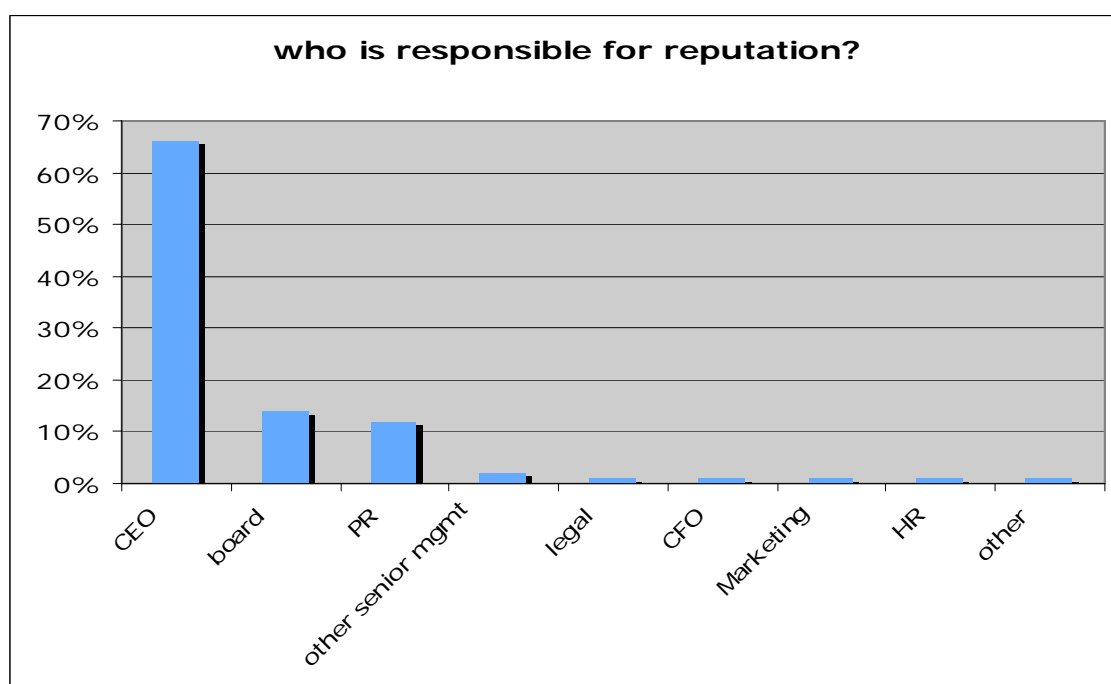
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1. Corporate reputation

The concept of reputation and the related themes of building and assessing reputations are not in themselves new ideas but CEOs are increasingly concerned about this issues especially regarding the need to manage reputation from a strategic perspective and with a rigorous approach.

With so many forces affecting it – heightened public sensitivity to corporate responsibility, media scrutiny, the value of intangible assets, the request for transparency and so on – managing reputation has become a key priority for every corporation.

The strategic perspective in which reputation is viewed is demonstrated by the 2003 survey by Hill & Knowlton, Inc. and Korn/Ferry International¹ in which the majority of the surveyed CEOs (65%) placed the responsibility for managing corporate reputation on themselves. Very few CEOs placed responsibility on the board of directors (14%) or the corporate communications function (12%).



Reputation is achieved over time by gaining and retaining the confidence and trust of stakeholders – shareholders, customers, suppliers, employees, etc. – and requires to invest in the relations over the longer term. Business reputations are hard to win but they are, instead, quickly lost. In many cases are few events, or even a single one, that can compromise the reputation of an entire organization. Loss of confidence by any group of stakeholders can quickly lead to the decline of any enterprise, most strikingly in service businesses such as finance or professional services.

¹ Hill & Knowlton, Inc. and Korn/Ferry International; “2003 Corporate Reputation Watch Survey”; Forbes CEO forum, Jefferson Hotel Richmond VA; 1-3 October 2003.

In Goldman Sachs' Business Principles it is stated: "Our assets are our people, capital and reputation. If any of these are ever diminished, the last is the most difficult to restore."²

Reputation is very important for every business, but especially for financial services, because it is a tool to predict future behaviour based on past actions and characteristics. We use reputation regularly in our daily lives: reputations of individuals, as when we choose a physician; groups, as when we decide that individuals above a certain age can be trusted to purchase alcohol; and collective entities, as when we decide whether Ford is a company that will sell us good cars. For financial services, the concept of reputation is no different and therefore, for the purpose of this paper, we can define reputation as the principle by which stakeholders form much their expectations regarding future behaviours of an entity, referring to past behaviour, results and characteristics of companies.

Reputation is thus based on "linkability". When we can link actions to an identity, and link actions by that identity to other actions by that same identity, then we can begin to make predictions about the identity's future behaviour.

As will be discussed later, one of the main reasons why corporate reputation is, generally, more important for financial services than other industries is the concept of information asymmetries.

1.1 A competitive advantage

So, reputation has a significant long term impact, it is difficult to achieve and maintain but yet sustainable, and it is not easily replicated. That makes it a competitive advantage and as such it should be treated.

Reputation is an intangible but highly prized asset, often equated with the goodwill of the business, and it is easily one of the most vulnerable of all assets. It reflects the "public perception" of the institution, and perception can, and often does, become reality.

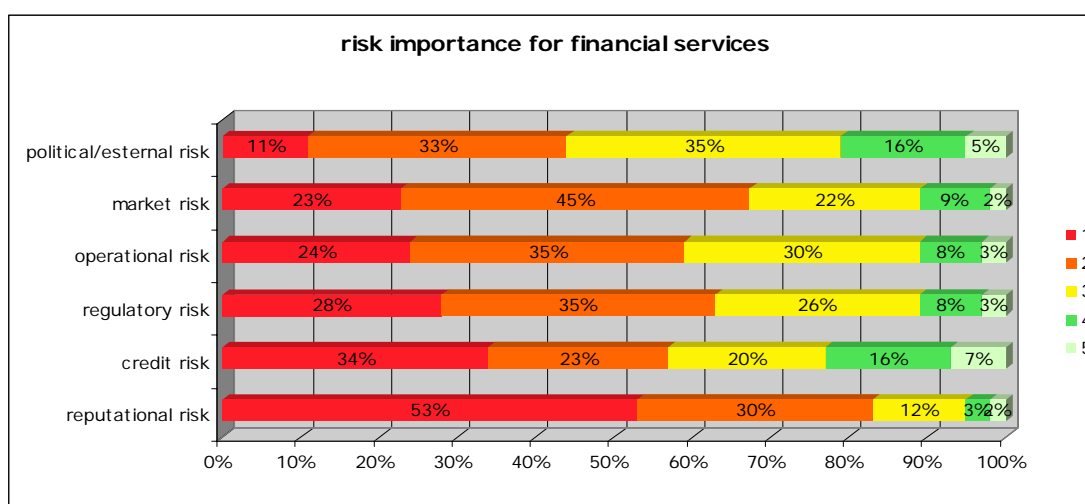
Like other assets, it can be affected by internal and external forces, positively or negatively and this possibility represents a risk that the organization has to manage.

² http://www2.goldmansachs.com/our_firm/our_culture/business_principles.html

2. Reputational risk

Reputational risk can be viewed as the risk that a company's reputation can be diminished (or augmented). It falls, also, into the area of public relations and marketing, which often seems a little too murky and fuzzy for good quantitative risk managers.

Financial services companies have pushed risk management further up the corporate agenda and regard reputational risk as one of the greatest threat to their market value: in the study "Compliance: A gap at the heart of risk management" by PricewaterhouseCoopers and Economist Intelligence Unit (EIU)³ respondents were asked to rank the risks faced by financial institutions on a scale from 1, being the biggest risk, and 5, being an insignificant risk. The results (shown in the graph below) indicate reputational risk as the biggest threat.



Yet, it is the quantifiable risks, such as credit and market risk, which still absorb the most attention amongst financial institutions.

The survey identified four reasons why risk management remains primarily focused on meeting regulatory requirements and only secondarily on protecting and enhancing the value of the franchise:

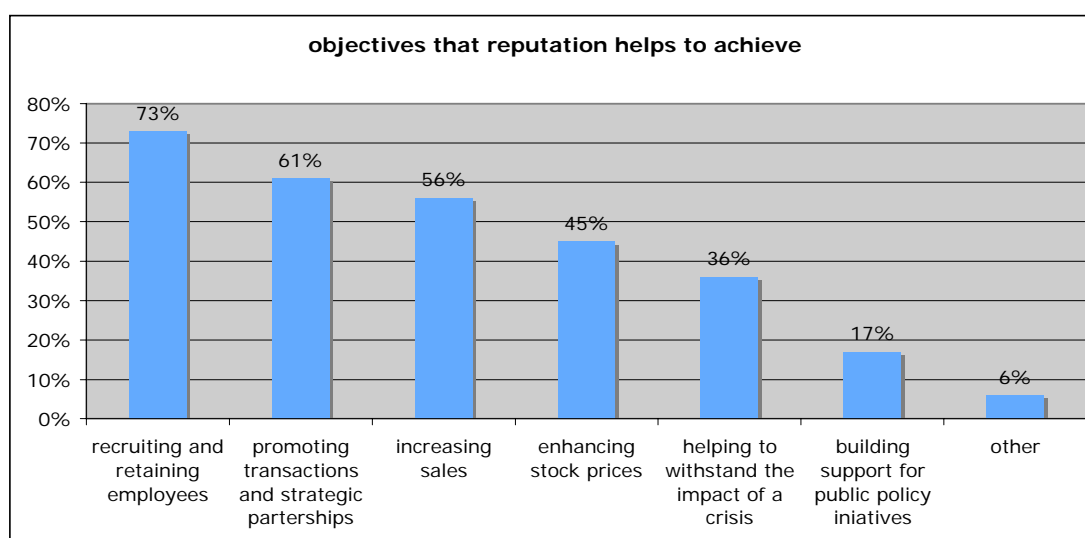
- A culture of risk awareness has yet to emerge
- Compliance is not being turned into competitive advantage
- The importance of governance is underestimated
- Quantifiable risks are still the focus of too much attention.

Reputational risk is more difficult to prepare for, and more difficult to respond to, than most other risks faced by organizations. It is, mainly, outside of the control of the institution and its board and management, and is much more difficult to quantify than other tangible risks, like credit or market, faced in the normal course of business.

³ Economist Intelligence Unit and PricewaterhouseCoopers; "Compliance: A gap at the heart of risk management"; June 2003.

The practical impact of reputational risk problems on financial institutions are too numerous to list, but include increased funding costs, reduced funding availability, reduced stock valuation, equity and debt downgrades, employee distraction and loss, increased regulatory oversight, increased exposure to shareholder claims, increased exposure to unwanted acquisition overtures, more difficult relations with strategic business partner and counterparts, difficulties in recruiting and retaining employees and, of course, the shrinking of market share and margins.

In the same 2003 survey by Hill & Knowlton, Inc. and Korn/Ferry International⁴ cited before, CEOs indicated the most important business objectives that company's reputation helps to achieve (the results are shown in the graph below as a percentage of time among top three answers)



On top of that, today, the new "rules of the game" concerning corporate reputation are taking shape. These go well beyond corporate image or identity and are in a very different league to public relations. Corporate governance and company law reforms now demand that the duties of directors and company reporting requirements explicitly deal with the imperatives of reputation. That means that an explicit consideration of reputational risk and its potential effects is going to be more and more important in the future.

As we will see, there are, however, contrasting, if not contradictory, views of where reputational risk should be positioned as a role in the business enterprise.

⁴ Hill & Knowlton, Inc. and Korn/Ferry International; "2003 Corporate Reputation Watch Survey"; Forbes CEO forum, Jefferson Hotel Richmond VA; 1-3 October 2003.

2.1 The size of reputational risk

The importance of reputation is well acknowledged but how much an organization can actually be affected by adverse events is difficult to understand.

According to Charles Fombrun, professor at the Stern business school of New York University and executive director of the Reputation Institute, reputation can count for as much as one third of the value of a company⁵ and academic efforts to quantify the value of reputation confirm that there are large economic premiums associated with corporate reputations. For instance, he cited⁶ a study conducted at the University of Texas at Austin that measured companies reputation and compared ten groups of companies with similar levels of risk and return, but different average reputation scores. Results showed that a 60% difference in reputation score was associated with a 7% difference in market value. Since an average company in the study was valued at \$3 billion, that means a 1-point difference in reputation score (from 6 to 7 on a 10-point scale) would be worth an additional \$53 million in market value.

However a proper analysis based on historical data can be very difficult because of the lack of statistics but, more important, it wouldn't be significant, either: the nature of reputational risk makes this kind of events quite unique. The type of the trigger event, the condition in which it arise, the factors that can influence it, the peculiarity of the organization and the industry, the composition and characteristics of the stakeholders, etc, are aspects that can vary a lot from case to case.

Still, taking a look at the size of past events, even if not statistical significant, can give important insights to understand what could happen to organizations in these cases.

The following examples⁷ of reputational risk events could, arguably, be avoided or limited with proactive reputational risk management frameworks and the consequent loss of value, here estimated through the fall of share prices, could have been contained. The examples in this Peterson study can be somehow misleading and have to be taken carefully since reputation damage is only one of the several factors that can affect share prices, however, it is reasonable to think that, given the situations, much of the market value loss is imputable to this driver.

⁵ "Intervista alla presidente del Sai"; Il Sole 24 Ore; 9 April 2001

⁶ C. J. Fombrun, C. B. Foss; "Developing a Reputation Quotient"; the Gauge Vol. 14, No. 3; 14 May 14 2001.

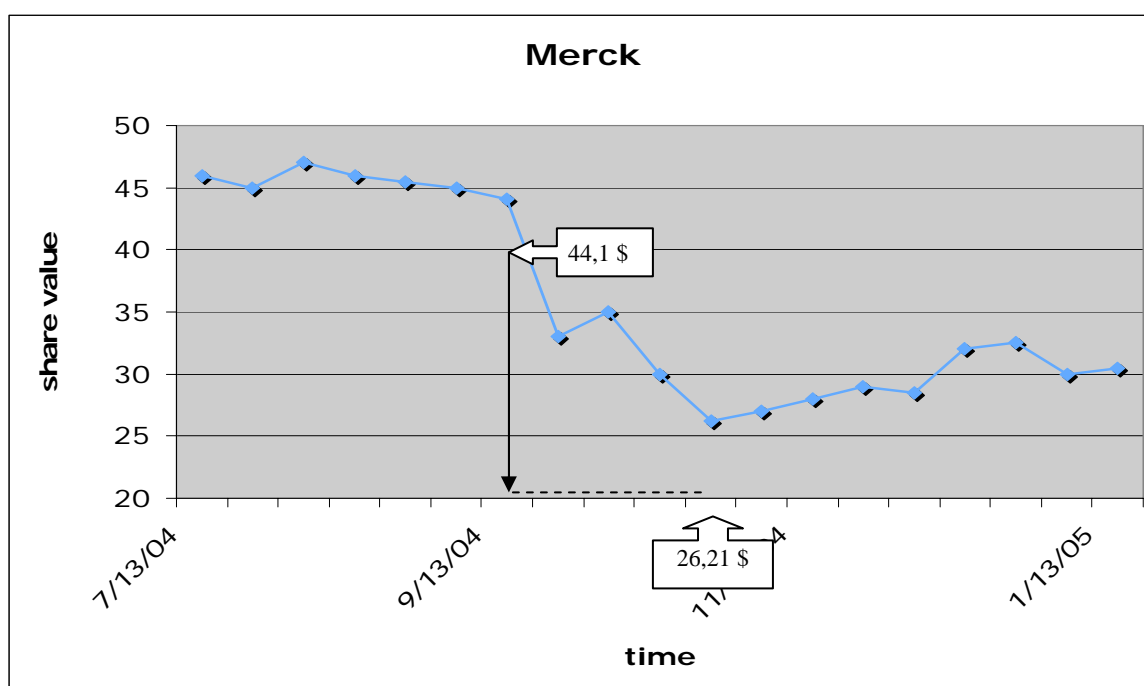
⁷ Taken from: G. E. Peterson; "Managing Reputation Risk Creating an Effective Risk Structure Part II"; International Management Advisory Group; 2005.

Merck:

In the fall of 2004, Vioxx, a painkiller that produced \$2.5 billion in revenues a year, was withdrawn from the market due to safety concerns that the drug raises the risk of heart attacks and strokes (over 2,400 lawsuits have been filed by users of Vioxx who claim the drug caused heart attacks and other cardiovascular problems).

US Justice Department launched a criminal investigation into Merck’s handling of the Vioxx case. The SEC said it was conducting an informal inquiry focusing on what Merck told investors about the risks facing users of the drug. At the very least, credibility issues have arisen threatening the good brand name of Merck.

Merck shares had been trading in the \$44-\$45 range until the withdrawal announcement and then plunged into the mid \$30s (touching a minimum of \$26,1) and has been floating around there since.



→ Approximate Market Capital Loss = \$40 Billion (41%) in 40 days

Morgan Stanley:

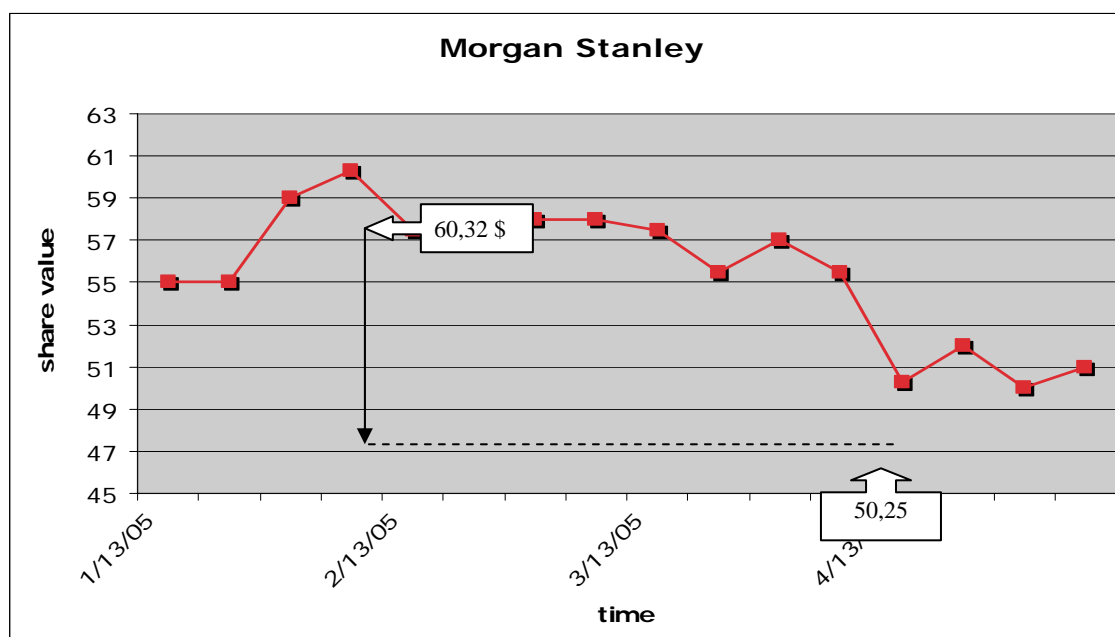
Since July 2004, when Morgan Stanley agreed to pay \$54 million to settle sex bias charges filed on behalf of hundreds of women who had complained of being denied raises and promotions and subjected to lewd behavior, MS has suffered a series of internal control battles as a result of opposing factions within the firm to the point that several of their executives complained to the Wall Street Journal about the “dirty laundry” within the firm.

This resulted in several fines, power struggles terminations and desertions of key executives among senior management.

Moreover, press reports indicate that key client groups have decided to “stand on the sidelines” until the dust settles.

MS paid a record \$19 million fine imposed by the NYSE for regulatory and supervisory lapses. The share price from February 2005 to April 2005 has dropped over 17% from \$60 to \$50.

Dissident shareholders are forcing change at MS as they are upset with the lack of performance of Discover, MS’ credit card division, among other issues resulting in poor financial and stock performance; and are seeking change of management leading to the exit of many MS executives.

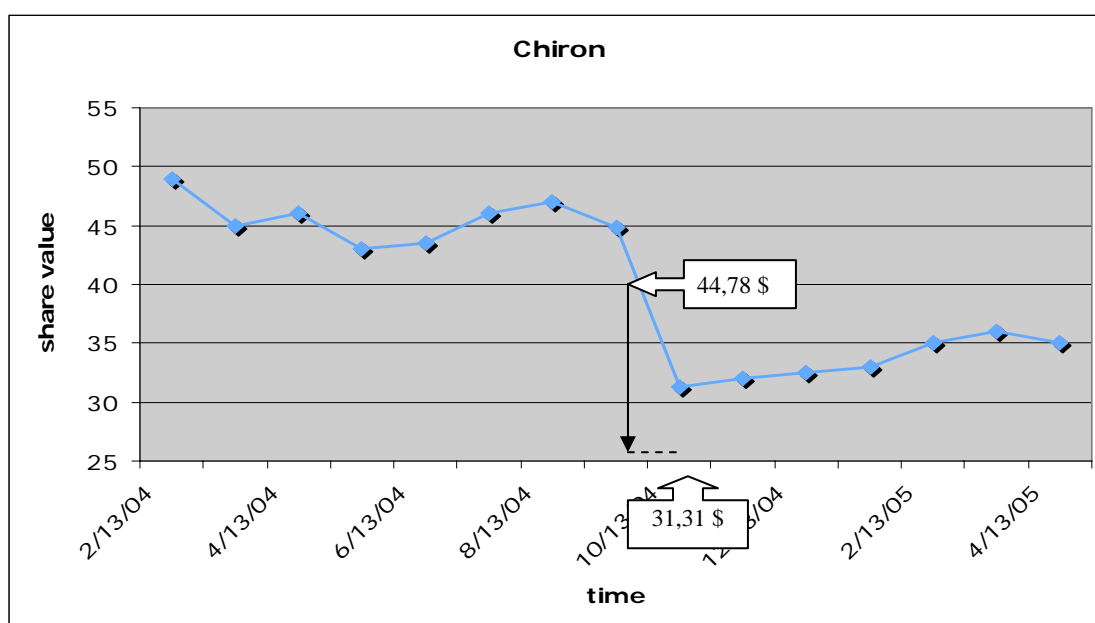


→ Approximate Market Capital Loss = \$ 11 Billion (17%) in 2,5 months

Chiron:

Chiron, a US biotech manufacturer of flu vaccine, had its manufacturing license suspended for one of its plants in Liverpool, England, due to bacterial contamination concerns that first arose in the late summer of 2004. This left the US with a severe flu vaccine shortage as this event blocked 50% of US's expected flu vaccine supply, nearly 48 million doses. This triggered an SEC investigation to determine whether Chiron violated US securities laws in its disclosure of UK regulatory problems that halted shipments.

The price of Chiron Corp. stock dropped from about \$45 to \$31, about 30%, when the event was uncovered in October, 2004. The share price has recovered somewhat to a trading range in the mid \$30's but investigations and possible lawsuits remain outstanding.



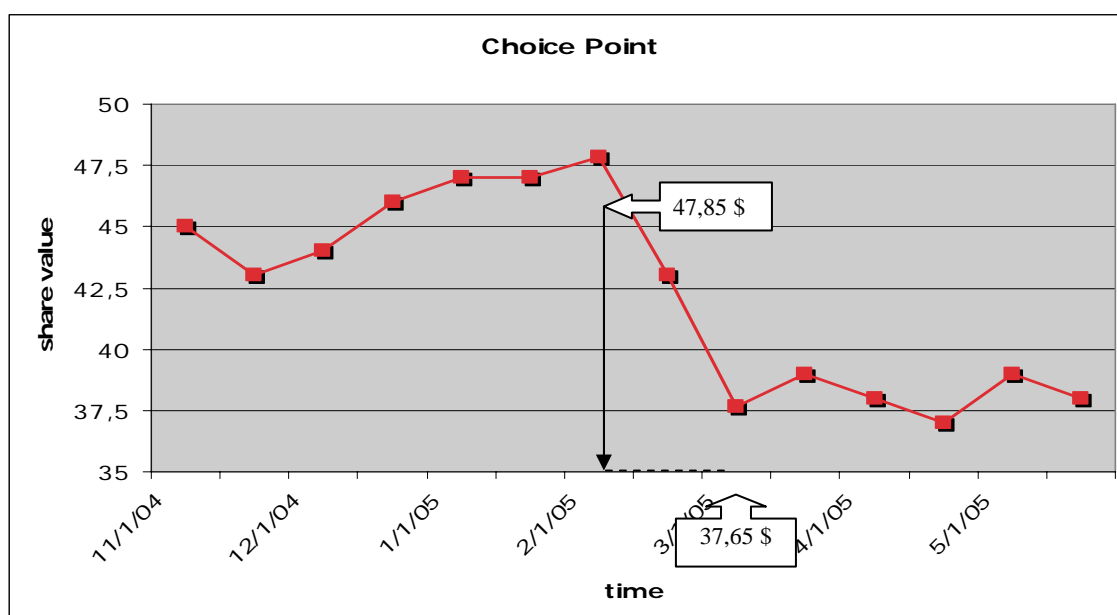
→ Approximate Market Capital Loss = \$ 2.5 Billion (30%) in 22 days

Choice Point:

In March, 2005 a complaint was filed against Choice Point, a leading provider of identification and credential verification services, charging certain officers and directors of the firm had made material misrepresentations concerning the firm's financial condition resulting in an artificial inflation of the share price.

Additionally, the complaint alleges that the firm knew and/or recklessly disregarded Choice Point's security measures designed to protect consumers from security breaches which were inadequate and ineffective; that Choice Point profited from selling consumer's private information to illegal enterprises; that security breaches by illegal enterprises occurred on a number of occasions in 2002 and in 2004; and that Choice Point exposed over 500,000 people to the threat of identity theft; all resulting in the fact that Choice Point's financial results were artificially inflated at all relevant times.

In a very short period (early February, 2005 until early March, 2005) the price of the shares of Choice Point fell over 21% from almost \$48 to slightly over \$37 as a result of security breach denials by the CEO and an investigation by the SEC into the circumstances surrounding any possible identity thefts.



→ Approximate Market Capital Loss = \$ 1 Billion (21%) in 1 months

The examples above are not statistically significant and use a proxy (the share price) to measure the impact of reputation damages, therefore don't represent the actual dimension of reputational risk. Those kind of events, however, can and do happen without giving any warning and can have dramatic consequences in a very short period of time. On top of that, these consequences are not, as one could think, only related to the short term: reputation takes a long time to be restored so it should be managed in a proper way.

2.2 A “second order” risk

Reputational risk can be defined as a “second order” risk. This does not mean that it is secondary. Quite the opposite, it means that, logically, it comes on a second wave. Let’s consider the case of a fraud: this kind of event lies in the field of what is usually referred as operational risk and has its own economic impact on the organization – a fine following a legal prosecution, for example – and its own risk management methods. One of the consequences of the fraud will likely be a reputation damage and this has its own economic impact and has (or should have) its own risk management methods. In the characteristic of being a “second order” risk, lies one of the main misunderstandings about reputational risk, that is the belief that managing reputation is about “making everything else right”. This belief lead to ignore elements that can be dealt with only considering reputational risk as a stand-alone factor.

The consideration of reputation as a “second order” risk is not solely logical or theoretical nor it is only meant to make explicit the reputation effects triggered by risk sources of other kind; it has a fundamental implication when trying to assess the expected impact of reputational risk because it is of second order from a functional point of view too. More precisely the reputation effects can exponentially increase the expected impact of negative events, qualitatively following this relations:

Given:

rx = a non reputational source of risk (the “originator” risk);

F_{rx} = the frequency or likelihood of occurrence of rx ;

E_{rx} = the exposure to rx ;

I_{rx} = the expected impact on the organization from rx .

Then:

$$I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{gx \times RE_{rx}}$$

Where:

RF_{rx} is the likelihood that rx can lead to a reputation damage;

RE_{rx} is the exposure of the organization to reputation damage from rx ;

gx is a factor representative of perceptions gaps (in general it could be different for different risk sources).

There are not enough data to infer an analytical function, so, the relation above is only intended to suggest that reputational expected impact doesn’t increase linearly with frequency and exposure to the “originator” risk and its reputational consequences, but it increase exponentially with them.

In general term, the organization is exposed to n risk factors; so, the overall expected impact will be:

$$I_{ovr} = f(I_{r1}, I_{r2}, \dots, I_{rn}) = f \left[(F_{r1} \times RF_{r1} \times E_{r1})^{g1 \times RE_{r1}}, \dots, (F_{rn} \times RF_{rn} \times E_{rn})^{gn \times RE_{rn}} \right]$$

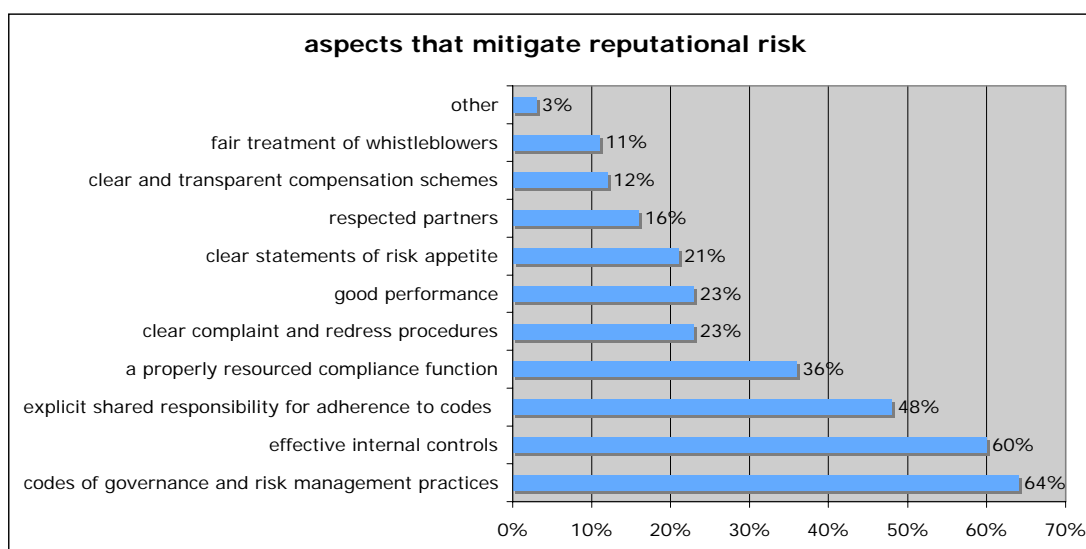
From now on we will refer to F_{rx} , E_{rx} , RF_{rx} , RE_{rx} , gx simply as “factors”.

3. Managing reputational risk

Since reputation is a competitive advantage, it is self evident that corporation should adopt a structured approach to manage reputational risk. Doing it properly require a multi-disciplinary approach, allocation of necessary resources and, given the variety of risk sources and the little number of information available, a well thought-out response plan; a corporate reputation risk management framework should then be documented and approved by the board, defining actions and responsibility.

Usually the available (scarce) literature is based on ‘after the fact’ evidence and is therefore subject to selection and some distortion of the events. In addition, collecting information about the recovery phase after reputation damages is difficult given companies’ sensitivity about any negative reporting of their business; hence, for the development and writing of an initial policy framework, literature search must be integrated with the use of external resources and a certain dose of experts’ opinions and creativity.

On top of that, the aspects that influence reputational risk and the actions that companies can undertake to mitigate it can be very different in nature, as demonstrated by the following results of the PriceWaterhouseCoopers survey (from the study: “Compliance: a gap at the heart of risk management”)⁸



3.1 Two complementary approaches

Two different approaches can be theorized regarding reputational risk management: the first one is based on the assumption that reputation is primarily the result of corporate performance in its core business, the other, instead, assumes that public perception is the main driver of corporate reputation. Taken to the extreme, both of those approaches are useless: if a company only try to “do things the right way”, it is simply ignoring the nature

⁸ Economist Intelligence Unit and PriceWaterhouseCoopers; “Compliance: A gap at the heart of risk management”; june 2003.

of the problem; if it only tries to influence perceptions it is just making a public relations operation that is only one aspect of reputation management.

A useful way to face reputational risk look at those approaches as complementary: companies must recognize that the core activities, although fundamental, are just one of the “sources”, but the results of those actions get to the stakeholders after some significant passages or “gaps” and only then affect reputation accordingly to their perception of companies’ performances.

3.2 A hardly quantifiable risk

One of the worse aspects of reputational risk is that such events are sometimes visible at the horizon, but rarely give extensive warning. The "finger in the chili" situation is not the usual scenario and it is probably intrinsically unpredictable. Hence the focus on governance, organizational ethics, controls, identification and disclosure: the event likelihood is difficult to estimate but good management and board oversight can minimize it if they, at least, try to breakdown the possible causes of reputational risk.

Even the potential impact of adverse events is very difficult to estimate. Good market research can help quantify some of the effects of public relations and marketing; companies have often hired market research firms to test concepts, to provide some sort of quantifiable measure of how successful a marketing program is likely to be. Something similar could be used, and is sometimes used, to evaluate reputation, media coverage, cultural awareness and brand performances, however, such instruments can only give a partial idea of the potential impact of negative events and the actual magnitude may not be known until it is too late. Scenarios or fault tree analysis can be useful tools but they need to be integrated with others to get to a fairly significant estimate of the potential impact of reputation-harming events.

Again, the recent EIU survey found that 62% of companies interviewed stated that reputational risk was the most difficult risk to manage. Among the major challenges are categorisation and quantification of reputational risk.

There is, however, some consensus on the key elements of managing reputational risk:

- Prompt and effective communication with all categories of stakeholder - shareholders, employees, customers and suppliers.
- Strong and consistent enforcement of controls on governance, business and legal compliance.
- Continuous monitoring of threats to reputation.
- Ensuring ethical practice throughout the supply chains.
- Establishment and continual updating of a crisis management plan and establishment of a crisis management team empowered with specific power and authority.

Even though senior executives of financial institutions may appreciate the dangers of reputational risk to their market value, many respondents’ confidence in their organizations’ risk management capabilities dipped markedly in this less traditional area of risk. Some 24 percent felt their institution was ineffective in dealing with reputational risk and even more took the same view of sovereign and political risks. However, the fact that only 16 percent admitted to quantifying intangible risks may help to explain why many organizations felt they were less than effective in dealing with them.

4. The “factors” behind reputational risk

The expected impact of reputational risk is the result of a combination of “factors” as in the relation:

$$I_{ovr} = f(I_{r1}, I_{r2}, \dots, I_{rn}) = f \left[(F_{r1} \times RF_{r1} \times E_{r1})^{g1 \times RE_{r1}}, \dots, (F_{rn} \times RF_{rn} \times E_{rn})^{gn \times RE_{rn}} \right]$$

For each risk affecting the organization, that is for each rx with $x=(1, \dots, n)$, the reputational expected impact can be assessed looking at the “factors” :

F_{rx} = the frequency or likelihood of occurrence of rx ;

E_{rx} = the exposure to rx ;

I_{rx} = the expected impact on the organization from rx ;

RF_{rx} = the likelihood that rx can lead to a reputation damage;

RE_{rx} = the exposure of the organization to reputation damage from rx ;

gx = a factor representative of perceptions gaps (in general it could be different for different risk sources).

Decomposing the overall expected impact in those “factors” is important because they have different meanings, they can be managed with different solutions and they are influenced by different “elements”.

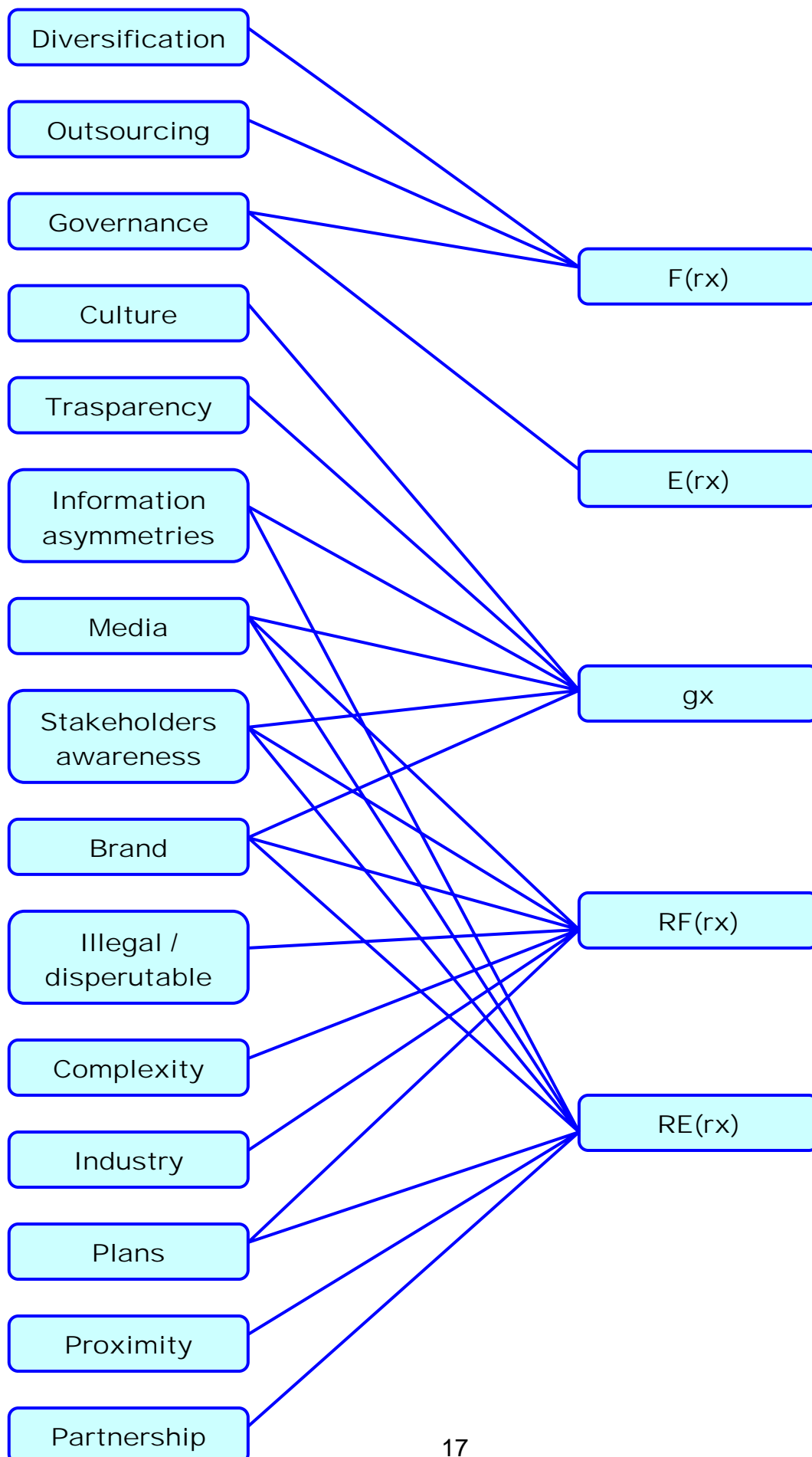
We define here “elements” as a decomposition of the “factors” behind the expected impact of reputational risk.

The “elements” that can be considered are numerous and can be different from company to company, but in general the more important and more common are:

- Culture of the organization and of the country in which events arise
- Brand awareness and recognizability
- Transparency and disclosure
- Corporate governance
- Proactive approaches, ability to communicate properly and emergency response plans
- Information asymmetries
- Outsourcing-related issues
- Influence of (and on) business partners
- Systemic nature of reputational risk and industry characteristics
- Media coverage
- Illegal or disreputable behaviours

- Complexity of the organization
- Diversification of the organization
- Investors, customers, analysts, regulators and rating agencies awareness
- Proximity to the core business

Those “elements” don’t have implications on all the “factors”; only the most relevant relations will be considered, as in figure:



To maintain a logical order we will describe the “factors” first and then the “elements” that influence them.

4.1 The frequency or likelihood of occurrence of rx: “factor” F_{rx}

This “factor” refers to the likelihood of occurrence of the “originator” event, for example the probability of a fraud within the organization or the probability of financial results below expected.

It should be estimated accordingly to the nature of that risk, regardless of the fact that it can have a reputational effect; this is quite straightforward for financial results below expected, much less for the probability of a fraud; in both cases the possible approach to the estimate are independent from the fact that there are possible consequent reputational implications; some possible approaches will be overviewed later (paragraph 6.3.1).

The only difference from the normal risk management approach to the estimate of frequency is represented by the three “elements”:

- Outsourcing-related issues;
- Diversification of the organization;
- Corporate governance.

The first two “elements”, in a sense, “expand” the range of events that should be considered. This concept can be explained looking at the two examples, one for each “element”, that will be described later: the Australian banks case for outsourcing related issues and the Citigroup’s Japan private banking case for the effects of diversification within a company.

The third relevant “element” of the frequency or likelihood of occurrence of rx is corporate governance. As it will be described, this is one of the main instruments to mitigate reputational risk with a proactive approach.

4.2 The exposure to rx: factor E_{rx}

The meaning of exposure of an organization to a certain risk is well understood; as for frequency, the exposure to the “originator” event can be estimated by the means of the approaches most suitable to its nature, again this is not related to the possible reputational implications.

When dealing with the reputational consequences, the exposure to an “originator” event is intended to give a measure of its dimension; the bigger the event, the bigger the potential reputation damage.

It is important to remember that the relation $I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{g \times RE_{rx}}$ is purely qualitative and, when trying to quantify the reputational impact, double counting must be avoided; that is, if we intend I_{rx} to be only the reputational expected impact, the “factors” must be calibrated in order to be able to then add to it the own impact of the “originator” event. To be more clear: in the case of a fraud, the I_{rx} must not count the fine following a legal prosecution if it has already been calculated when considering it within operational risks.

The only “element” affecting the exposure to rx that will be discussed is corporate governance; it is not an “element” peculiar of reputational risk management and it is normally considered when assessing E_{rx} , the reason why it is highlighted here is to show where the governance actions undertaken to manage reputational risk actually impact.

4.3 The likelihood that rx can lead to a reputation damage: “factor” RF_{rx}

A fundamental distinction that must be made, and that is possible to make only decomposing the reputation expected impact as in the relation $I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{gx \times RE_{rx}}$, is that the likelihood of occurrence of an “originator” risk, F_{rx} , and the likelihood that this can lead to a reputational damage, RF_{rx} , are two different things.

Obviously, all the events have a probability of occurrence, but not all the events, once happened, lead to reputational damages: it is possible, in theory, to link a certain probability to this, too; then the combined probability is simply the product $F_{rx} \times RF_{rx}$.

The “factor” RF_{rx} is influenced by the following “elements”:

- Brand awareness and recognizability
- Proactive approaches, ability to communicate properly and emergency response plans
- Information asymmetries
- Systemic nature of reputational risk and industry characteristics
- Media coverage
- Illegal or disreputable behaviours
- Complexity of the organization
- Investors, customers, analysts, regulators and rating agencies awareness

4.4 The exposure of the organization to reputation damage from rx: “factor” RE_{rx}

The “factors” that we already described were quite straightforward; RE_{rx} , instead, is conceptually more complex.

RE_{rx} has been broadly defined as the exposure of the organization to reputation damage from rx; in reality a properly defined exposure to reputational risk should be a function $f(E_{rx}, gx, RE_{rx})$ but there are two problems: first, to take this definition literally, we should be able to infer an analytical function of the reputational expected impact but, because of the lack of data, we can only suggest the qualitative relation $I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{gx \times RE_{rx}}$; second, using a proper exposure leave some conceptual and practical awkwardness.

Therefore it is better to treat RE_{rx} more flexibly, still representing the exposure, but as a qualitative measure of the importance of the scenario or of the magnitude of the threat. Later on we will discuss a possible approach to assess this “factor” (paragraph 6.3.3).

The “factor” RE_{rx} is influenced by the following components:

- Brand awareness and recognizability
- Proactive approaches, ability to communicate properly and emergency response plans
- Information asymmetries
- Influence of (and on) business partners
- Media coverage
- Investors, customers, analysts, regulators and rating agencies awareness
- Proximity to the core business

4.5 The “g” factor

The g_x “factor” is representative of the gaps or misalignments between corporate performances and their perception by stakeholders. In particular it is possible to identify seven gaps, as shown in figure below, of which the last one, g_x , is a function of the other six and it is the one that influence reputation.

To define their strategies, organizations try to understand what are the performances expected by stakeholders; this can be done in several ways – market researches, for example – however, the perceived needs can be different from the actual ones (gap 1).

The perceived needs are the basis to set companies objectives but they are not necessarily accurately mapped and are not the only factor considered (gap 2).

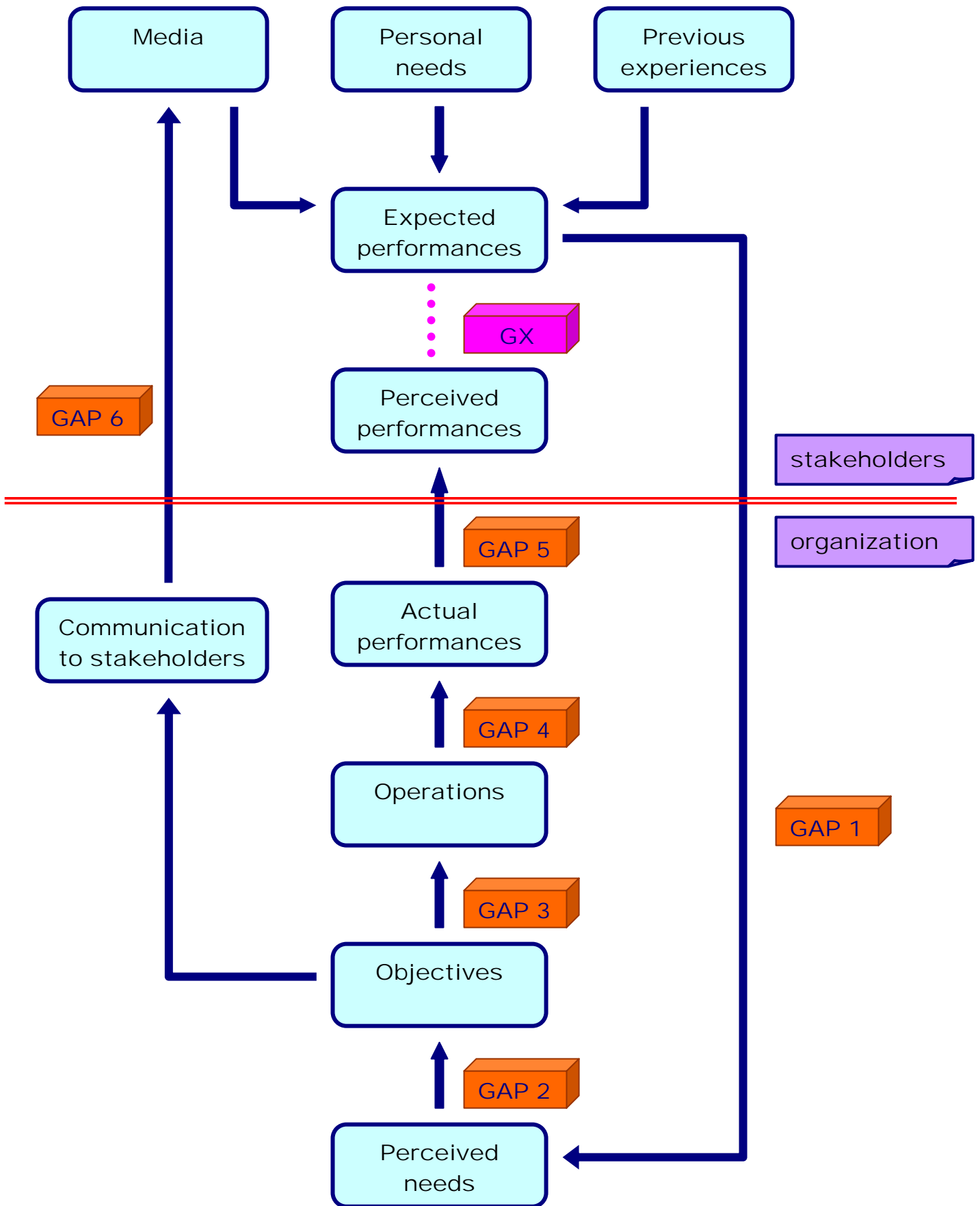
The objectives set guide the operations – in a broad sense – of the organizations, in general term, there could be differences between the path indicated by the objectives and that followed by operations (gap 3).

Obviously the actual performances of operations can be different from the results they tried to achieve (gap 4).

The stakeholders then have a perception of the performances that can be different from the actual ones in the sense that some performances are objective, such as financial results, but other are subjective, such as product quality (gap 5).

The performances expected by stakeholders can be influenced by personal needs, previous experiences and by the media or other information sources. Organizations can try to influence the expected performances with some sort of communication with stakeholders; again the communication is not, in general, perfect (gap 6).

Reputation damages arise when there is a misalignment between the performance that stakeholders perceive and those they expected (g_x). Obviously the wider is this gap, the stronger are the consequences, either positive or negative.



The “elements” influencing the g_x “factor” are:

- Culture of the organization and of the country in which events arise
- Brand awareness and recognizability
- Transparency and disclosure
- Information asymmetries
- Media coverage
- Investors, customers, analysts, regulators and rating agencies awareness

5. The “elements” that can influence the “factors” impacting on reputation

We will now take a closer look at the, generally, more important “elements”, as we called them, that have a direct influence on the “factors” in the relation

$$I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{g \times RE_{rx}}.$$

Each “element” will be described highlighting the “factors” that it affects the most, although they could be not the only ones; in addition, very brief case studies will give examples in which those “elements” played an important role in reputation harming events.

5.1 Diversification of the organization (influence on: F_{rx})

It is unanimously recognized that a diversified, in term of activities and countries, business model has many advantages and this, usually, includes the overall risk reduction potential. Despite that, a potential drawback of diversification should be considered: a reputation damage, by nature, can propagate easily from one area to another within the organization; once it is germinated, it can damages others compartment of the group.

High levels of diversification have a risk reduction potential for many categories of risk; for example a properly diversified investment portfolio has an overall risk profile that is lower than the average risk of the single investments. For reputational risk, this is not true: the substance is that reputation problems in one area could easily infect operations in others.

Case study: the Citigroup’s Japan private banking

On September 2004 the Japanese Financial Services Authority ordered Citigroup Inc. to permanently close its private-banking operations in one of the harshest penalties ever handed down against a bank in Japan. The order shut down one Tokyo branch, as well as satellite offices in three major cities giving one year to comply with this order.

In a strongly worded statement, the financial supervisory body criticized the Japan unit and the group for not having properly functioning internal controls, adding that it found a long list of "serious violations of laws and regulations" and "extremely inappropriate transactions."

The FSA said that over a three-year period, Citigroup employees misled customers about the risk involved in some products, tied loans to the purchase of specific investments, allowed transactions that looked like money laundering and extended loans that would later be used to manipulate publicly traded stock. Supervisors also said Citigroup's Japanese operations had ignored warnings from Citigroup branches in other countries about problems with some clients. The FSA investigation portrayed a culture within Citigroup's Japan operations that tolerated lax and potentially criminal practices as long as aggressive sales targets were met. FSA officials said that Citigroup salespeople routinely took advantage of Japanese customers, many of whom were wealthy, suggesting unrealistic returns on investments and encouraging them to purchase complicated, derivative products they didn't understand.

In some cases, the salespeople sold derivative products based on U.S. Treasuries and Japanese government bonds at prices well above what the market would have indicated their price should be. Though FSA officials declined to say how much higher than fair value the prices were, they indicated Citigroup salespeople put unreasonably high mark-ups on the products.

The private banking arm also violated Japanese banking law by brokering and soliciting unauthorized products, including foreign real estate investments, foreign life insurance policies and deals involving art.

The closure of the private-banking business in Japan had little direct impact on Citigroup's overall performance. Citigroup posted net profit of \$17.9 billion in 2003, of which only 3% came from the global private banking business.

Although private banking in Japan is a relatively small business in group terms, the severity of the punishment and the nature of the complaints had certainly harmed Citigroup's reputation.

The irony is that private banking was one of the businesses where Citigroup argued its conglomerate model gave it a competitive edge. Because the group includes one of the world's leading investment banks and a large private equity arm, Citigroup's private bankers could offer their clients the most sophisticated financial products and the chance to invest alongside the company in deals around the world.

Moreover, many private bank clients have corporate interests that can be an important source of business for the investment bank. All of which means that being locked out of private banking in the world's second-biggest economy is more significant for Citigroup than merely the loss of the roughly \$90m of net income the business made in 2003.

It's likely that Citigroup's other businesses in Japan had suffered in the wake of the FSA's actions. Citigroup, which has been operating in Japan since 1902 and has 9,000 employees, also has a retail banking business and a securities arm there.

Not only some Japanese corporate customers might have reviewed their relationship with the company following the regulator's criticism of the private bank branch, but the reputational damage could have harmed Citigroup's business elsewhere. Various analysts said the closure was a reminder of the risks run by a broad-based financial conglomerate operating in many countries.

5.2 Outsourcing related issues (influence on: F_{rx})

While the outsourcing of certain activities can create a number of benefits to organizations, there are a number of risks that need to be managed effectively. One of those is reputational risk that can arise, for example, from poor service from third party, customer interaction not consistent with overall standards of the outsourcing entity and third party practice not in line with stated practices (ethical or otherwise) of outsourcing entity. The risk that outsourcing can lead to reputation damage is, obviously, greater as the activities delegated to a third party are closer to the core business of the outsourcing entity. This is an important aspect to evaluate when considering the option of outsourcing and when establishing control systems on the third party's operations. Outsourcing-related issues are, in fact, particularly delicate

because the level of control a company can exercise on the supplier is lower than if the production was under direct control. The benefits of outsourcing can, of course, outbalance the negative sides, but the potential reputational impact should be recognized.

Case Study: Australian regulator investigates bank outsourcing

Like elsewhere, Australian banks have outsourced activities including information technology, credit card services, procurement, cheque and other electronic clearing services, mortgage processing and payroll, amongst others. This raises questions about privacy of customer information and the financial and reputational risks to the banks if a service provider experiences problems or cannot go on providing.

In January 2002, the Australian Prudential Regulation Authority (APRA) completed a targeted review of bank outsourcing and introduced detailed prudential standards from 1 July 2002.

APRA found that outsourcing arrangements were managed in a number of ways. Larger institutions generally had a dedicated outsourcing unit responsible for ensuring the institution's outsourcing policy is applied consistently. However, a number of institutions delegated responsibility for outsourcing to business units. In these cases, there was no guarantee that risks would be appropriately identified and assessed, and there was no central point for monitoring outsourcing arrangements.

Less than one-third of institutions surveyed had a formal policy on outsourcing. In most cases banks were able to articulate the types of activities that could be outsourced or the reasons for outsourcing an activity, but this had not been formalised.

In 1999, a major Australian institution outsourced its pricing and custody arrangements unit to a custodian that was part of the overall group. The custodian was eventually sold to another party but the outsourcing arrangement remained in place. In January 2004, it was discovered that tax credits had not been claimed for the relevant funds over a number of years and that unit prices had been underestimated as a result. When the problem was revealed, the institution had to compensate investors, costing approximately AUD\$90 million, and the regulators instructed the institution to carry out an overall review of its systems and processes to ensure that the problem does not recur.

Key issues which emerged included:

- There were insufficient controls and checking mechanisms between the third-party provider and the institution.
- The institution was concerned about its ability to easily change processes at the third-party provider as the service level agreements had been negotiated when it was part of the group.
- The organisation was taking a significant reputational risk by outsourcing such an activity to a third-party provider.

5.3 Corporate governance (influence on: F_{rx} , E_{rx})

Particularly when adopting the approach based on the assumption that reputation is primarily the result of corporate performance in its core business, corporate governance and, in general, control systems are seen as one of the main instruments to manage reputational risk. They are, indeed, fundamental mechanisms, but, when we decompose the overall expected impact in the “factors” influencing it with the relation $I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{gx \times RE_{rx}}$, we can see that corporate governance can actually mitigate only the “factor” F_{rx} and in some cases RE_{rx} ; the effect on the others is relatively small. It is now clear why this approach, by itself, cannot appreciate completely the nature of reputational risk, as stated before.

Still, corporate governance remains one of the main tools in the hands of risk managers, and, very important, it is one of the few that can actually help to prevent reputation harming situations, reducing the likelihood of “originators” events.

The drive to undertake corporate governance improvement initiatives can come up from many considerations only in part related to reputation, for example there can be a need to reconcile potentially divergent shareholder interests, to provide better incentives to managers, to attract new investors or to access new sources of capital. However, when the varied experiences of the companies are considered together it is possible to draw a few general conclusions:

- While the principles of good governance may be fundamentally the same for all companies, there is great scope for creativity and innovation in applying such principles to the specific circumstances facing individual firms;
- The commitment of managers and controlling shareholders is a sine qua non of any sustained program of improvement in a company’s governance;
- To be fully successful, a corporate governance program must effectively communicate to stakeholders the commitment of the firm, its management and controllers;
- The rewards of initial, narrowly-focused efforts can generate sustainable momentum for more comprehensive efforts and a virtuous circle of adoption of best practices;
- Various corporate governance experiences demonstrate the contribution they can make to operational performance, access to capital and its cost, ultimately generating positive returns.

Case study: the Enron debacle

Enron Corporation was a diversified American company based in Houston, Texas that filed for bankruptcy in late 2001. Before its debacle, Enron employed more than 20,000 people and was one of the world's leading electricity, natural gas, pulp and paper, and communications companies, with claimed revenues of \$111 billion in 2000. At the end of 2001, it was revealed that its reported financial condition was sustained mostly by institutionalized, systematic, and creatively planned accounting frauds.

As the scandal was revealed in 2001, Enron shares dropped from over US\$90.00 to US\$0.30. As Enron had been considered a blue chip stock, this was an unprecedented and disastrous event in the financial world. Enron's plunge occurred after it was revealed that much of its profits and revenue were the result of deals with special purpose entities (limited

partnerships which it controlled). The result was that many of Enron's debts and the losses that it suffered were not reported in its financial statements.

Enron's collapse also contributed to the adoption of new corporate governance legislations in many countries and the approval of the U.S. Sarbanes-Oxley Act (SOX) in the U.S., signed on July 30, 2002. Securities law historian Joel S. Seligman was quoted in The Washington Post saying, "this was the most important corporate scandal of our lifetimes. It was one of the immediate causes of the Sarbanes-Oxley Act, the governance reforms of the New York Stock Exchange and NASD, and the most consequential reorientation of corporate behaviour in living memory."

The claim that good corporate governance and audit system could have prevented such behaviours may look naive in such a complex, large and clamorous case; still, better control system could, arguably, mitigate such effects or, at least, take them to the surface earlier, reducing, consistently, the consequences.

5.4 Culture of the organization and of the country in which events arise (influence on: gx)

When speaking about culture, there are two principal aspects to consider: the internal culture of the organization and the culture of the environment in which it operates.

The internal culture of an organization is widely acknowledged as one of the main pillars for any risk management framework; this aspect is probably more important in a reputational risk framework than elsewhere because reputation vastly depend on personal behaviour and responsibility.

A very important and sometimes underestimated "element" of reputational risk is the cultural environment in which an event arises. As noted before and as represented by the "factor" gx , reputation damages can occur when there is a misalignment between expected and perceived performances: culture has, obviously, a great impact on this point and this can be surprisingly difficult to estimate when the event arise in a cultural environment different from that of the organization (another country, for example).

Case study: Minato Ward 2006 Schindler's elevator accident

In 2006, Schindler, the second largest elevator manufacturer in the world, came under fire by the Japanese government and Japanese people over its elevator's safety. In June, a 16-year old high school student in Tokyo was killed while attempting to exit a Schindler elevator as it suddenly rose with the doors still open; investigations began related to this fatality and the cause of the elevator malfunction.

It has been reported that of the 8,800 Schindler elevators installed in Japan, 85 have trapped people. But entrapments are not really uncommon. The Japan Elevator Association disclosed that 9,200 entrapments happened in Japan in 2004 in elevators of the big five Japanese elevator manufacturers (Mitsubishi Electric, Hitachi, Toshiba, Otis and Fujitec). In addition, many elevators were reported to have suddenly stopped between floors, or had the doors fail to open when arriving at a floor.

As of June 14, 2006, the precise cause of the accident has still not been confirmed and the investigations by the police are still ongoing. It should be noted that elevator maintenance was carried out by a Japanese maintenance company and not by Schindler since 2005. The elevators in question were maintained by Japan Power in 2005, and by SEC Elevator in 2006. The International Herald Tribune/Asahi Shimbun reported on June 14 that "Loose bolts and worn brake pads, evidence of poor maintenance, likely played a central role in the elevator accident". In the article it is also stated "it is the responsibility of the maintenance company to ensure that such bolts are tightly fastened".

Besides actual direct responsibility, that many times are not the point when dealing with reputation, the world's second-largest elevator and escalator manufacturer baffled many in Japan, including residents in the building, because it failed to swiftly apologize, which is the Japanese custom in this kind of situation.

Corporate crisis management consultant and head of Risk Hedge Co, Tatsumi Tanaka, said "Japan is a country in which you are forgiven, in many cases, if you apologize soon"; Schindler took too long (9 days) before issuing the first clear apology for the accident in Tokyo and also failed to meet the building's residents until 11 days afterward, even though they had been demanding that the company provide them with information on what happened as soon as possible. Before that, Schindler had only offered condolences to the boy's family on its website. Ken Smith, who heads the group's arm in Japan, Schindler Elevator KK, told the press conference the company thought it was "not appropriate" to meet the press and the residents so soon after the incident.

Analysts say public anger flared because Schindler lacked enough knowledge about the important role that apologizing plays in Japanese culture, and they urge other foreign-affiliated companies doing business here not to make the same mistake.

Senior Schindler official Roland Hess said the public outrage in Japan was "much stronger than normally we're used to" and he admitted that the company "underestimated the amount of concern" stemming from the accident.

Behind problems like the one hitting Schindler is a structural problem among many major foreign companies with overseas units, corporate consultant Reiji Shibata said.

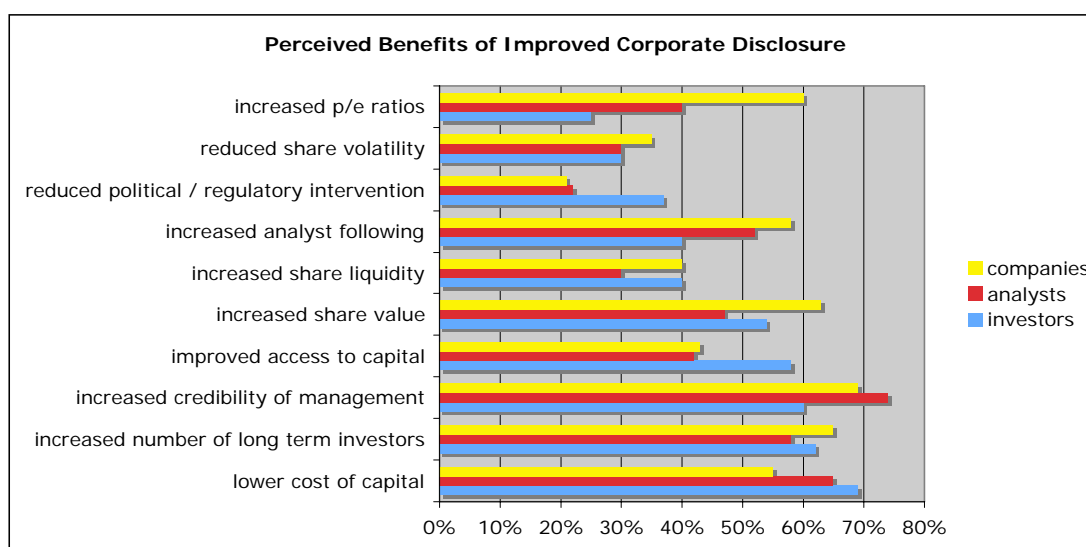
Shibata, president of the Japanese unit of the Mercer Human Resource Consulting group of the United States, said global companies are more and more trying to handle problems mainly at their headquarters.

The trend of strengthening corporate compliance began in the late 1990s among U.S. companies and many other international firms inevitably followed suit. The U.S. economy was robust and business practices originating there had strong influence at the time.

"That means the head office tries to tighten its grip on various matters, including trouble occurring in a country thousands of miles away, but instructions given by the headquarters to foreign arms are off the mark and come late in many cases because the head office knows little about the local culture," Shibata said.

5.5 Transparency and disclosure (influence on: gx)

When we described the gx factor, we saw that it is heavily affected by perception issues. A commitment to transparency and accuracy of information could address much of those concerns, especially in unconventional circumstances. As an example, in the following chart are shown the principal perceived benefits of an improved corporate disclosure as resulting from the study “Value and Reporting in the Insurance Industry” by PriceWaterhouseCoopers⁹ (percentage of respondents that recognize those benefits).



However, the disclosure challenge is immense, given the number and complexity of issues that could affect an organization’s reputation. Think, for example, at the risk management techniques used by modern financial institutions or the sophisticated off-balance-sheet ventures involving derivatives and special purpose entities so prolific in the financial system.

Rightly or wrongly, investors and regulators, in part as a backlash to recent big corporate scandals, now demand a much more high level of disclosure.

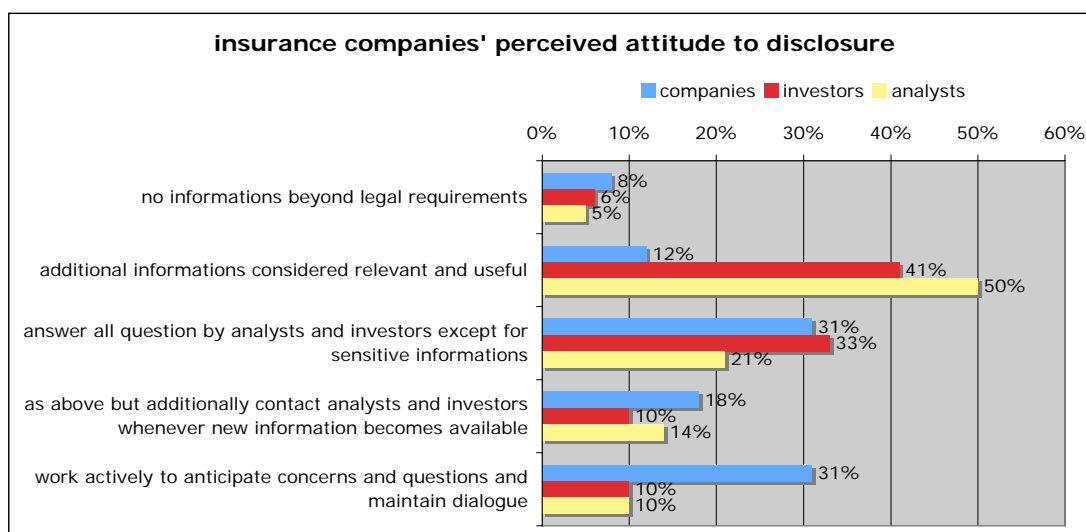
In the same PriceWaterhouseCoopers study, insurance companies, investors and analyst were asked to evaluate the companies attitude to disclosure indicating which of the following descriptions was more suitable to companies’ attitude:

- companies do not offer information beyond legal disclosure requirements;
- companies offer additional information to analysts that are considered relevant or useful;
- companies answer all questions put to them by analysts and investors, except where proprietary or sensitive information is involved;

⁹ PricewaterhouseCoopers; “Value and Reporting in the Insurance Industry”; 1999.

- as above, but additionally companies initiate contact with analysts and investors whenever new information becomes available;
- companies work actively to anticipate concerns and questions and attempt to maintain continuous dialogue with analysts and investors.

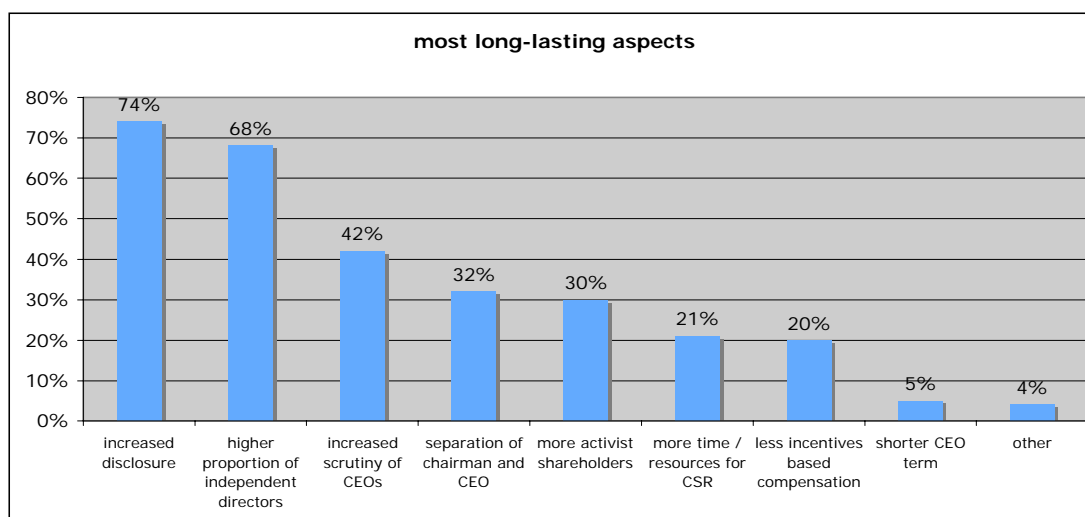
The survey results (shown below) provide dramatic evidence that companies believe they are doing a much better job of satisfying the market’s information needs than they actually are.



The call to action is clear, yet one danger is that people will view this as short-term public relations problem likely to go away over a period of time, after which they can resume business as usual. Another is that they will underestimate the preparation that is needed to manage and explain contingencies in the new environment.

In the already cited Hill & Knowlton survey¹⁰, CEOs were asked to rank-order the three reactions to the recent focus on corporate governance that, in their opinion, will be the most long-lasting in the corporate world in general and “increased disclosure” figured among the top three answers of 74% percent of CEOs (see chart below).

¹⁰ Hill & Knowlton, Inc. and Korn/Ferry International; “2003 Corporate Reputation Watch Survey”; Forbes CEO forum, Jefferson Hotel Richmond VA; 1-3 October 2003.



The prudent approach is to view disclosure as a long-term issue that will require a sustained commitment to reputational risk management. The dimensions of this commitment include adherence to principles as well as rules, so that people throughout the organization are conscious of the potential public consequences of their private acts.

Good intentions will ultimately fall short unless they are backed up by robust plans and procedures. That is why executives will have to work harder to envision all the possible outcomes of their corporate ventures and rehearse management and communication responses.

The combination of stricter disclosure requirements and heightened investor and regulator sensitivity to what's being reported does pose a substantial additional burden on financial institutions. Yet, the best managers will seize on the situation as an opportunity to elevate their preparedness.

5.6 Information asymmetries (influence on: RE_{rx} , gx)

Reputation is an important concept, especially, in environments in which there are information asymmetries; the reason is intuitive: the less a customer knows about the product, the more it must rely on trust.

This is the case of financial services, and insurance in particular, because many features of companies and product are unknown or misunderstood by third parties (customers but other stakeholders as well) and many times they will only reveal themselves in the future (an insurance contract is a promise of a future claim payment that implies the future will and financial capability to cover it, for example).

The importance of reputation as a mean to face information asymmetries is deeply influenced by the exponentially growing amount of information and alternatives available.

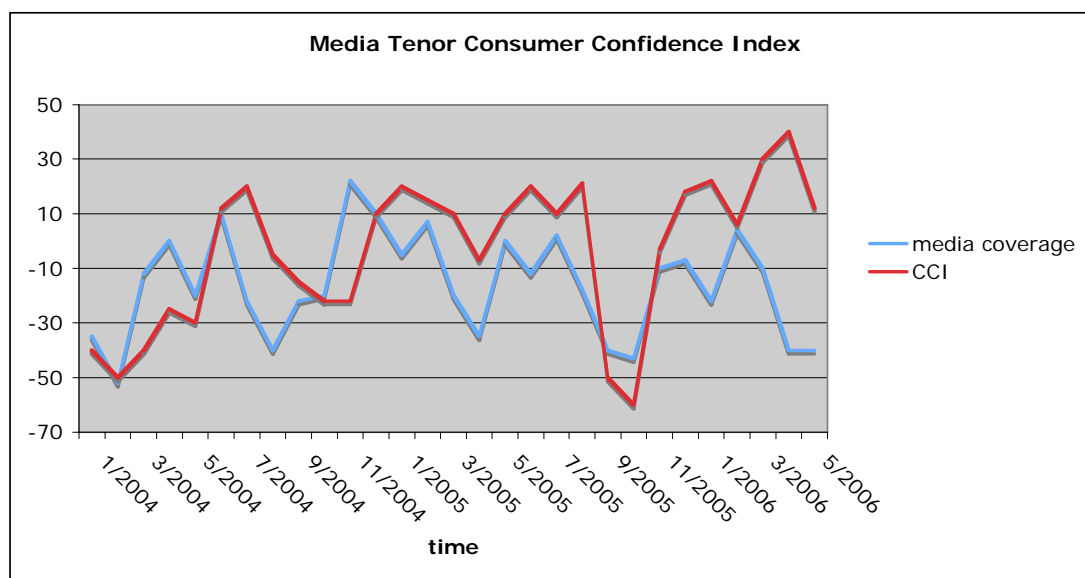
More information (sources, availability, disclosure, etc.) means – theoretically – less information asymmetries; if this is true, and not always is, the range of importance of reputation would be limited to some specific areas (governance and procedures, for

example), meanwhile in others (financial strength, for example) data could speak for themselves. On the other hand, information is not only about quantity but also (mainly?) about quality: information can become too much and too complex; when this happens the quality of information usually fade and reputation, in a broad sense, has a fundamental role that is no more that of fill the lack of information but that of guarantee the reliability of information and their sources (the credibility of data disclosure and the reliability of a source, for example).

Something similar happens when there are more alternatives: when investors, small one in particular, have to put their money in financial instruments, they can be overwhelmed by the amount of alternatives and information to evaluate, ending up in relying much on the reputation of the issuing entity or the intermediate.

5.7 Media coverage (influence on: RF_{rx} , RE_{rx} , gx)

Reputation is an issue in which perception plays a very important role and, in today's world, media can heavily influence stakeholders' perception. This is a very intuitive concept and is supported by a quantity of studies and surveys. Media Tenor Research Institute's findings between January 2004 and April 2006¹¹, for example, underline that there is a direct correlation between consumer confidence and media coverage of the economy. The ongoing comparative study indicate, as shown in figure below, that the Consumer Confidence Index's trend, in the US, trail behind media ratings of the economy by around one month.



In its analysis, Media Tenor monitored media coverage of the economy on ABC, CBS, NBC and FOX evening news. Applying a scientific and verifiable methodology, Media Tenor's research took into account all statements, forecasts and prognoses of the US economy, including assessments of business sentiments, investment and employment prospects.

¹¹ Media Tenor; "Consumer Confidence Index follows media ratings"; April 2006.

The Consumer Confidence Index, involving a poll of around 5,000 managers, measures consumers' feelings about the economy.

The research findings for the first three months of 2006 show a general improvement in media economic ratings. However, in April, media economic ratings dropped, anticipating an equally dramatic fall in the Consumer Confidence Index the following month.

The index rose at the beginning of the year to reach a four-year, optimistic peak in April, at a time when Media Tenor's findings were looking their most dismal. A month later, the Consumer Confidence Index plummeted sharply.

Fuel prices, jobs and short-term economic prospects have weighed heavily on the minds of Americans, the Conference Board said as it announced its Consumer Confidence Index for May.

The Research Institute's findings bear out the fact that the way the media portrays the economy impacts directly the public perceptions and consequently, consumer confidence.

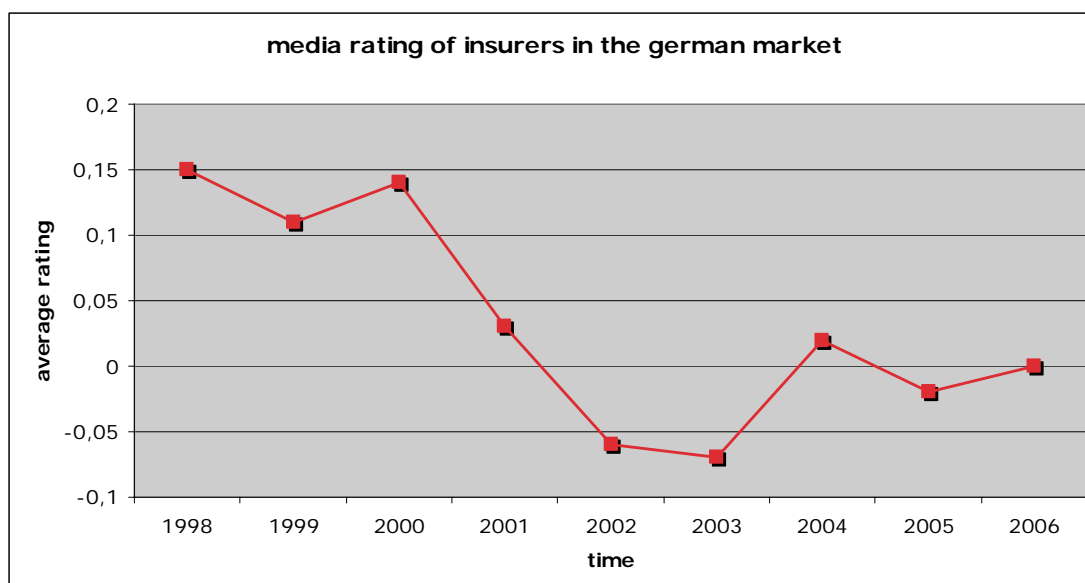
Those findings can, likely, be generalized to other kind of media and confirm the intuitive concept that they are a very important player in a subject largely based on perception; the same consideration can be made with regard to reputational risk: the more a negative event is reported, the worse will be its consequences.

Case study: German insurers

Matthias Vollbracht and Robert G. Eccles, in their 2006 article "Media reputation of the insurance industry"¹², describe the fundamental change in media reporting regarding insurers in the German market for the period between 1996 and 2006.

One of the result of this study, the media rating balance of the insurance industry in the opinion-leading German dailies, weeklies and TV news channels, is reported in the following chart. An average rating of 0,1 or higher defines a clearly positive rating and trustable image. Between 1998 and 2000, the overall rating of the industry was rather favourable and the stock market rally boosted insurers' reserves, especially for those that were heavily weighted in equities in their investment portfolio. However, this positive period ended with the triple burden of the 09/11 terrorist attacks, major natural disasters in 2002, and the stock market crash of 2002/2003, which led to large losses for the industry. During this period the average rating balance declined to only 0,03 in 2001 and fell to unparalleled lows in 2002/2003 by going into the negative range.

¹² R. G. Eccles, M. Vollbracht; "Media reputation of the insurance industry: an urgent call for strategic communication management"; The Geneva Papers; Volume 31 No. 3 July 2006.



When we look at these results considering the Media Tenor comparative study cited previously, in which emerged that there is a direct correlation between the Consumer Confidence Index and the media ratings we can get a feeling of the importance of trying to influence this significant “element”.

5.8 Investors, customers, analysts, regulators and rating agencies awareness (influence on: RF_{rx} , RE_{rx} , gx)

Stakeholders’ awareness is, obviously, an “element” that organization should consider when assessing the reputational impact of a possible event. In particular, some categories of stakeholders – investors, customers, analysts, regulators and rating agencies – have become particularly sensitive in these years as a consequence of recent major corporate scandals.

This growing awareness or sensitiveness means that smaller events that were before ignored can lead to reputation damage, impact on RF_{rx} , that the consequences can be worse, impact on RE_{rx} , and that the level of performance expected by stakeholders can be largely different from what organizations are used to deliver, impact on gx .

Case study: the Sarbanes-Oxley Act

A very well known case of increasing awareness by stakeholders is represented by the Sarbanes-Oxley Act of 2002. This United States federal law, also known as the Public Company Accounting Reform and Investor Protection Act, was approved, arguably, in response to a number of major corporate and accounting scandals including those affecting Enron, Tyco International, Peregrine Systems and WorldCom. These scandals resulted in a decline of public trust in accounting and reporting practices. Named after sponsors Senator Paul Sarbanes and Representative Michael G. Oxley, this act passed with an almost unanimous vote (423-3 at the House of Representatives and 99-0 at the Senate), a sign of the feelings about the issue. The legislation is wide ranging and establishes new or enhanced

standards for all U.S. public company boards, management, and public accounting firms. The Act contains 11 titles, or sections, ranging from additional Corporate Board responsibilities to criminal penalties, and requires the Securities and Exchange Commission (SEC) to implement rulings on requirements to comply with the new law. Some believe the legislation was necessary and useful, others believe it does more economic damage than it prevents.

The Sarbanes-Oxley Act's major provisions include the following:

- Creation of the Public Company Accounting Oversight Board (PCAOB), which is charged with overseeing, regulating, inspecting, and disciplining accounting firms in their roles as auditors of public companies;
- A requirement that public companies evaluate and disclose the effectiveness of their internal controls as they relate to financial reporting, and that independent auditors for such companies "attest" (i.e., agree, or qualify) to such disclosure;
- Certification of financial reports by chief executive officers and chief financial officers;
- Auditor independence, including outright bans on certain types of work for audit clients and pre-certification by the company's Audit Committee of all other non-audit work;
- A requirement that companies listed on stock exchanges have fully independent audit committees that oversee the relationship between the company and its auditor;
- Ban on most personal loans to any executive officer or director;
- Accelerated reporting of insider trading;
- Prohibition on insider trades during pension fund blackout periods;
- Additional disclosure;
- Enhanced criminal and civil penalties for violations of securities law;
- Significantly longer maximum jail sentences and larger fines for corporate executives who knowingly and wilfully misstate financial statements;
- Employee protections allowing those corporate fraud whistleblowers who file complaints with OSHA within 90 days to win reinstatement, back pay and benefits, compensatory damages, and congressional page abatement orders, and reasonable attorney fees and costs.

Concerning the auditing process, Standard No. 2 of the Public Company Accounting Oversight Board (PCAOB) has the following key requirements:

- The design of controls-relevant assertions related to all significant accounts and disclosures in the financial statements;
- Information about how significant transactions are initiated, authorized, supported, processed, and reported;
- Enough information about the flow of transactions to identify where material misstatements due to error or fraud could occur;
- Controls designed to prevent or detect fraud, including who performs the controls and the regulated segregation of duties;
- Controls over the period-end financial reporting process;

- Controls over safeguarding of assets;
- The results of management's testing and evaluation.

The costs of implementing the new Sarbanes-Oxley requirements have proven to be significant. According to the Financial Executives International (FEI), in a survey of 217 companies with average revenue above \$5 billion, the cost of compliance was an average of \$4.36 million. The high cost of compliance throughout the first year can be attributed to the sharp increase in hours charged per audit engagement. These compliance costs can be a relative small change for a Fortune 500 company but an insurmountable obstacle for many smaller companies with only a few million in revenues.

This has led some to widespread questioning of how effective or necessary the specific provisions of the law truly are and if it was an out of proportion reaction to isolated situations. Still, this case is a good example of how growing stakeholders' awareness and sensitiveness, leading to new regulation or not, put organizations under a higher scrutiny level and therefore can increase reputational risk.

5.9 Brand awareness and recognizability (influence on: RF_{rx} , RE_{rx} , gx)

Without the ability to brand, most of the competitive advantages of a good reputation would be lost.

As already stated stakeholders form much of their expectations referring to past behaviour, results and characteristics of companies; this concept has been called "linkability": the ability to link actions to an identity, to link actions by that identity to other actions by that same identity and, by that means, to make predictions about the identity's future behaviour. This concept is the basis of reputation and it requires the company to be recognizable, that is, to have a brand.

The stronger is the brand, the more advantage a good reputation can bring to the company. However, the opposite is true as well: the more a brand is recognizable, the more adverse events can be dangerous, as to say, the stronger is the brand, the greater is reputational risk.

The main effects of this "element" are on the "factor" RF_{rx} , because it's easier to link an event to an entity with a well recognizable brand; on RE_{rx} , because the importance of reputation is directly correlated with the importance of the brand (the more a company rely on its brand, the more the effect of reputation damage can be dangerous); and on gx , because a strong brand awareness implies more scrutiny by stakeholders.

Case study: the 1999 Coca Cola incident in Belgium

A well-known case of a reputation damage that was increased by an extremely well recognizable brand is the Coca Cola incident in Belgium.

In June 1999 Coca Cola had to withdraw up to 30 million cans and bottles of Coke, Diet Coke, Sprite and Fanta when more than 100 schoolchildren reported symptoms such as headache, nausea and shivering after drinking these beverages. Some children even went to hospital.

Although chemical analysis found nothing wrong with the drinks, the incident brought a massive reaction from the Belgians, who were just recovering from a dioxin scare. The cancer-causing substance dioxin had entered the food chain through animal feed and therefore the sale of chicken, pork, beef, eggs and meat products had been banned for some time.

Even now it is not clear what caused the schoolchildren's illness. Coca Cola presented three possible scenarios. One was that a pesticide used on crates in its Dunkirk plant leaked onto the cans. A company spokesman confirmed that people who drank from these cans probably fell ill after inhaling the substance, but denied that the pesticide had leaked into the drink.

Another explanation was that in its Antwerp plant, the gas used to carbonate drinks had been "of bad quality". The manufacturers of the gas, however, denied that their gas was the cause and presented a sample of the batch delivered to Belgium.

A third explanation was that chlorine products used to clean automatic drink dispensers had caused the illness.

Whatever caused the illness, Coca Cola's reputation was severely damaged. Some observers blamed the company for taking more than a week to react to the incident. Belgian authorities said Coca Cola did not offer enough information on the potential cause of the illness and therefore banned the sale of all products. Coca Cola later said the crisis cost about USD 60 million in lost sales, while other sources speculated that the loss could have been three times this figure.

5.10 Illegal or disreputable behaviours (influence on: RF_{rx})

Business scandals of recent years have knocked public confidence in corporations to all-time lows and the financial services industry is no exception. Former corporate superstars such as Enron, Parmalat, Worldcom and others found themselves in court facing harsh prosecution. Those offences were undoubtedly illicit but other recent scandal charges have a different nature. Take the case of Henry Blodget, a former analyst at Merrill Lynch involved in alleged false and misleading analyst research reports on internet companies as part of a scheme to earn lucrative investment banking business from those and other companies; or the case of Tyco International's former chairman and chief executive Dennis Kozlowski and former chief financial officer Mark H. Swartz: they were accused of the theft of US \$600 million from the company. During their trial in March 2004, they contended the board of directors authorized it as compensation. Blodget never made it to court and in Kozlowski and Swartz's case the jury of the first trial declared a mistrial: it was not convincing that either defendant had actually committed crimes.

Press reports and, even more, public opinion tend to lump together these and other corporate scandals leading to major lack of trust in corporations. But in fact, there are very important differences. Blodget and Kozlowski clearly behaved improperly, but that doesn't necessarily mean they broke any law.

So actually, there are two types of scandals: the illegal and the disreputable. Both of the two can have a catastrophic impact on the reputation and public opinion, by the means of media coverage, tend to consider them as fairly similar; but the distinction, even if many times blurred, is important, because, although both end up tainting public opinion of corporations, the solutions to each are different.

Unfortunately, many unpredictable events are beyond the companies' ability to control, particularly once they become fodder for the media. Even if rumours and allegations are unfounded and untrue, retractions rarely appear on the front page and the damage has been done.

5.11 Complexity of the organization (influence on: RF_{rx})

Complexity is always difficult to manage. With regard to reputational risk, this means that complex organization will likely experience more difficulty in performing controls, problems will arise from many different areas and those issues will sum up together increasing the overall level of reputational risk.

It is worth underlining that we are focussing here on the "sum up" effect; the fact that big corporations are more likely to witness unexpected events due to the great number of activity that they cover has already been covered in the diversification "element".

In particular, the main consequence of having a complex organization that should be considered will be on the "factor" RF_{rx} , since many events combined together are more likely to lead to reputational damages.

Case study: BP plc

In 2006, the oil giant BP experienced a series of major setbacks that forced it to plan to embark on a major review of its global operations.

In September, there was a fourth delay to its new Thunder Horse platform in the Gulf of Mexico, which is now not likely to begin operating until mid-2008. The group said all underwater welding on the platform's structure needed to be checked.

Almost at the same time, proceedings were opened in a lawsuit against the oil company for an explosion at the Texas City oil refinery in 2005, which left 15 people dead and 170 injured. The group had already recognized that internal errors were behind the blast and boss John Browne has publicly apologized for the explosion.

No more that a week before, the company was obliged to admit that it was responsible for a leak that saw the equivalent of 1,000 barrels of oil spill out near the port of Long Beach, California.

This event, however, was minor compared to the massive spill the company caused in Alaska in March. Rusty oil pipes were to blame for that disaster, which forced the partial shut down of the Prudhoe Bay Oil field, the largest in North America.

The company is also facing three separate investigations for allegedly manipulating the prices of butane, propane and petrol between 2002 and 2004.

Forces by this series of negative events, and other minor ones, BP began a major review of its activities, which is set to last for five to ten years and will, hopefully, lead to a better integration of its global activities.

Analysts say the plan is similar to an overhaul announced by BP's competitor Exxon after the 1989 Exxon Valdez oil spill. That review saw Exxon go on to forge a reputation as the world's safest oil firm.

BP's problems worldwide are in large part linked to its extremely rapid growth: in less than six years, the firm has grown from a large British company to a global giant, following the acquisitions in 2000 and 2001 of US oil firms Arco, Castrol and Amoco.

Analysts argued that this means BP has found itself with "a lot of units in isolation" within the company as a whole. Such a complex organization is more likely to experience many events at the same time, whose effects tend to combine resulting in a poor reputation of the company.

5.12 Systemic nature of reputational risk and industry characteristics (influence on: RF_{rx})

An important issue in reputation is "transferability", that is the fact that the behaviour of some subjects influence the reputation of the entire group to which they belong. The concept of transferability is particularly important for companies when it comes to dealing with the public because of the potential systemic nature of reputational risk.

Saying that loss of reputation is systemic in nature means that, once germinated, other parts of business and the whole industry begin to suffer.

Again, this "element" is strengthened by information asymmetries: the less customers, or other stakeholders, know about single companies, the more they tend to base their decisions on the reputation of the industry as a whole.

This aspect concern particularly industries in which companies have a less differentiated image and a less recognizable brand. For example, if an event damage the reputation of a very recognizable brand such as Coca-Cola, this is less likely to affect the whole industry than if it happened in the insurance industry, where brands are much weaker. The other way around, companies with a very strong brand are less likely to be affected by the reputation of their industry.

It is widely recognized, for example, that the Enron scandal had a strong negative effect not only on its industry but also on the reputation of big corporations in general.

A slightly different case, that will be discussed again later, is the Parmalat scandal in Italy. Parmalat is a food company but the alleged illegal actions were related only to the financial structure of the company and the related banks (the main suspect is that Parmalat artificially boosted its financial statement and banks consciously "pushed" the consequently overestimated bonds to public to get rid of them): this, mainly, led to a negative impact not on reputation of the food industry but on the trust of the great public in the banks reliability.

5.13 Proactive approaches, ability to communicate properly and emergency response plans (influence on: RF_{rx} , RE_{rx})

In managing reputation many obstacles must be faced to success. These obstacles range from difficulties in identifying the drivers of reputation to prioritising company actions and to support them addressing behavioural change within the organisation. However, while the processes and procedures for managing reputational risk may differ, there is general agreement that a key “element” is supporting the trust of all and each category of corporate stakeholder by the means of plans, processes and practices to be implemented before adverse events occur. A proactive approach is definitely more effective than any reaction capability.

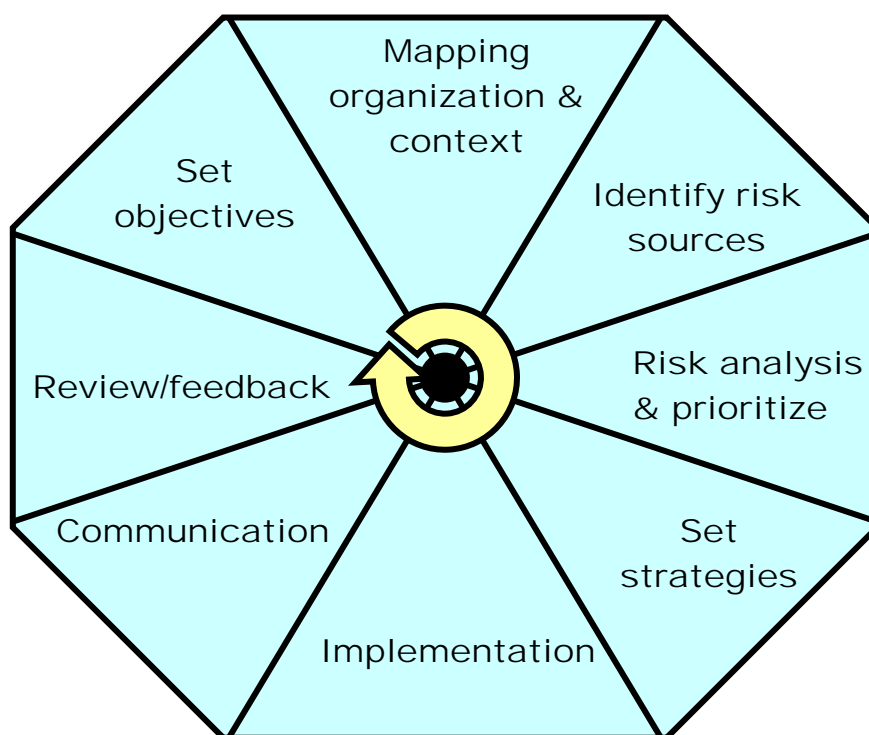
While strong organizational values and ethics, coupled with good management and active board oversight, can minimize the likelihood of events giving rise to reputational risk, the fact is that problems still occur and prepared organizations will, likely, experience less shortfalls.

Usually, when image-harming events happen, most of the damage is already been made. However, this is not always the case and a timely and firm response can by far reduce the negative impact of the incident. For the response to be effective, it is necessary to have properly planned it: assembling a team to respond to reputation issues after they have become public is likely too late to effectively facing those events.

Since it is impossible to engage business in a risk-free environment, institutions should be ready to deal with issues impacting their public image in an aggressive and positive fashion. When problems arise, the institution must speak clearly and promptly according to proper and defined principles and must take care to control the flow of half-truths and rumours that can have a devastating impact on the institution. The board, in particular, must take control of the situation to prevent it from escalating.

Those response plans must incorporate effective controls and structural governance, and define processes assuring that companies’ members must conduct their activities in a manner that will support confidence of the stakeholders and reflect ongoing credibility of the institution and its management.

Good response plans will have a positive effect on the “factors” RF_{rx} and RE_{rx} , therefore, organizations should implement – and evaluate – them following the general logical steps shown in figure:



More in detail, the eight logical steps include the following activities:

1. Define objectives and assumptions

The objectives of the emergency response plan should be defined taking care of identifying the key stakeholders and their responsibilities, rights and needs.

Consideration should be made about which are the stakeholders with whom close, confidential work needs to be done and those who need to be informed of the planning process.

All of this needs top level commitment that should be achieved and maintained by providing feedback as appropriate.

In a systematic risk management approach, it is also important that risk evaluation criteria are established early alongside the objectives.

2. Mapping the company and establishing the context

To prepare a good response plan is important to deeply understand the structure (functions and processes) of the entity and its relation with the context. Mapping should define the relationship between the organization and its environment, identifying the organization's strengths, weaknesses, opportunities and threats.

3. Gather information and identify risk sources

Existing and newly gathered information about the vulnerability of the entity should be collected and reviewed in order to identify the principal sources of risk in order to recognize critical functions and processes.

4. Analyze and prioritize risks

Once risk sources are linked to the entity structure, they should be analyzed, quantified (if possible), and prioritized.

For each hazard, key characteristics, starting from likelihood of occurrence and potential impact, should be established in the light of the objectives and assessment criteria defined.

The risk evaluation information should serve as a suitable input to identify a comprehensive range of options for properly reacting to the possible event identified.

5. Design the strategies

Once there is a map of the more likely risk sources and their areas of impact, organization can prepare the response strategies. The response plan should, also, identify responsibilities, schedules, expected outcome of treatments, budgeting, performance measures and the review process to be set in place.

6. Implementation of the plan

Implementation is a crucial phase of the process; the emergency response plans don't have to remain on paper but should become part of the company's culture.

7. Communication and Warning

The emergency plans should also incorporate the definitions of communication procedures, both regarding the exchange of information during the crisis and the communication of the plan through the organization in order to make it widely understood.

A strong control environment and early-warning system can also help the institutions to react rapidly and effectively to problems before they spread and grow, hence they must be an integral part of the communication systems.

8. Review/Update/Maintain the Plan

Accordingly to its determined aims and objectives, a broad range of activities that train, exercise and evaluate any aspect of the response plans should be conducted to promote awareness, develop and demonstrate capability, confirm preparedness and to test plans.

The performances of the response system should be constantly monitored and reviewed analysing the changes that might affect it and the development of risk sources and the environment.

Case study: Johnson & Johnson's Tylenol

A meaningful case here is the Johnson & Johnson experience: in 1982, certain bottles of its market-leading pain reliever, Tylenol, were contaminated with cyanide by a still-unknown killer before sale, and these caused the death of seven people. J&J removed all Tylenol from trade, shut down manufacturing plants and basically upended its operations to stem the problem. They even ran nationwide television adverts telling consumers not to use the product. Months later, after reformulating the tablets and bottles to block tampering, Tylenol was re-launched, and today, it is again the US market leader.

There are many lessons to this, but the crucial one here is: when faced with a crisis, J&J managers knew the right things to do. This was because they had a strong corporate credo that spelled out what was right. It had been written some 40 years earlier by a former chairman, and most importantly, that chairman had believed and lived what it said.

In a book written by fellow J&J executive Lawrence Foster, then president David Clare recalls the Tylenol poisonings hit the company with overwhelming speed and force. "No management could ever have been prepared for a tragedy like this." As blow upon blow piled in, so did bad advice, such as: "Don't admit anything, kill the Tylenol brand, and avoid a product recall." Amidst the chaos, says Clare, "We turned to the credo for help. It was the credo that prompted our decisions."

According to the credo, the company should give profits priority, but it should give the well-being of customers and society even higher priority. And to this day, J&J has a widespread, public reputation of believing and living just that.

One could argue that, in general terms, many plans dissolve fairly quickly after first contact with the reality. However, organisations that have been through a planning process perform better after a crisis than those that have not, whether or not the plan is diligently followed. The main practical value of the process appears to lie in the attention given to the underlying structural needs of the organisation and the allocation of resources and other requirements, which are therefore available to be utilised reactively in the response phase. There is another benefit, and that is that the experience of going through the planning process itself can reinforce a sense that the defence of the reputation must be a cooperative effort.

Organisations that have not been through the planning experience take longer to get organised and find it more difficult to sort and evaluate information and to prioritise; poorly formed perceptions of the loss are developed in the first few days after a disaster and these become difficult to shift; confusion occurs when new information comes to light that does not correlate with the initial perceptions; there is difficulty relating the reactive strategy to the actual extent of damage; vital opportunities to take control of the situation in the first few days are missed and the recovery suffers.

5.14 Proximity to the core business (influence on: RE_{rx})

As for many other companies' concerns, an "element" that can be very important when assessing reputational risk is the proximity of the event to the core business of the organization. The closer it is, the more relevant will be the consequences.

For reputation, this is true regarding the perception of every stakeholders' category but it is in particular for customers: they, more than others, are interested in the integrity of the core business, i.e. the reliability of products.

This "element" slightly influences RF_{rx} because incidents far from the core business could be ignored, in term of reputation, but the main effect is on the "factor" RE_{rx} , since the proximity to the core business makes an event more damaging.

Case study: Parmalat and Arthur Andersen

Parmalat SpA is an Italian dairy and food corporation with a global presence, having major operations in Europe, Latin America, North America and Australia. The company is specialised in UHT milk and milk derivatives (yoghurts, cheeses, butters, ice creams) and has an interest in fruit juices.

At the end of 2003, the company nearly disappeared altogether following accusations of financial wrongdoing in one of the biggest corporate scandals in history when an €8 billion hole was discovered in Parmalat's accounting records.

In the previous years, Parmalat managers built a complex financial system in order to artificially boost its financial statement and cover the losses. This system involved subsidiaries in the Cayman Islands, mutual funds, financiers in Italy and abroad and, allegedly, a number of banks that consciously “pushed” Parmalat’s overestimated bonds to the public to get rid of them.

The first indication of financial problems came in early 2003 as the company tried to sell €500 million in bonds but the crisis became public only in November when questions were raised about transactions with mutual fund Epicurum, another Cayman-based company linked to Parmalat (rating agencies only downgraded Parmalat bonds to “junk” level in mid December, no more than 10 days before the company filed for bankruptcy). Parmalat reorganization was assigned to Enrico Bondi, who took the role of extraordinary administrator and led the company through a two-year program that resulted in a new IPO.

Arthur Andersen LLP, based in Chicago, later named Andersen, was once one of the Big Five accounting firms, performing auditing, tax, and consulting services for large corporations. In 2002 the firm voluntarily surrendered its licenses to practice as Certified Public Accountants in the U.S. pending the result of prosecution by the Department of Justice over the firm's handling of the auditing of Enron, the energy corporation (see paragraph 5.3).

Nowadays, one of the few revenue-generating assets that the Andersen firm still has is The Q Center, a conference and training facility outside of Chicago.

These two cases have many differences and some common aspects; however, what is interesting to underline, for the “element” that we are considering, is one of the differences: if we consider the relative dimension of the two events looking at what we called the “originator” event (that is looking at the “factor” E_{rx} in relation to the two companies' dimensions) the Parmalat scandal was much bigger than the Arthur Andersen's; nevertheless the latter involved the core activity of the company – auditing and accounting certification – instead the former had nothing to do with Parmalat's core business – dairy and food – resulting, using the terms we defined, in a much higher RE_{rx} for Arthur Andersen.

Due, mainly, to this fact, the consequences for the two companies were much different. The reputation of Arthur Andersen as a reliable accounting and auditing firm was un-repairably damaged, the firm lost nearly all of its clients when it was indicted and began winding down its operations without even waiting for a verdict.

Parmalat, obviously, found itself in a terrible financial situation and had to dismantle a lot of its activities, but the suffering for its core business, through all this period, was quite limited: its dairy and food business, while re-dimensioned, continued throughout the two years of reorganization and, as for now, is still a relatively healthy business.

5.15 Influence of (and on) business partners (influence on: RE_{rx})

Issues concerning business partnerships are, somehow, similar to those related to outsourcing strategies.

Outsourcing-related issues are particularly delicate because it is self evident that the level of control a company can exercise on the supplier is lower than if the production was under direct control. The benefits of outsourcing can, of course, outbalance the negative sides, but the potential reputational impact should be recognized.

Although partnerships usually entail stricter control mechanisms, the same basic principle is the reason why partnership-related issues can increase reputational risk: involving another entity in a business relation means assuming the risk that the partner's behaviour could affect a company's reputation.

For outsourcing this effects are, substantially, confined to the probability of occurrence of an "originator" risk, the F_{rx} factor; when the relation evolves to a partnership, instead, the main potential effects are related to the exposure to reputational consequences, the RE_{rx} factor, because the relation is much closer, there is much more "overlapping" between the entities and much more efforts are invested in the relation.

Case study: Sony batteries

In the summer 2006, Sony had to withdrawn more then 10 million lithium batteries due to defects that generated overheating and, in some cases, dangerous sparking. The cost for the Japanese producer is estimated to be in the order of 400 million dollars. The fact is that those defective batteries were mainly installed on portable computers of other companies, Apple and Fujitsu among others. Those companies didn't have to sustain the cost of the withdrawal of the defective batteries (a surveying of the same Sony has confirmed that the incident was attributable to its batteries), but they, arguably, will have a negative effect on their reputation, particularly those who put lot of emphasis on the reliability of their products, as for Apple. Being a strategic alliance, not merely an outsourcing operation, the drawback for Apple and the other laptop producer are likely to be relevant and long lasting: they invested resources and they sell the product with their name fully assuming the related risks.

6. From theory to practice: building a reputational risk management framework

Setting the theoretical framework for managing reputational risk is just the first step companies should make when addressing the issue. Then they have to put theory in practice.

There are two logical phases in managing reputational risk: the first is an analysis of the situation the second consist in setting the risk management strategy.

In the first phase organizations should:

1. Perform a reality check of the organization;
2. Identify the sources of risk;
3. Estimate, for each source of risk, the “factors” (F_{rx} , E_{rx} , RF_{rx} , RE_{rx} and gx) considering the “elements” that influence them;
4. Assess the overall expected impact of reputational risk as a function of the “factors”.

In the second phase organization should look at the “elements” we defined as intervention levers by which they can influence the “factors” and therefore reduce reputational risk; the scope of this phase is to set the optimal strategy of intervention on those “elements” following this steps:

1. Evaluate areas of intervention on the “elements” and associated costs;
2. Estimate effects on the “factors”;
3. Assess the overall risk-reduction potential as a function of the “factors”;
4. Set the optimal strategy of intervention considering the trade-off between risk-reduction effects and relative costs.

6.1 Perform a reality check (step 1.1)

Performing a reality check means setting the context to implement a reputational risk management framework. Organizations should map their own structure, identify the key stakeholders and assess the control systems currently in use.

It is likely that many companies already performed such an analysis for other purposes such as corporate governance initiatives or Sarbanes-Oxley compliance, among others.

An accurate mapping of the organization will be useful to identify the sources of risk and, at the end of the process, to implement controls and assign responsibility.

An assessment of the control systems is, obviously, necessary to identify and evaluate the sources of risk and then to identify areas and methods of intervention in order to reduce reputational risk at the end of the process.

The identification of the key stakeholders is a very important step: without considering their point of view the whole concept of reputation doesn't make any sense. For each group of stakeholders, companies should identify the main interests, concerns and expectations, as in the example below:

Stakeholders group	Interests, concerns and expectations
Customers	<ul style="list-style-type: none"> • Trust/respect/admiration • Service/fair treatment • Product quality/value • Convenience/accessibility
Employees	<ul style="list-style-type: none"> • Corporate culture • Workplace environment/safety • Fair treatment • Opportunity
Suppliers and Alliance Partners	<ul style="list-style-type: none"> • Volume of business • Management/operations • Financial stability
Financial and industry Analysts	<ul style="list-style-type: none"> • Volume of business • Management/operations • Financial stability • Investment/financial performance
Shareholders	<ul style="list-style-type: none"> • Investment/financial performance • Corporate governance • Regulatory compliance • Volume of business • Management/operations • Financial stability
Regulators/ Government	<ul style="list-style-type: none"> • Community involvement • Contribution to tax base • Respect for environment • Fair treatment of people • Compliance
Media	<ul style="list-style-type: none"> • Investment/financial performance • Corporate governance • Respect for environment • Fair treatment of people • Regulatory compliance
NGOs	<ul style="list-style-type: none"> • Respect for environment • Fair treatment of people

6.2 Identify the sources of risk (step 1.2)

Once analyzed the context and the company structure, risk managers should identify the sources of reputational risk throughout the organization. Due to the particular nature of reputational risk, identifying the events that could lead to reputation damage is a particularly delicate and difficult task; companies should invest a considerable amount of time and resources into event identification. The approach to use can be different from company to company and even from a business unit from another but it will, likely, involve some scenario analysis to uncover some unobvious situations.

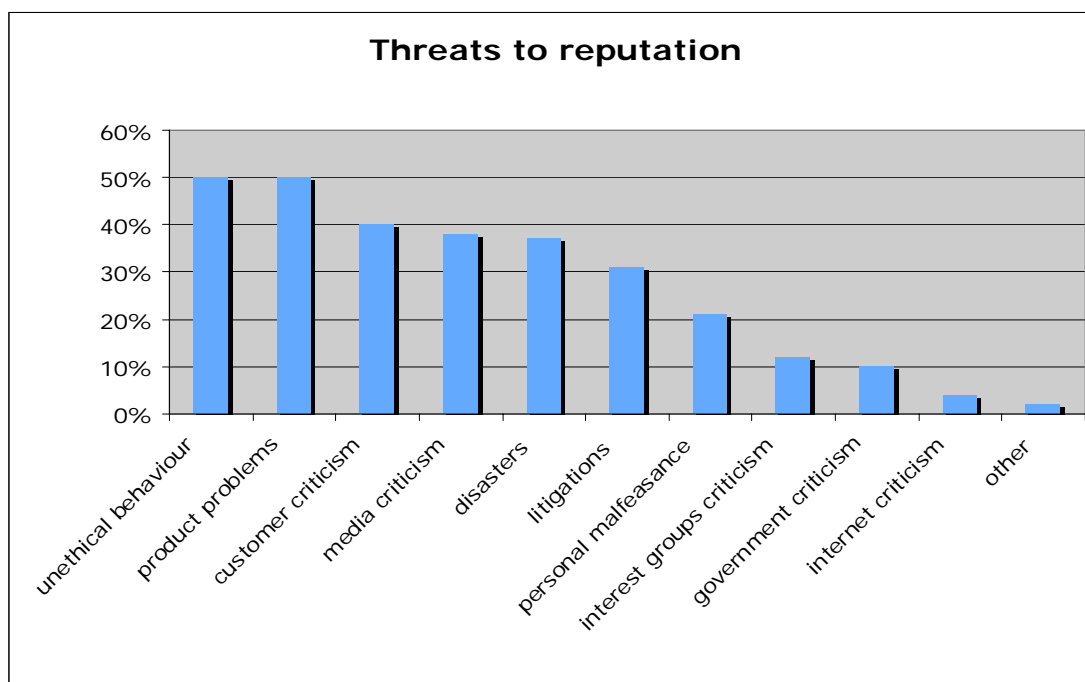
To give an example, the 2003 survey by Hill & Knowlton, Inc. and Korn/Ferry International¹³, investigated CEOs opinion on this point; they did not identify one monumental threat to reputation, but suggested that there are many of, almost, equal concern.

Here's the list of the types of threat to reputation identified by CEO's:

- Unethical Corporate Behavior
- Product/ Service Problems
- Customer Criticism
- Media Criticism
- Disaster which Disrupts Operations
- Litigation/Adverse Court Judgements
- Personal Malfeasance by Individual Sr. Execs
- Interest Group / NGO Criticism
- Government Criticism
- Internet Criticism
- Other

The following graph reports the percentage on responses in which the concern listed above were named in the first three more pressing:

¹³ Hill & Knowlton, Inc. and Korn/Ferry International; "2003 Corporate Reputation Watch Survey"; Forbes CEO forum, Jefferson Hotel Richmond VA; 1-3 October 2003.



Still, performing this analysis is as much important as getting an accurate breakdown of the sources of risk, and they can change significantly from case to case, so each company should do its own.

6.3 Estimate the “factors” (step 1.3)

The next step consists in estimating the “factors” that contribute to the overall reputational risk, considering the “elements” that influence them, for each risk source rx (the “originator” risks).

6.3.1 Frequency and exposure to rx : overview of methods

F_{rx} (the frequency or likelihood of occurrence of rx) and E_{rx} (the exposure to rx), as already said, should be estimated regardless of potential implications on reputation.

The approaches used within organization to estimate this “factors” will typically be customized accordingly to the nature of rx , nevertheless, most of them can be referred to the following categories (adapted from “overview of enterprise risk management” by Casualty Actuarial Society, 2003).

Most of the approaches can be described as “analytic” vs. “simulation” methods, referring to way in which the calculation are carried out and “statistical” vs. “structural” referring to the manner in which the relationships among variables are represented in the models, in details:

- Analytic methods

In the analytic methods the solution is determined in closed form by solving a set of equation. These models usually require a restrictive set of assumptions and mathematically tractable assumed probability distributions. The principal advantage over simulation methods is ease and speed of calculation.

- Simulation methods (Montecarlo)

Montecarlo simulations require a large number of computer generated trials to approximate an answer. These methods are relatively robust and flexible and can deal with complex relationships (as path-dependent options, for example).

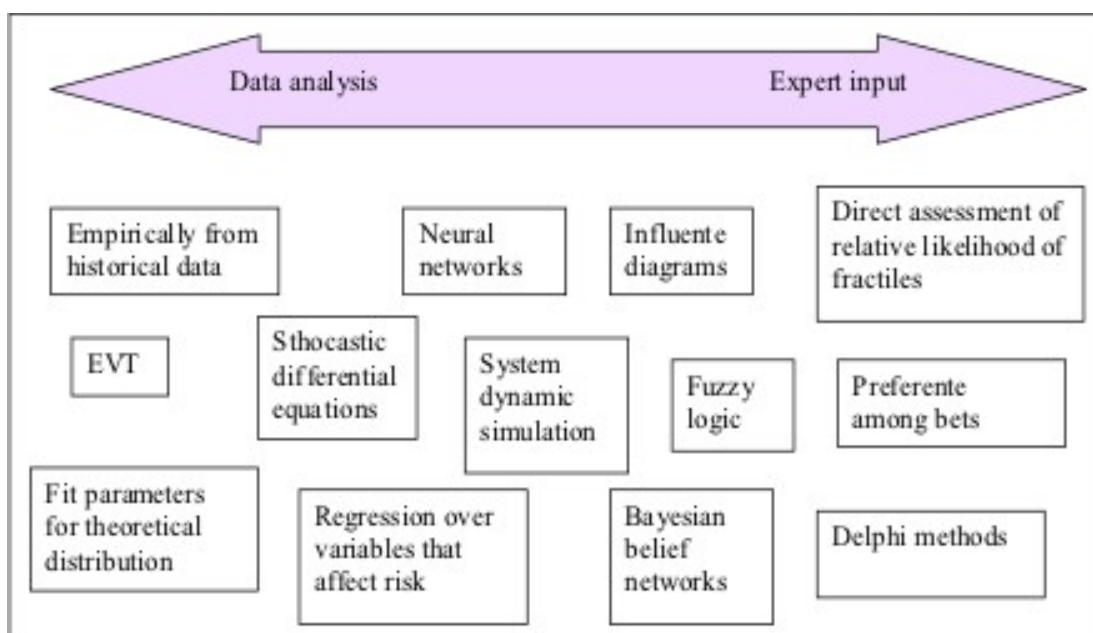
- Statistical methods

Statistical methods perform the analysis observing statistical data without considering any cause/effect relationships. These methods can only be used if there are enough data for the analysis to be significant.

- Structural methods

These methods explicitly consider the cause/effect relationships that are typically derived from both data and expert opinion. The principal advantage over statistical methods is the ability to examine the causes driving certain outcomes (e.g., ruin scenario), and the ability to directly model the effects of different decisions on the outcome.

Another possible distinction to be made is based on the type of data that the models rely on. Due, mostly, to the lack of historical data, some models use expert input. The models can be thought as lying on a continuum spreading from those who rely mostly (or only) on historical data and those who rely mostly (or only) on expert input (see figure below).



Methods based primarily on analysis of historical data

These methods are the most appropriate when there is enough historical data to develop probability distributions applying standard statistical approaches. These methods are often used to model risks that are traded in the financial markets such as interest rate, foreign exchange, asset risks, claims and so on.

- Empirical distributions

The simplest and most direct approach is to assume that the historical data fully defines the probability distribution. Of course the danger is in assuming that the data is complete and the time period over which the data is gathered is long enough to have seen or experienced the full range of outcomes

- Fit parameters of theoretical probability functions

An alternative to empirical distribution is to assume that the risk can be described by a theoretical probability density function and to use the data to determine the parameters of the theoretical distribution.

- Stochastic differential equations

A stochastic differential equation (SDE) expresses the difference (or change) between the value of a variable (e.g. interest rate) at the time t and the value of the same variable one time period later, $t+1$. It's stochastic because the difference is expressed as a combination of a predictable change and an uncertain or random change during the time period. The random change is represented as a random variable with a specified probability distribution (typically normal distribution). Starting with an initial value, the SDE is used to iteratively determine a scenario of how the value changes over a forecast period. Hundreds or possibly thousands of scenarios are generated in this way and then summarized as probability distributions for each point in time over the forecast period.

- Extreme value theory (EVT)

EVT is used to model the tails of distributions in order to estimate rare and extreme events such as natural disasters. Recently, EVT has been used increasingly in finance and insurance. The main difficulty of estimating rare events is that in most cases there is a small amount of, or even no, data available.

- Regression

Often it's necessary and useful to develop a model of a variable by examining its drivers or causal variables. A regression equation expresses a dependent variable as a function of one or more predictor variables. Regression equations provide managers more information on the dynamics underlying a specific risk to help manage, insure or hedge the risk.

Methods based on a combination of historical data and expert inputs

Often there is not enough data to reliably quantify risks directly through data analysis. This requires drawing on the experience and knowledge of domain experts to fill the data gaps. The following methods attempt to model the dynamics of a system by using a combination of both historical data and expert input.

- System dynamics simulation

System dynamics simulation is a robust modelling method that explicitly simulates the cause/effect underlying the dynamics of system. The approach leverages both existing historical data and the knowledge and experience of senior managers to develop a stochastic simulation model. The model is used to run Montecarlo simulations and develop probability distributions for the variable of interest.

The system dynamics approach has several advantages over parametric approaches described above, particularly for modelling operational risks:

- it provides a systematic way to fill any gaps in historical data with input from experts relying on their knowledge and experience.
- It provides a way to determine how operational risks change as a function of changes in operations. Since the approach explicitly captures the cause/effect relationships, it is easier to develop effective ways to mitigate risks and measure their impact than with non-casual methods
- As businesses become more complex, knowledge of their underlying dynamics becomes more fragmented and localized. Although many managers have good understanding of their own functional areas, few have a solid grasp of the dynamics of the entire organization. Obtaining a complete picture, for example, of the sources of operational risks and how they affect financial performance, requires the combined knowledge of managers across functional areas. The system dynamics approach facilitates this interaction through a structured, participative modelling and decision-making process.

- Fuzzy logic

In spite of the name, fuzzy logic is a well-established engineering science used successfully in control systems and expert reasoning. It is an approach to modelling complex systems, where much of the complexity comes from the ambiguous, uncertain or undecided representation of the variable of the system. Traditional quantitative models tend to interpret reality in binary terms. Fuzzy logic recognize grey areas between alternative values of a variable, thus having advantages in modelling complex business problems where linguistic variables are used to express the logic rules, the information is subjective, incomplete or unreliable, and the problem spaces are often nonlinear. A fuzzy system is closer to the way people reason and is therefore often used to build expert systems. The fuzzy nature of the rule spaces makes it easy to model multiple, often different or conflicting expert views toward the same model variables. In terms of risk modelling and assessment, fuzzy logic shows potential to be a good approach in dealing with operational risk, where the probability assessment is often based on expert opinion and the risk space is multidimensional and highly nonlinear.

- Decomposition to aid probability assessment

Often, decomposing an event into conditional causal events helps expert assess risk of complex systems. An influence diagram can represent the structure of the conditional causal events. Influence diagrams illustrate the interdependencies between known events (inputs), scenarios or uncertainties (intermediate variables or nodes) and an event of interest (output). While this approach increases the number of probability assessments, it also allows input from multiple experts or specialists, and helps combine empirical data with subjective data.

The output probability can be estimated using a Bayesian approach. For example, if a certain output (OUT) is causally connected with two nodes (n1, n2) then, for the Bayes rule: $P(\text{OUT}) = P(\text{OUT}|n1,n2) * P(n1,n2)$

Where:

$P(n1,n2)$ is the joint probability of n1 and n2;

$P(\text{OUT}|n1,n2)$ is the conditional probability of OUT given n1 and n2.

Estimating probability through expert testimony

In extreme cases, where there are no data at all, one must rely solely on the knowledge and experience of field experts. There are, however, some pitfalls and biases to be aware of when using only experts' opinions to estimate probability distributions. The following techniques, deriving from behavioural science, can help to get reliable answers:

- Preference among bets

Probabilities are determined by asking the experts to choose which side they prefer on a bet on the underlying events; the payoffs for the bet are iteratively adjusted until the expert is indifferent to taking a position on either side of the bet.

- Judgements of relative likelihood

This method involves asking the expert to provide information on the likelihood of an event relative to a reference lottery. The expert is asked to indicate whether the probability of the event occurring is more likely or less likely compared to a lottery with known probabilities. The reference lottery is iteratively modified until the expert indicates the two events to be equally likely.

- The Delphi technique

The Delphi technique is a strategy to develop consensus and making group decisions and can be used to assess probabilities from a group of people. This process structures group communication involving anonymity of response, feedback to the group as collective groups and the opportunity for any respondent to modify an early judgement. Through several iterations, in which the answer are used to form the basis for the next round, the process synthesizes the responses, resulting in a consensus that reflects the participants' combined intuition, experience and knowledge. The Delphi technique can be used to explore or expose underlying assumptions or information leading to different judgements and to synthesize informed judgements on a topic spanning a wide range of disciplines.

6.3.2 Estimating the likelihood that rx can lead to a reputation damage

Once again, there is not one way to estimate the "factor" RF_{rx} (the likelihood that rx can lead to a reputation damage); organizations will adopt the approach they think more suitable to their needs and to the situation. However, this estimate will probably be based most, or solely, on experts' opinions (see previous paragraph) because companies will hardly find enough historical data to perform significant statistical analyses.

6.3.3 Estimating the exposure of the organization to reputation damage from rx

As already said, RE_{rx} has been broadly defined as the exposure of the organization to reputation damage from rx but it should be treated more flexibly than a proper defined exposure, that is as a qualitative measure of the importance of the scenario or of the magnitude of the threat.

A possible approach to estimate RE_{rx} is the following:

In the step 1.1 companies identified the key stakeholders and their main interests, concerns and expectations (see paragraph 6.1). On this basis it is possible to generate a matrix with the relative importance of each interest, concern and expectation for each stakeholders' category. In the following example (adapted from "Predict the unpredictable" by PriceWaterhouseCoopers, 2005) the importance of each interest, concern and expectation is ranked on a scale from 1 to 4, where 1 means that the concern is marginal for that particular category of stakeholders and 4 means that it is very important.

		Consumers and customers	Suppliers and partners	Employees	Shareholders and investors	Analysts	Community	Regulators
Emotional Appeal	Good feeling about the company	4	4	4	4	4	4	2
	Admire and respect the company	2	2	4	4	2	4	2
	Trust the company	3	4	4	4	4	3	3
Products and Services	Stands behind products / services	4	2	4	2	2	4	4
	Offers high quality products / services	4	2	4	4	2	4	2
	Develops innovative products / services (first to market, new features, design)	4	2	2	4	4	1	1
	Offers products/servi ces that are Good value (properly priced)	4	2	2	2	2	2	1

	Products are better than competitors' (best in class, top rated)	4	2	2	4	4	2	1
	Strong branding and communications	2	2	2	2	4	2	1
	Standard setter	2	2	2	2	4	1	1
	High market share	2	2	2	4	4	1	1
Vision and Leadership	Has excellent leadership (CEO strength, overall management)	2	4	4	4	4	2	2
	Has a clear vision for the future	2	4	4	4	4	2	2
	Reputation of CEO, CFO and Board Members	2	3	2	4	4	1	2
	Thought leader (agenda-setter)	1	4	2	4	4	4	2
Workplace environment	Is well managed	2	4	4	4	4	2	4
	Looks like a good company to work for (employer of choice, best place to work)	2	4	4	2	4	4	2
	Looks like it Has Good Employees	2	4	4	4	4	4	2
	Fosters entrepreneurship (innovative organization, management and employees)	2	4	4	4	4	2	2
	Strong corporate culture	2	4	4	4	4	2	1
	Human Values	3	2	4	2	1	4	3

	Handling of Social / Environmental Issues	3	2	3	2	1	4	4
	Reasonable treatment of employees (pay, healthcare, job security, relationships with unions, and avoidance of layoffs)	3	4	4	2	2	4	4
Financial performance	Record of profitability (current and projected)	1	2	3	4	4	1	2
	Looks like a low risk investment (consider company's financial history, including past performance, stock price, bankruptcies, recapitalizations)	1	4	3	4	4	1	2
	Strong prospects for future growth (current and projected revenue growth)	1	4	3	4	4	1	2
	Tends to outperform its competitors	1	2	3	4	4	1	2
	Capital structure (IPO, debt rating)	1	2	3	4	4	1	2
	Cost control (current and projected)	1	1	3	4	4	1	2
	Stock performance (current and projected)	1	1	3	4	4	1	2
	Supports Good causes	4	2	4	4	3	4	2
Soc								

	Environmentally responsible	4	2	4	4	3	4	3
	Treats people well	4	2	4	4	3	4	2
	Clearly operates within legal, regulatory, and ethical bounds	3	4	4	4	4	4	4
	Corporate governance (transparency, board independence, clean audit opinion)	2	4	4	4	4	4	4
Communication	Ability to Communicate	4	2	2	2	2	4	2
	Internet Communications	4	3	2	1	1	4	1
	Transparency	4	4	2	4	4	3	3
Strategy	Ability to Innovate	3	4	2	4	4	1	1
	Adaptability to Change	2	3	4	4	4	1	2
	Recognizes / takes advantage of market opportunities	2	4	2	4	4	2	2

The next passage is to assess the expected impact of each risk source rx on each interest, concern and expectation defined, that is how they are affected if the events materializes. This would be a second matrix with risk sources on an axis and interests, concerns and expectations on the other.

It is now possible, from these two matrices, to obtain a third one with risk sources on an axis and their effects on stakeholders' groups on the other. To obtain RE_{rx} we can simply weight the values in this matrix by the relative weight of each group of stakeholders.

6.3.4 Estimating the "factor" gx

The estimation of the "factor" gx , as we defined it, should be performed considering experts' opinions (through one of the methods that we shortly described in paragraph 6.3.1, for example) and it would, probably, be easier decomposing the evaluation both on the cause side (that is, considering the "elements" defined in paragraphs from 5.4 to 5.9) and on the effect side (that is, considering the decomposition of gx described in paragraph 4.5).

6.4 Assess the overall expected impact of reputational risk as a function of the factors (step 1.4).

Now that we estimated all the “factors” (F_{rx} , E_{rx} , RF_{rx} , RE_{rx} and gx), we can use the relation $I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{g_{rx} \times RE_{rx}}$ to assess the expected impact on the organization for each risk source rx . Obviously, this relation has to be calibrated in order to obtain meaningful results.

The result of this assessment process varies according to the approaches used, the data available and the relations modelled: it could either be a proper estimate of the risk potential of each source or a ranking of the risk source from the more to the less dangerous. Of course, the accuracy, and the effort to reach it, would be different but, in both cases, this assessment would be a necessary step for the second phase of the process.

6.5 Evaluate areas of intervention on the “elements” and associated costs (step 2.1)

The scope of this “second phase” is to set the optimal strategy of intervention on the “elements”; of course, they can be those defined in chapter 5 or other more suitable to the characteristics of the organization and the context in which it operates.

The first step of the second phase is to determine how can a company intervene on those “elements” (for example what corporate governance initiative could be undertaken) and how much it would cost.

It will, probably, not be possible to intervene on all the “elements” (changing a country’s culture, for example) and on others it would not make much sense or the costs would be unbearable (for example, Coca-Cola’s strong brand makes the company more exposed to reputational risk but it’s very unlikely that the board would consider weakening it for this reason).

To evaluate how the “elements” could be used as intervention levers, could be necessary to combine more than one of the approaches described in paragraph 6.3.1 and to include in the analysis some experts’ opinions and some scenario analysis.

6.6 Estimate effects on the “factors” (step 2.2)

The simplest way to address this step is to build a matrix for each “factor” with the “elements” and, for different level of intervention, the estimated coefficients reflecting how much that “factor” is influenced.

In the example below, relative the “factor” F_{rx} , the levels of intervention are ranked on a scale ranging from “much worse” to “much better”.

To “much better” corporate governance, meaning that the organization intend to undertake state of the art initiatives on this “element”, is associated a coefficient of 0,7 which means that the “factor” F_{rx} would be reduced by 30%. Obviously for all the “elements” that don’t have direct impact on F_{rx} , see paragraph 4, the value of the coefficient would be 1 whatever the level of intervention.

Effects on F_{rx}					
“elements”	Level of intervention				
	much worse	worse	the same	better	much better
Culture of the organization and of the country in which events arise	1	1	1	1	1
Brand awareness and recognizability	1	1	1	1	1
Transparency and disclosure	1	1	1	1	1
Corporate governance	1,3	1,1	1	0,9	0,7
Proactive approaches, ability to communicate properly and emergency response plans	1	1	1	1	1
Information asymmetries	1	1	1	1	1
Outsourcing-related issues	1,3	1,1	1	0,9	0,7
Influence of (and on) business partners	1	1	1	1	1
Systemic nature of reputational risk and industry characteristics	1	1	1	1	1
Media coverage	1	1	1	1	1
Illegal or disreputable behaviours	1	1	1	1	1

Effects on F_{rx}					
	Level of intervention				
Complexity of the organization	1	1	1	1	1
Diversification of the organization	1,3	1,1	1	0,9	0,7
Investors, customers, analysts, regulators and rating agencies awareness	1	1	1	1	1
Proximity to the core business	1	1	1	1	1

6.7 Assess the overall risk-reduction potential as a function of the “factors” (step 2.3)

Once built the matrices for all the “factors” (F_{rx} , E_{rx} , RF_{rx} , RE_{rx} and gx) as described in the previous paragraph, it is possible to evaluate the expected impact of different strategies through the relation $I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{gx \times RE_{rx}}$ that has been calibrated at the step 1.4 (see paragraph 6.4).

A strategy is a combination of different level of intervention for each couple “element”/factor; for example, an organization can undertake corporate governance initiatives that strongly reduce F_{rx} and slightly reduce E_{rx} and combine them with better disclosure procedures that strongly reduce the gx factor.

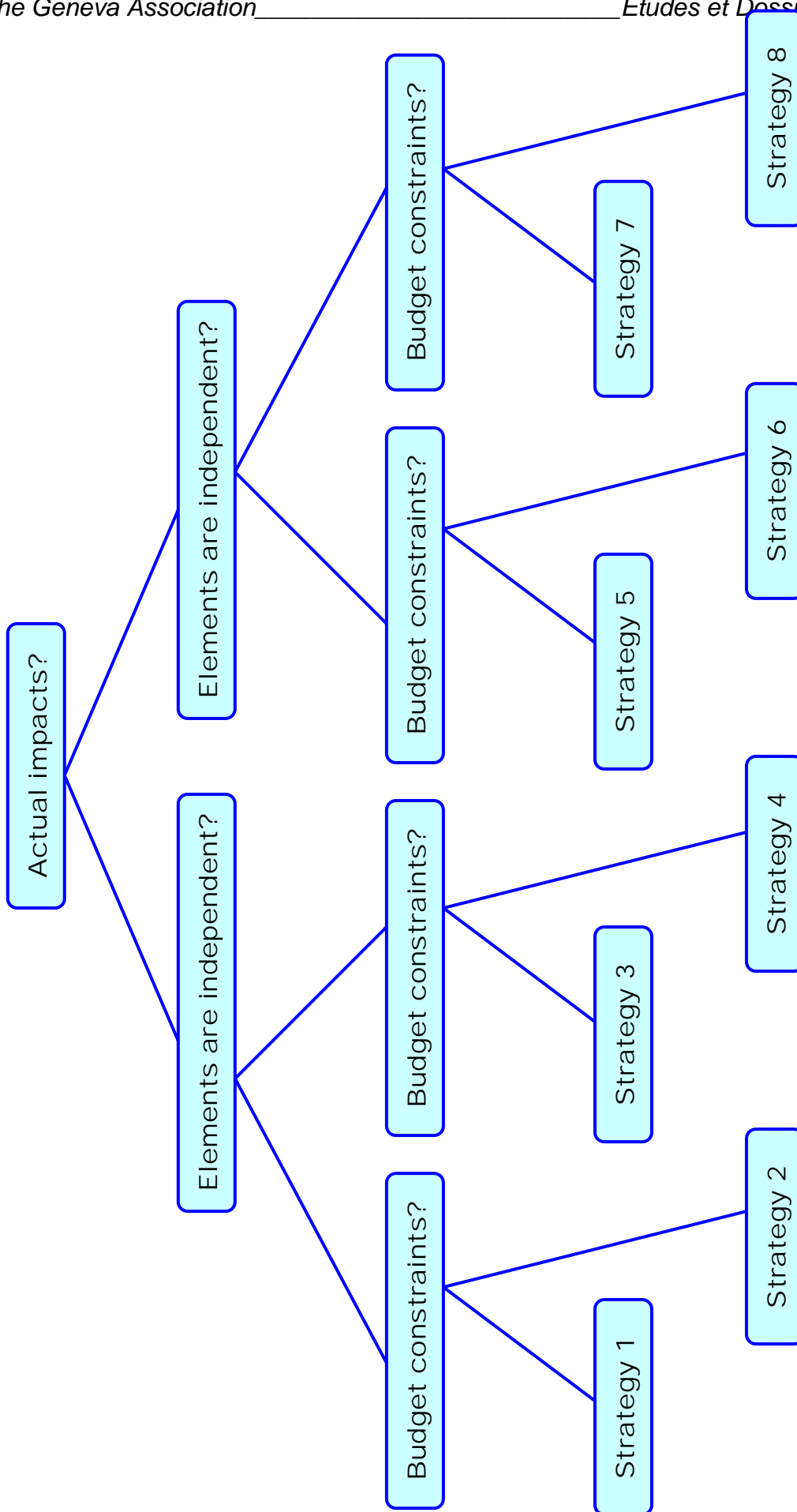
6.8 Set the optimal strategy of intervention (step 2.4)

The last step of this two phases process consists in setting the optimal strategy of intervention considering the trade-off between risk-reduction effects and relative costs.

There are different approaches to determine the optimal strategy; to choose the best one, organizations should answer these question:

- In the analysis performed has been possible to determine the actual expected impact of the interventions (an economic value) or the result was a ranking / a relative valuation of their effectiveness?
- The interventions on “elements” are independent from each other or they are an integral part of the strategy?
- There are budget constraints determined “a priori”?

According to the answers to these questions, it is possible to define eight different strategies as described by the decision tree shown in figure below:



- Strategy 1:

The first strategy could be the more suitable if it was possible to determine the actual expected impact of the possible interventions; the “elements” are independent from each other, which means that everyone of them can be changed without modifying the others; and there is a budget constraint, that is a previously defined limit at the total investment in reputational risk reduction initiatives.

In this case a possible strategy is as follow:

- determine a ratio $R_i = \frac{Economic_impact_i}{Intervention_cost_i}$ for each “element” i (or an analogue ratio: actualized, risk-adjusted, etc.);
- this ratios should be ranked in decreasing order;
- organizations should include in the undertaken strategy the “elements” one by one, starting from the one with higher R_i , till the sum of the single intervention costs is within the budget.

- Strategy 2:

If organizations have the actual expected impact of the interventions, the “elements” are independent from each other and there is no previously defined budget constraint, they can:

- determine the ratio $R_i = \frac{Economic_impact_i}{Intervention_cost_i}$ (or an analogue ratio) for each “element” i ;
- define a threshold value T (it could be 0, the cost of capital, the risk adjusted cost of capital, etc. according to the ratio defined);
- undertake all the interventions with $R_i > T$

- Strategy 3:

If it was possible to determine the actual expected impacts, the “elements” are not independent (that is organizations have to evaluate the strategies and not the single interventions) and there is a budget constraint, then companies should:

- determine alternative strategies;
- calculate the total cost of each possible strategy;
- eliminate the strategies that don’t respect the budget constraints;
- pick the most effective of the remaining strategies

- Strategy 4:

We have the actual expected impacts, the “elements” are not independent and there is no previously determined budget constraint:

- determine alternative strategies;
- define a valuation metric to choose the best strategy ($MAX (R_i)$, for example);

- calculate $R_i = \frac{\text{Economic_impact}_i}{\text{Intervention_cost}_i}$ (or an analogue ratio, according to the valuation metric), where, this time, the index i represent each strategy, not the single “elements”;
- choose among the possible strategies using the defined valuation metric
- Strategy 5:

Organizations don’t have the actual expected impacts of interventions, the “elements” are independent and there is a budget constraint.

Since it was not possible to estimate the actual expected impact of interventions but only a relative valuation of their effectiveness or their ranking, defining the strategy is more complicated. In this case, organizations can’t perform a proper optimization of the allocation of resources and should adopt a pragmatic approach, for example, they could:

- rank the possible interventions in decreasing order of effectiveness;
- include in the strategy the interventions one by one till reaching the budget starting with the more effective.

or

- rank the possible interventions in increasing order of cost;
- include in the strategy the interventions one by one till reaching the budget starting with the cheaper.

or

- split the budget in two parts with, for example, the Pareto principle (it states that for many phenomena, 80% of the consequences stem from 20% of the causes), and therefore assign 80% of the budget to the first 20% of interventions in order of effectiveness and the remaining to the other interventions;
- within each of the two parts, assign the resources to the interventions in decreasing order of effectiveness (or increasing order of cost) till reaching each of the two budget constraints.

- Strategy 6:

It was not possible to determine the actual expected impacts, the “elements” are independent and there is not a budget constraint.

This case is more complicated than the previous because the budget is not defined “a priori”. A possible approach would be to undertake a certain number of interventions (for example, the first 20% in decreasing order of effectiveness or increasing order of cost, again resembling the Pareto principle) to gain some early wins and then, if they were successful and consensus is built, to progressively introduce others.

- Strategy 7:

It was not possible to determine the actual expected impacts, the “elements” are not independent and there is a budget constraint.

Since “elements” are not independent, companies have to compare alternative strategies. Doing so, they don’t need to know the actual expected impact of strategies to pick the best one, a ranking is enough, and therefore strategy 7 would be the same as strategy 3:

- determine alternative strategies;
 - calculate the total cost of each possible strategy;
 - eliminate the strategies that don’t respect the budget constraints;
 - pick the most effective of the remaining strategies
- Strategy 8:

It was not possible to determine the actual expected impacts, the “elements” are not independent and there is not a budget constraint.

In this case, organizations have to heavily rely on intuition and pragmatism to pick the strategy. For example, they could eliminate those with unreasonable costs and then choose the most effective among the ones remaining; they could pick the cheaper among the 20% most effective or the most effective among the cheaper 20% and then rethink the strategy when consensus is built or additional information are available.

7. Reputation and strategy

One problem that is often highlighted is that many central risk groups don’t have much input into strategic decision-making. Again in the 2003 survey by Hill & Knowlton, Inc. and Korn/Ferry International, when asked in which business processes their company had a structured approach to assessing risk, only 43 percent of respondents pointed to mergers and acquisitions and only slightly more (44 percent) to forming alliances and partnerships. Just 17 percent pointed to the setting of compensation policies for directors and recruitment policies. These are all situation in which the reputational risk component should be a considerable concern; companies, instead, tend not to consider it explicitly and, even less, with a structured approach.

However, reputational is one of the highest priority risk and the one for which CEOs have direct and individual responsibility; therefore the consequences on reputation should be kept in high consideration in the strategic decision making process.

The framework we described, allow companies to integrate consideration on reputational risk in this process in a quite straightforward and flexible way; having decomposed the expected impact in the “factors” (F_{rx} , E_{rx} , RF_{rx} , RE_{rx} and gx), through a qualitative assessment of the “elements”, it is possible to evaluate the expected impact of different strategies through the relation $I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{gx \times RE_{rx}}$.

This can be, not only a one-time activity to identify the areas of intervention to mitigate reputational risk, but, as it should be, also a continuous monitoring process; this framework allow companies to do it quite easily: the “factors” F_{rx} and E_{rx} , if the company has a structure enterprise risk management framework, have to be estimated anyway; the other “factors” (RF_{rx} , RE_{rx} and gx), once the company have set the various parameters (see chapter 6), can simply be estimated by changing, if needed, the “elements” assessment.

In a comprehensive and coherent fashion, strategies should incorporate both the two complementary points of view described earlier: one focussing on improving corporate performances, reliability and controls and the other on influencing stakeholders' perception. In the former point of view, the key to manage reputational risk rely in the analysis of the corporate value chain to identify areas whose optimization can enhance stakeholders' trust in the company. The latter point of view emphasises the use of reputation management tools – such as triple bottom line and corporate social responsibility – as a way to influence stakeholders' perceptions.

In this framework is quite straightforward to include in the valuation, alongside the expected impact, a dashboard of KPI in order to enhance the level of detail of the analysis and to perform a more focussed monitoring. Typical measures used in the dashboards that could be included in a reputational risk management framework, because highly influenced by reputation, are, for example:

- marketing
 - new business sold
 - retention of old business
 - market share by customer type
 - average premium or assets per customer
 - % of high-yield customers
 - customer satisfaction
 - average number of products per customer
- underwriting
 - price achieved vs. target price
 - quotes accepted/declined
 - variance analysis
 - premium persistency
- financial
 - revenue
 - underwriting profit
 - pre-tax operating income
 - net income
 - return on equity and total capital
 - economic value added
 - embedded value
- sales/distribution
 - acquisition costs per sale
 - sales by distribution channels
 - growth/retention of agents

- human resources
 - agency composition
 - total employment, turn-over, vacancy rates and salary by department
 - employee commitment and engagement
- external data
 - audit compliance

The inclusion of a dashboard of KPI can be a means to increase the reliability of the framework: for example, it could be useful to perform a less qualitative and more rigorous risk and intervention prioritization, ranking them in terms of their expected impact on KPIs (the marginal contribution of each risk factor to the overall risk profile can be determined by “tuning off” that risk factor and examining the expected impact on the KPI probability distribution).

This, or other, improvement to the framework can be introduced later on, when a higher level of commitment is achieved and more resources are assigned.

The qualitative, intuitive and pragmatic relation $I_{rx} = (F_{rx} \times RF_{rx} \times E_{rx})^{g \times RE_{rx}}$, even if it could be not perfectly rigorous from a theoretical point of view, allow organizations to consider the reputational consequences of their action on an ongoing basis because, recognizing the “second order” nature of reputational risk, it can be assessed as an add-on to other risk assessment processes, drastically simplifying the task.

The approach used is also flexible enough to adapt to different situations and environment and allow companies to use different valuation methods according to their needs, to the nature of “originator” events and to the data available.

Another positive aspect of using a flexible and pragmatic approach is that companies can approach the reputation issue gradually, starting with a limited and focussed set of intervention, gain some early wins and consensus among the organization and therefore the possibility to undertake more ambitious strategies.

Changes in business practices arising from increasing governance, legal and regulatory influences have made companies more vulnerable to reputational damage. Equally, the power and intrusiveness of media and communications industries has intensified the focus on corporate reputation.

Therefore, the need to manage reputation explicitly and with a structured approach is increasing. Reputational risk must be aligned with an organisation's strategic priorities and integrated into its approaches to risk and business management; investing in and maintaining reputation as a critical corporate asset can both build brand equity and help to deliver shareholder value.

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