# ACCEPTABLE RISK LEVEL

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### The accidental risk

An organization daily faces accidental risks. The losses associated with such situations can disrupt the continuity of the organization's operations.

It is generally accepted that the objective of Risk Management is to treat these risks in the best economical way, in other words, to optimize the cost of the treatment.

Today this is most effectively achieved through an integration of these risks into the management of the organization rather than through pure transfer to an insurance company.

In this concept, the question of whether the organization should switch from an insurance management function to a risk management function does not require an urgent answer!

It is easy to understand the reaction of a majority of General Managers who recognize the value of the approach but feel that the corresponding priority level is low: the transfer to an insurance company might not be the best economical solution but this solution exists.

There is another principle, however, that is implicit in the Risk Management approach and this is the word "Continuity". If a large loss happens tomorrow, is the organization going to survive despite all existing insurance contracts?

A statistic established by the Chubb Insurance Company in the United States, three years ago reveals that 80% of the organizations that have suffered a major loss in a largely computerized administration will not survive the loss within the next three years.

Let us go deeper in this statistic.

Organization's collapse is the result of one or more of the following mistakes:

#1. The risk of a loss to the computer system has not been considered (a forgotten risk!). This has been a mistake in the identification of the risk.

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- #2. The risk of a loss has been considered but the probability has been found so small that it could be neglected. This has been a first mistake in the evaluation of the risk.
- #3. The risk of a loss has been considered but the size of the loss and of all its consequences has been underevaluated. This has been a second mistake in the evaluation of the risk.
- #4. The risk of a loss has been considered and correctly evaluated but the necessary recovery measures in order to have the computer system operable shortly after the loss have not been taken.

  This has been a first mistake in the treatment of the risk.
- #5. The risk of a loss has been considered and evaluated and proper recovery mesures have been taken but after the loss no money was available in order to support the recovery measures. This has been a second mistake in the treatment of the risk.

When the group of 80% that collapsed is contrasted with the 20% that survived, one learns that the main difference between the two groups has been in the survivor's prior creation of necessary recovery measures (#4)

Since there is no significant differences in the insurance policies owned by the two groups, we can consider that, in this case, #5 was not a relevant factor.

It is also because identification and evaluation had been correctly performed by the survivors, that the risk had been initially considered as UNACCEPTABLE and that recovery measures had been taken to make it acceptable.

## Defining Risk Management

Beside the economical treatment of the accidental risks, there is a more significant objective in the definition of Risk Management:

- Secure the survival of the organization or secure such a level of continuity that survival is not threatened.
   or
- Remain in such a position that the organization's objectives can be reached.

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When dealing with such an issue as "staying in business or disappearing", we necessarily involve the top management. Who is going to explain the stockholders that collapse is the result of a poor evaluation or of a poor treatment?

The Risk Management process itself can likewise be defined :

"The various technical and economical analysis (1) and treatment (2) operations for accidental risks which can threaten the existence (3) of an organization".

- (1) Analysis means identification and evaluation processes,
- (2) Economic treatment means lowest cost.
- (3) Existence can also be the organization's ability to achieve its objectives.

## An "Acceptable Risk"

In the first definition of Risk Management (treat the risks in the most economical way) the "Acceptable Risk" is an implicit and rather vague concept. Under the second definition, the acceptable risk becomes something of prime importance and against which all risks need to be assessed.

The future of the organization is at stake !

If computer risks as well as liability risks for environmental impairments as well as for product defects, are considered today as major risks, it is precisely because the associated losses and all consequences exceed the "Acceptability" level for a large number of organizations.

As long as the concept was vague and the context of the problem not well defined, there was no need for the organization to provide a clear answer.

With the new definition, it becomes clear that all accidental risks must be properly identified and evaluated in all their consequences in order to be in a position to check if they are acceptable and subsequently to develop the best economical treatment.

- The identification is not performed against the catalog of available insurance products, but by considering all accidental events that can prevent the organization from reaching its objectives.
- 2. The evaluation of a risk is much more than the financial limits to be incorporated in an insurance contract.

### Evaluation should include :

- the development of the scenario of a large loss associated with the risk (direct effect and <u>all</u> consequences)
- the various means which will be necessary after the loss: personnel, organization and the various technical means such as buildings, machines etc...(today, it is seldom that a piece of machinery will be replaced after the loss by the same piece of machinery).

This is not a theoretical but a very practical exercise that can be called "Continuation plan" and in some circumstances, contingency or crisis or emergency plan.

If this continuation plan is not developed, it is impossible to estimate what is the amount of money which will be necessary after the loss in other words the continuation plan is the very basic support for the financing aspects of the treatment.

- 3. The treatment will deal with two different aspects:
  - 3.1. The treatment of the unacceptable risk which becomes a priority, can be performed in two ways :
    - Reduction of the risk what means a reduction of the probability of a large loss up to a level where the risk can be ignored (very rare) or a reduction of the severity of the effect and/or of the consequences up to a level where the risk becomes acceptable (after a new evaluation).
    - Risk avoidance which is generally achieved by waiving the activity or part of the activity the risk relates to.
  - 3.2. The treatment of acceptable risks is achieved by making provisions of the various organizational and material means which will be necessary after the loss and by providing internal and/or external financial resources in order to pay for these means.

Risk reduction is an important tool which reduces the importance of the means to be found after the loss and as a result of the corresponding financial resources. Risk reduction reduces the cost of the continuation plan.

There are two aspects in the way risk reduction measures are effective: they can make a risk acceptable or improve the efficiency of the treatment.

Is there a limit beyond which the cost of risk reduction becomes uneconomical?

Because of a lack of reduction measures, an unacceptable risk will require the organization to interrupt the activity the risk relates to (3.1).

It is against the loss of revenue resulting from the discontinuation of the activity that the cost of the reduction measures shall be balanced.

This rule is applied at least implicitly in the design of new products: for an automobile manufacturer, the consequences of the company's liability exposure are such that the cost of all safety measures needs to be taken into account in the feasibility study of a new model.

The global economy of the treatment (3.2) is another criterion which governs the risk reduction policy. The treatment is made of various organizational, material and financial measures.

Except for pure indemnification of third parties involved in a loss, it is generally considered that the financial resources are devoted to the availability of these means after a loss.

If measures are taken which reduce the loss and as a result the importance of the means, there should be a corresponding reduction in the financial resources which need to be available after the loss.

Financial resources which are deemed necessary for indemnification of third parties and for supporting the continuation plan fall into two basic categories according to the way these resources are structured: retention or tranfer.

In the first case, the process (e.g., the formation of a captive insurance company) is purely internal, and in the second case, a third party (e.g., an insurance company) is involved.

Retention can be mandatory for the portions of the risks that cannot be transferred to a third party; in most cases, they are simply forgotten and many aspects of the computer risks alluded to earlier, fall into this category.

Retention can also be a deliberate choice every time the cost of the retention apppears to be lower than the cost of an equivalent transfer.

This can be determined from the "Cost of Risk" which is the sum of the expenses related to :

- the cost of the retention measures
- the cost of the transfer measures
- the cost of the reduction measures
- the cost of the administration of the Risk Management program.

In order to achieve economical treatment, reduction measures have to be taken to reduce the total "Cost of Risk" by reducing the cost of the transfer or the cost of the retention.

For risks associated with work accident, the cost of the various prevention measures should be balanced or bettered by the lower cost of all the uninsured consequences of an accident (retention) and by a lower insurance premium (transfer).

For an "Unacceptable" fire risk, installing a sprinkler system in an industrial bdg would be considered a reduction measure. In this respect the cost involved shall be balanced by the cost of the interruption of the activity in this building. The installation of such a system might also reduce the insurance premium as well as all the non insured consequences of a large fire.

If, instead of installing such a system, the heat load in the building is reduced by removing most of the combustible materials, the risk can be brought to an "Acceptable" level.

The Risk Manager will weigh the pros and cons of the two approaches and will recommend the solution which gives the lowest "Cost of Risk" and as a result, an improved economical balance.

## The Contingency Plan

More and more organizations are concerning themselves with contingency (or emergency) plans. Such a plan can address two types of situations:

- A loss suddenly becomes more probable (e.g., due to a bomb threat)
- The loss has already occurred.

In the latter case, although such a plan is intended to reduce the consequences of a loss, a contingency plan is not in itself a component of the "Risk Reduction Policy" that could be applied at the end of the Risk Management process.

The contingency or continuation plan is directly derived from the risk evaluation.

In order to evaluate a risk, a scenario must be developed from which a plan can be drawn to enable the organization to continue its operations after the shortest possible interruption.

An organization must be able to "Manage the Loss" and to usefully spend the money provided by the financing instruments.

This "Loss Management" is the continuation plan. While reduction measures can be selected according to "Acceptability" or "Economy" considerations, the continuation plan is a "Must" and cannot be escaped.

Unfortunately, it is because such a plan too often is not established and put into practice, that, for example, 80% of the organizations that suffer a large computer loss will disappear within the next three years.

The attached diagram illustrates the complete Risk Management process.

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