

An insurance approach to comprehensive crisis management for business continuity

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Abstract:

The limited scope of insurance industry to cover various business interruption losses necessitates a reexamination of risk management techniques in this regard. Business interruption literature have used different approaches to minimize the relevant losses. However the subject has not been dealt with a comprehensive view.

In this article, the definition of crisis, as a situational variable, has been extended to encompass “any” situation in businesses. Furthermore, our analytic definition of crisis considers it as an increasing function of three independent variables, i.e.: severity of risk, lack of decision makers’ information and lack of time to make an appropriate decision. This comprehensive and analytic definition directs us to deal with different critical situations in the business through appropriate measures in the context of three abovementioned independent variables.

In order to formulate the appropriate measures business crisis

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up with a strategic suggestion to organize the business interruption risk management services market to deal with losses resulting from lower than optimum levels of production comprehensively and efficiently:

-on the supply side the services could be coordinated at the macro level of the market by business interruption experts and officials of insurance industry, and

-on the demand side of the market implementation of business crisis management process should be encouraged at micro level through the support of policy makers of different sectors of the economy as well as by insurers' lower business interruption rates.

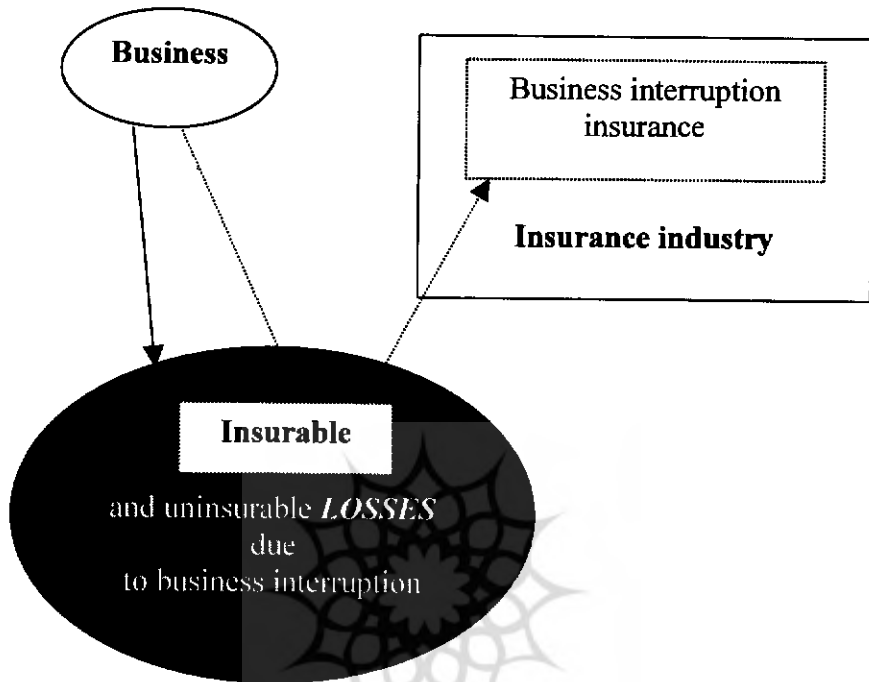
Keywords:

Crisis, business interruption insurance, business continuity services, crisis management process, business interruption risks market.

Introduction:

Business interruption (B.I.) and delays in starting the operation of new projects imposes heavy losses on world economy and in particular on developing economies such as that of Iran. Insurers offering business interruption insurance may only cover a small part of B.I. insurable losses. Therefore, a large part of abovementioned losses, as well as all of the uninsurable losses due to BI are left uncovered (Fig.1: overview). This very limited scope of BI risk transfer and loss coverage obliges us to consider other approaches and directions of risk management such as prevention and protection in this article. However, we would not suffice at this stage and would aim to present a comprehensive approach by extending crisis management techniques.

Figure 1. Overview



In business interruption literature different notions express various aspects of a single but comprehensive concept i.e. different ways and means of achieving the least possible BI. Although, it is emphasized that an holistic approach is essential for the successful implementation of business continuity programs; use of notions such as “management services for business availability” , “ business continuity management”, “disaster recovery” and “crisis management” show that there is, to some extent, a lack of comprehensive and holistic approach in this regard.

In this article, a model of crisis management in foreign policy which has been proposed to study the behavior of decision makers in international relations is adapted to propose a comprehensive definition for integration of different notions of maintaining business continuity into a single concept that we shall refer to as Business Crisis Management (BCM). In order to achieve such an integrated

notion "crisis" in this article is considered to be any situation ranging from the worst possible incident up to the normal and routine conditions in the business.

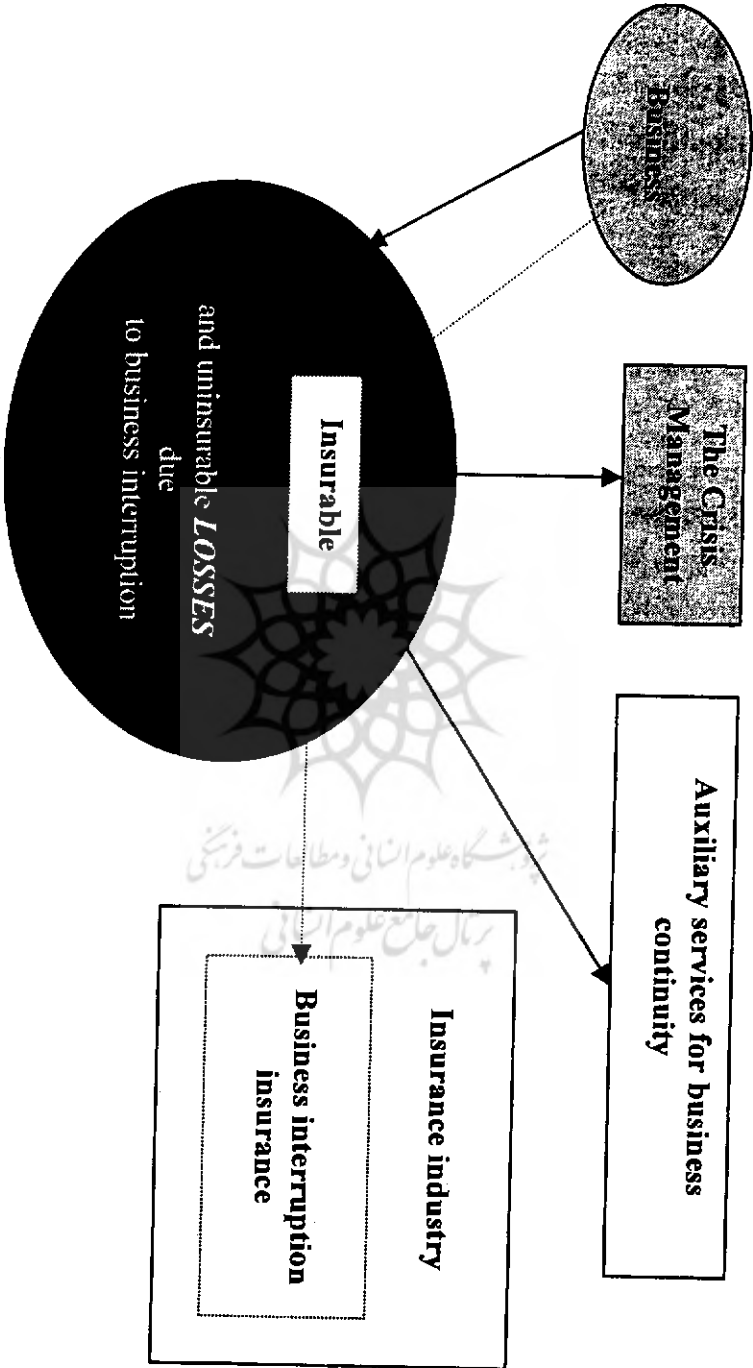
Using such an extended definition, the process of BCM, is briefly reviewed. At the end, it is concluded that considering the proposed definition and approach, implementation of BCM process would aim at business continuity in all conditions, as a result reducing BI insurable losses and any uninsurable losses relating to aspects such as reputation, brand image and market share.

1. The concept of Crisis

The concept of crisis may be considered in relation with various other concepts, for example concepts such as BI, business continuity with a low percentage of production capacity, etc. BI is an extreme situation, where the insurer has to fulfill his commitments according to the policy, i.e. pay the relevant loss. Therefore, mere prevention of BI seems to be an elementary stage of activities in this field.

However, if additional services are extended – not only to prevent BI but also – to maintain business continuity and operations in optimum production capacity in different situations, there would be more value added and more income. The latter approach to the concept of crisis seems to be rather an advanced stage in this regard. The notion of crisis usually represents extreme cases and is compatible with BI. Therefore, the question is how we could consider and define "crisis" so that it would be compatible with the notion of business continuity at different production levels. (Figure 2: Crisis management in business continuity context)

Fig. 1: Crisis Management in Business Continuity Context



2.a) A literature Review of Concept of Crisis

Different characteristics and definitions for crisis have been mentioned; some of them according to one study (Wiener and Kahn, pp.20-21) are as follows:

1. Crisis is a situation in which the necessity to make decision and act on behalf of planners and executive is high.
2. Crisis is a real threat to the aims and goals of the relevant executive.
3. Crisis has important consequences that shape the future relationship of relevant parties.
4. Crisis is a result of a sequence of events, the combination of which creates new conditions.
5. Crisis is a length of, and a phase in, time in which the uncertainty about foreseeable situations increases.
6. Crisis is a period in time or a situation in which the control or influence on the events is reduced.
7. Crisis creates an emergency situation in which the anxiety and the apprehension of the decision makers rise.
8. The necessary information and knowledge of decision – makers is usually insufficient and incomplete in critical situations.
9. In critical situations, time is against the executive.
10. The relationship between different parties changes during crisis.
11. In critical situations, the conflict or resistance between different parties rise.
12. Crisis is usually a turning point in a sequence of events and operations.

According to another study (Miller and Iscoe, pp.195-201) some other characteristics have been mentioned. Two of them are as follows:

13. Crisis is often an emergency or even instantaneous situation and normally is not chronic, although the shortage of time is not definite.
14. The perception and the understanding of Crisis is relative, while one party considers an incident a crisis, other parties may not distinguish it as Crisis.

From one aspect, the abovementioned definitions and / or characteristics emphasize on three elements in crisis:

- The **stimulus**: The event or sequence of events, which triggers or creates the crisis,
- The **perception** of decision – makers about the situation created by the stimulus, and
- The **response** of decision – makers in the new circumstances.

From another aspect, three consequences of crisis may be distinguished in the abovementioned definitions (Hermann C.F., 1972):

- The vitally important goals of the decision – makers are threatened.
- The length of time to make an appropriate decision becomes limited.
- The sudden and unexpected outbreak of crisis surprises the relevant decision makers.

2.b) Definition of Crisis

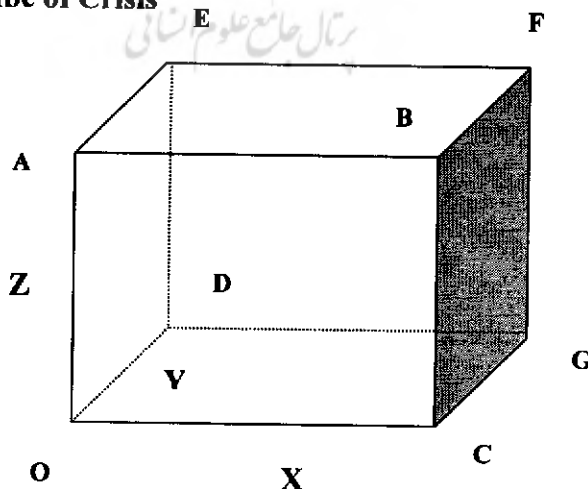
The abovementioned consequences and a model of crisis management in foreign policy (Hermann, C.F., 1972) is adapted to propose a comprehensive definition of crisis. As a result, “ crisis ” is considered to be a situational variable that is dependent on three other independent variables:

X- **Severity of risk**,

Y- **Unawareness** of decision makers regarding the relevant risk,

Z – **Shortage of time** to make an appropriate decision.

Fig.3: The Cube of Crisis



The abovementioned three independent variables may be considered as different axes of a cube as shown in figure3. Point **O** represents the worst situation and point **F** is a routinised situation. The reason for such representations is because it is assumed that:

- On the **X** axis **O** represents the most severe risk and moving towards **C** less severe risks are shown,
- On **Y** axis the least knowledge about the relevant risk is considered to be on point **O**,
- On **Z** axis the least amount of time for decision making is assumed to be on point **O**.

Therefore, the situational variable of crisis, in this article, is any situation in the business, i.e. any point in the space or on the surface of the cube of crisis and a variable which can assume quantities ranging from **O** (the worst possible incident) up to **F** (the optimum production level in the business).

In other words, the situational variable of crisis, i.e. "**C**" is a function of three above mentioned independent variables of **X**, **Y** and **Z**. Here, **C** would be a decreasing function of higher values of:

- X** indicating less severity of risk,
- Y** indicating more information for decision makers in different new situations, and
- **Z** indicating more time to make necessary decisions in upcoming situations. Our definition of crisis allows us to treat it rationally as almost routine situations only differing in three dimensions of the cube of crisis.

3. Business Crisis Management Process

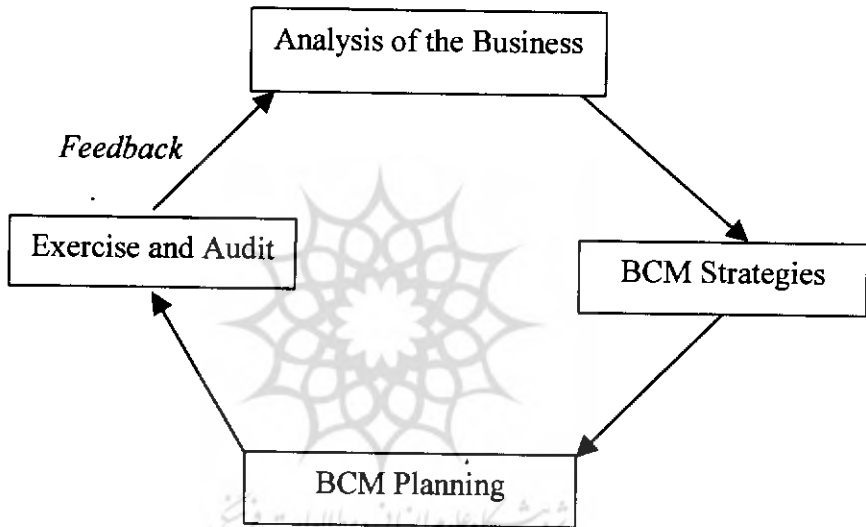
Our analytic approach prepares an appropriate ground in dealing with critical situations and directs us to consider their position with respect to the dimensions of the cube of crisis for BCM process, i.e.

- For situations of severe risk the appropriate direction would be the use of related risk management techniques such as risk reduction whether by prevention or protection,
- For situations we are unaware of, the emphasis of decision makers should rely on a strategy to raise the knowledge of the organization about that situation and the relevant risk, and

- For situations we are in a shortage of time to make a decision and take action, operational programs should be planned in a framework of fast mobilization of resources.

Considering the above – mentioned definition of crisis, BCM here is a comprehensive, systematic and an on going process. An overview of BCM process is shown in figure 4.

Fig.4: BCM Process



3.a) Analysis of the Business

The first step in BCM process is understanding the business. It is necessary to carry out a business impact analysis and risk assessment. Various methods of risk assessment have been presented in the literature. An article by Henry Kalt (2003) here is referred to and its results are integrated in the risk dimension of our cube of crisis. (the X axis in Fig.3)

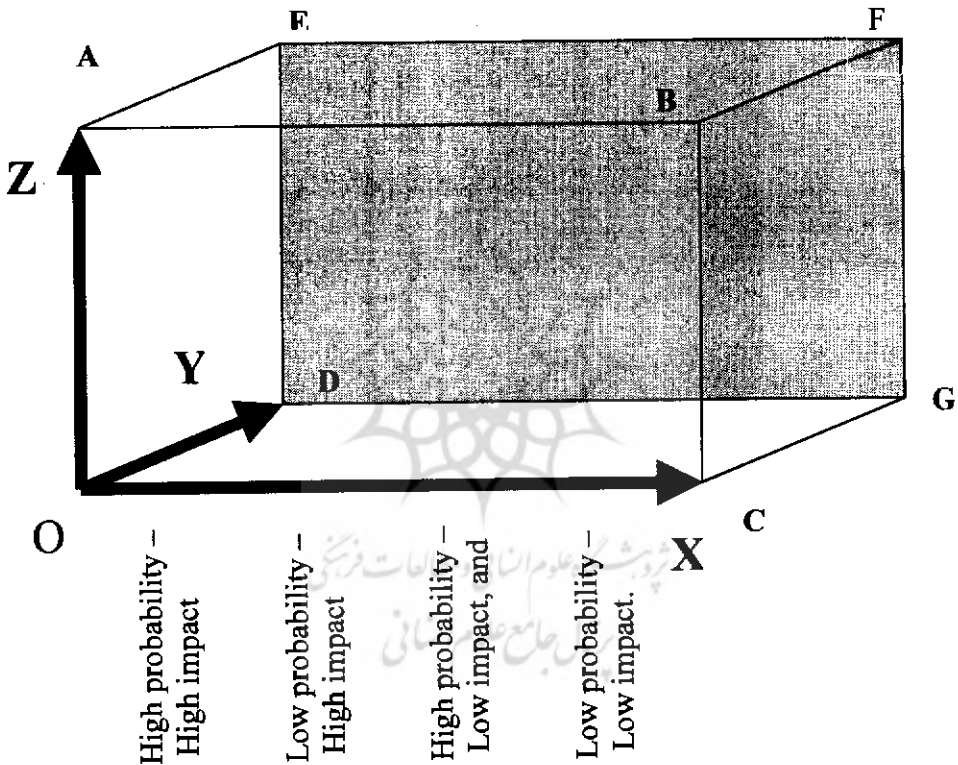
According to this reference all operational as well as competitive and financial risks could be evaluated by considering two key variables, i.e. impact and probability. As a result, all the abovementioned risks may be categorized into four groups:

1. High probability – High impact,
2. Low probability – High impact,

3. High probability – Low impact, and
4. Low probability – Low impact

These four groups of risks can be assumed to be on the X axis of the cube of crisis, starting from O and ending in C. (Figure 5: Analysis of the business)

Fig.5:Analysis of the Business



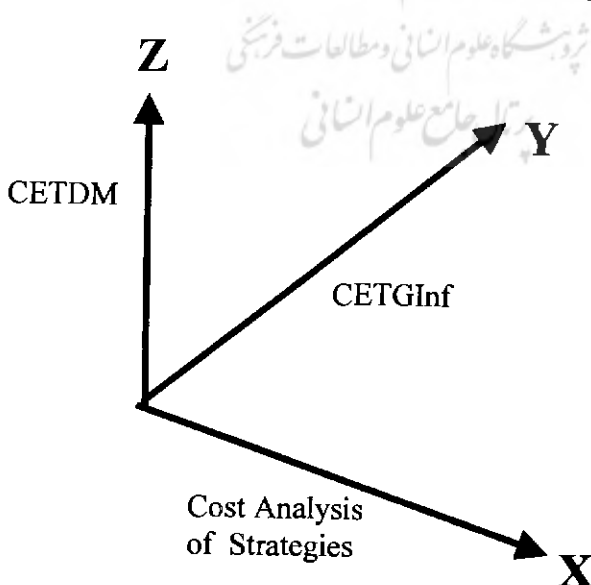
3. b) Business Crisis Management Strategies

The second stage in BCM process is selecting the BCM strategies. These strategies may not contradict the overall corporate strategy. The BCM strategies should be based on the critical resources determined during the first stage of BCM process, i.e. analysis of the business. In fact, selecting the appropriate BCM strategy is the fundamental step in BCM process.

The appropriate strategy depends on the nature of the business and its critical functions, i.e. functions that the business has to perform in order to stay in business. However, there are quantitative approaches to analyze and choose from suitable strategies. Two techniques, namely numerical analysis and cost analysis have been elaborated by G.H. wold (2003) that can be used in most businesses. In particular, the results of cost analysis of different strategies could be compared with the monetary values of business impact analysis in section 3.a. on the X axis of the cube of crisis for a rather straight forward decision making. (Fig. 6: Business crisis management strategies)

Furthermore, apart from the cost of estimated recovery time in wold's strategic cost analysis, we could consider a cost for the estimated time for decision making (CETDM) on the Z axis of the cube of crisis (fig.6). The latter cost is particularly important in unprecedented situations and / or in developing countries where BCM has not normally been implemented. Obviously, the cost of estimated time spent on gathering information (CETGInf) about the relevant event, where we have not a BCM in place, would escalate on Y axis of the cube of crisis.(Fig.6)

Fig.6: Cost Analysis of Business Crisis Management Strategies



3. c) Business Crisis Management Planning

Based on the selected BCM strategy BCM planning can be carried out. There are two main objectives at this stage (J. Barnes, 2004):

1. Protection of the organization's ability to produce through strategies and plans and programmes that will withstand destructive events and / or unprecedented situations.

2. Coordinate the creation of procedures and supporting documentation that will allow the organization to recover in time to prevent financial collapse.

Resources in any planning process have a vital role. Therefore, each and every element of resources i.e. staff, IT, Data, telecommunications, facilities, power, equipment and supplies should be clearly accounted for in an appropriate time schedule. An effective BCM planning should take into consideration at least the following: (J. Myers, 2003)

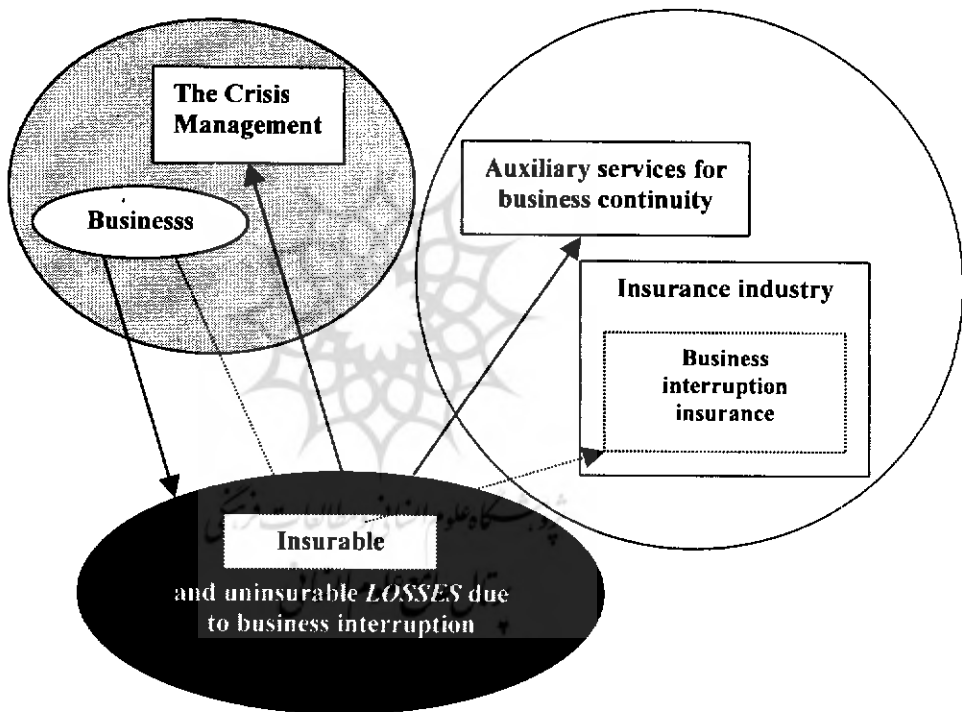
1. The safety of company employees and their ability to perform the relevant duties.
2. Backing up existing data and information in alignment with business critical functions.
3. Successfully returning key company data and information to its original state.
4. Completing recovery work within the specified time schedule.
5. Preparing for the performance of scheduled plan testing to validate it.
6. Defining and practicing ongoing BCM training and education for new and existing employees.

Having reviewed abovementioned points, there is one strategically important point left, that can not be overemphasized, i.e. we should aim at business crisis avoidance, mitigation and being prepared for it in our management planning and not focus merely on recovery from unprecedented or extraordinary disasters. That is because we considered crises as (the continuation of) any situation, which might prevent the optimum performance of the organization.

The abovementioned aim requires not only specialized divisions of risk management or crisis management; as it has been defined in

this article; within the businesses, but considering an environmental analysis of these businesses also we need a coordination and reorganization of existing auxiliary services in the market as well as paving the ground for supply of new specialized services for business continuity at optimum production level and prompt start of the operation of economic projects. (Fig. 7: Suggestions)

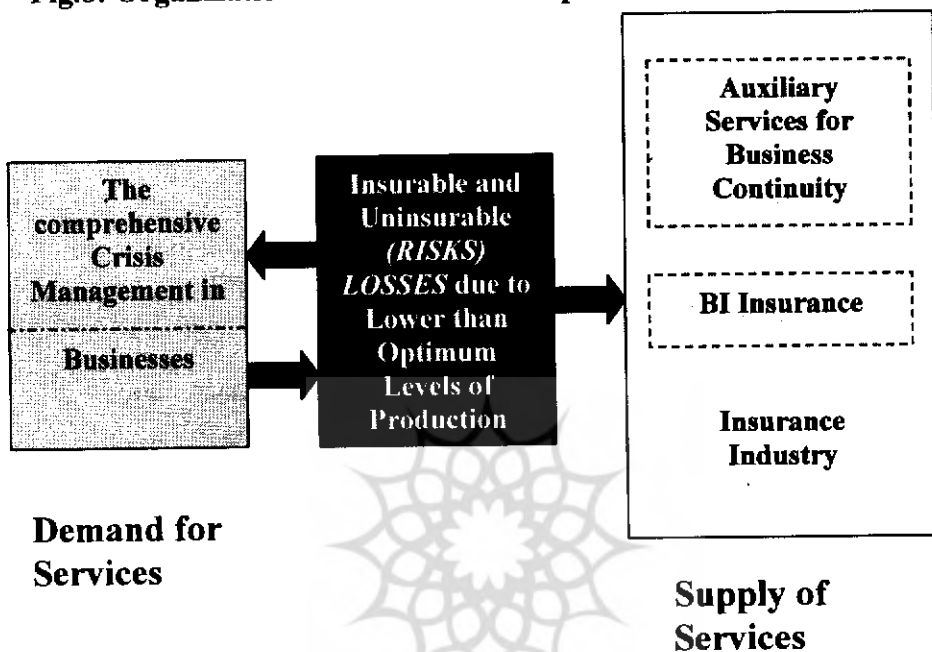
Fig. 7: Suggestions



Such a coordination could best be formulated and practiced at macro level of the market by insurance industry B.I. experts and officials on the supply side of these services. On the demand side of the market for these services the implementation of business crisis management process at micro level of the businesses should be encouraged through the support of policy makers of different sectors of economy and also by insurers' lower B.I. rates for businesses

having implemented crisis management process. (Fig.8: Organization of BI risks market)

Fig.8: Organization of Business Interruption risks market



3. d) Business Crisis Management Exercise and Audit

Auditing function can be considered as an independent appraisal activity to review operations in the organization by evaluating the adequacy of controls and the efficiency and effectiveness of performance. Obviously, the report of such an appraisal would furnish all managers of the organization with valuable information they need to discharge their main responsibilities. Therefore, any point in the auditor's report may well attract the attention of the executive as a whole. Furthermore, increasing organizational complexity and the integration of technology into business processes has considerably increased the importance of auditing during the recent decades.

We may have other considerations that emphasizes on the importance of internal auditing with respect to BCM:

- In normal conditions, usually, it is not easy to justify for additional expenses to prepare for events which are not known when would happen. Auditor's report can be very effective in this regard.

- In large organizations there are few people who have a general view of the organization and understand trans – departmental processes. Auditor's report can illustrate such a view.

- It is the auditor's report, specially after the exercises of BCM, that presents a proof that validates BCM strategies and plans and it is the same report that presents a documented feedback for revision of analysis in the next cycle of BCM process.

4. Conclusion

In this article an analytic definition of the concept of crisis was presented compared with the empirical approaches to the notion of crisis that could be viewed in the existing business interruption literature. Based on such a definition a comprehensive crisis management process was presented to integrate various notions expressing different aspects of achieving the least possible business interruption.

Our analytic approach showed immediately its positive results in the management process, in particular in the analysis of the business; selection of appropriate strategies according to their cost analysis and planning process. To mention only one of these results, "Fig.8: Organization of B.I. risks market" may be viewed for the position of the supply and demand for services to deal with the risks resulting in lower than optimum levels of production.

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