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ABSTRACT

Organizations and societies of this century encounter with significant level of increasing threats due to the complexities resulting from integration of industries and cultures and momentary changes. Wherever that there is a name of threat, the defense category, whether it is a kind of operating defense or a kind of passive one, is given to the human mind. Defense in its own form is effective in preventing the actualization of threats in the first place, and then is effective in reducing the level of disasters (crisis management) after actualization. Therefore, passive defense and crisis management are two related issues that must necessarily be considered in the form of a new model and pattern in strategic planning of organizations. In this research, a hybrid model has been designed and presented for this purpose that it has described the integration of these two issues with consideration of the issue of change management with an analytical-descriptive method. The presented model has been developed in 8 levels (District) consists of 4 main District and 4 sub-District, 4 dimensions and 1 direction. Each District has its own unique qualitative and strategic features and requires management methods and organizational and cultural measures related to the specific circumstances placed in it. It is identified by examining all Districts that District 3 has an acceptable level of infrastructure reliability due to the intrinsic coherence and coordination with the constant changes in the perimeter and interior environment and keeping preparedness against existing threats and the likelihood of crisis growth has been reduced in it.

KEYWORDS: Passive Defense, Crisis, Change, Threat

1. INTRODUCTION

Passive defense is a set of non-armed actions that causes to increase deterrence, reduce vulnerability, sustain vital activities, promote national sustainability, and facilitate crisis management against enemy military threats and measures. There is a crucial relationship between passive defense and crisis management in the mentioned definition; here, the passive defense has been named as a factor in order to facilitate crisis management, but not in any crisis, but in threats-related crises. Threat is the serious danger of human being to phenomena; on the other hand, threats are often or permanently located at the site of the vulnerability (Jalali, 2010). Infrastructures as the main determinants of the survival of urbanization in today's world (Dadashpour and Jalali, 2012) are being harmed in so low level at a time when threats are occurring (Hakim Panah, 2009); hence defense of them and risk assessment of vulnerability of critical arteries and observing non-passive defense principles are only a guarantee of their salvation against threats (Soltani *et al.*, 2016). The threat, in the case of actualization, the lack of attention to infrastructures strength, the lack of knowledge of the type of threat or lack of preparedness to deal with it, is prone to become a crisis.

Crisis has been defined as an incident that causes confusion and astonishment of individuals, has deprived them of the power of effective and logical response and endangers the meeting their objectives (Ahmadi, 2012), and basic and great measures are needed in order to meet and solve that need (Puri, 2004). There are several models for managing (or controlling) the crisis, that its most notably is the 5-step Thierry and Mitraf Model (1978): identifying, preparing, controlling, improving, learning. The element of knowledge (consciousness) in integrating with the element of leadership along with the element of preparedness and preparing as the most important elements and the weakness of the crisis management's function was identified in a case study of research in a study that was conducted by the author (2014). The less awareness and preparedness to deal with the threat (in its general sense, which includes natural, industrial, human made, etc. threats) is less likely to increase the crisis.

All organizations work together to provide a systematic and accurate hierarchy of planning and management to cope with crisis and mitigate its negative effects by identifying priorities, integrating communication systems, coordinating information and decisions, in the management of crisis and passive defense.(Movahedinia, 2006). Therefore, crisis management and passive defense, not as two separate issues with a separate structure and organization, but as a whole, should be combined with each other and their effective elements on each other should be analyzed at the same time.

One of the main strategies for integrating passive defense and crisis management is to manage change. Organizations are pressured from both internal and external dimensions to make changes, and the tools for coordinating pressure and change are strategy formulation. Different approaches that are in the body of the organization to change are included in four general modalities that depend on the style and direction of change: Inductive approach, mediation approach, conservative approach and aggressive approach (Rezaian, 2015).

The main objective of this research is to provide a model for integrating the principles and principles of passive defense and crisis management with consideration for change management. In other words, creating a step-by-step process by considering the elements of each of these key components seems vital due to the inherent nature of crisis management and passive defense that are essential and necessary for each other and in many events play the role of cause and effect. Researchers notice to three basic factors in providing each model or pattern: direction, dimension, and level:

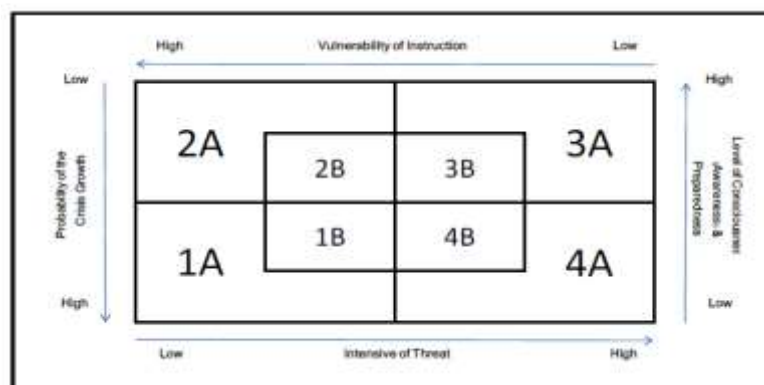
- ✓ the meaning of level , it is the underlying District that the structure of the model is explained in it;
- ✓ Dimension is measurable quantity or distinguishable;
- ✓ The role of direction is to determine the path and the point of beginning and end.

2. MATERIALS AND METHODS

The above introductory explanations, which at the same time provide a brief explanation of the problem and literature of research, are the pre context and background for entering the main discussion and the hybrid model presented in this study. The dimensions or elements mentioned in the model presented in this study are:

- The nature of the threat, that is introduced regardless of its type (biological, military, cyber, etc.), with the severity component of the threat (both potential and actual);
- The degree of vulnerability of infrastructure as a variable depends on various independent variables (or possibly interfering) including human, engineering, defense, communication factors, etc.;
- Level of consciousness (awareness) and preparedness of the type of primary threat and its subsequent crisis.
- The talent or probability of crises growth is measurable with three main variables: "Threat rate, degree of awareness and surprisal level" (Bashiri *et al.*, 2013). The greater the threat or the severity of the crisis, the less awareness and the greater surprise in dealing with the crisis, the probability of the crises will grow.

The model that is presented in this paper with this description is as follows:



Analytical model of crisis management and passive defense

Accurately, in the above model, 8 levels or District are identified that four primary District are main (A) and four secondary District are sub District (B) - as moderated District can be distinguished after creating the change management in the organization. The study and examination of the behavior of each District will be conducted in the following.

District 1

In District 1A, the organization (city, region, or country) had been in a low level of threats in a stable environment conditions and has a slight adaptation tendency to small external and internal environmental changes. This District is potentially less aware of the surrounding environment and relies on internal resources and reluctance outside the organization because of the low level of threats; for this reason, the level of preparedness against threats is low.

If the critical infrastructure is available in this District, it is very vulnerable and hence, if there is a chain of incidents and their lack of control, the talent or the probability of crisis growth is high. Most of the ongoing threats in this District are generally of a serious type of threats, and emerging crises have the potential to turn into human disasters.

The high tendency of this District id to stay stable and reluctant to create organizational transformation will lead to the institutionalization of a stable organizational culture by formulating short-term objectives and intra-axis strategies. Risk taking of management is low in this District, controls are intense, and organizational level is increasing and pyramid. It can be expected that in the case of applying transformational policies and changing in management style, the probability of the growth of the crisis can be reduced by raising the level of awareness and preparedness by carrying out risk assessments based on the facts and strengthening the infrastructures, although the level of threats (especially soft threats) grows a bit in the same amount in the face of created organizational changes,. District 1B is considered as a moderated mode of District 1A after applying such policies.

District 2

In District 2A, like in District 1A, the organization is in steady environmental conditions with low threat levels, but it tends to be more consistent with external and internal environmental changes. In this District, despite the low level of threats, the level of awareness is higher than the surrounding environment, and relying is on internal resources and the tendency for external resources of the organization due to the organization's tendency to be aligned with environmental changes; therefore, the level of preparedness against threats is high.

Vital Infrastructures and arteries in this District are vulnerable due to structural and infrastructure weaknesses. However, in the event of a pseudo-accidental chain and the growth of incidents, the talent or the probability of crisis growth is low due to control measures and high level of preparedness. Most of the ongoing threats in this District are generally of soft threats and the emerging crises have the ability to control.

This District tends to create organizational change at a limited level, organizational culture is a kind of mission, objectives are middle term and strategies are outsourcing. The risk taking of management in this District is moderate and controls are relatively high.

Organizational resources in this District should necessarily be spent on the promotion and durability of infrastructures against threats. District 1B, as a moderated state of the 1A District , is formed after focusing on directing resources to strengthen physical infrastructures, which sometimes leads to neglect of human resources and reduce the level of preparedness and awareness of manpower and increase the level of soft threats.

District 3

In District 3A, the organization is highly variable in environments with high levels of threats and tends to adapt to very high environmental changes. In this district, the severity of the threats is high and awareness of the surrounding environment is high due to extensive interaction with the establishment of communication platforms; hence, there is inclination and reliance on resources outside and inside the organization, and thus the level of preparedness against the threats is high.

The vital arteries in this district have a low level of vulnerability, and therefore incidents are not likely to grow and the talent or the probability of crisis growth is low. Most of the ongoing threats in this district are generally of a kind of soft and special threats (biological, terrorist, sabotage) and the emerging crises can be controlled in a short period of time.

The tendency of this district to adapt to changes and responses at the time of creating continuous environmental changes leads to the institutionalization of participatory organizational culture, long-term perspectives, missions and objectives, and the development and creation of multiple inter-organizational groups is noticed in developing strategies. Risk taking of management in this district is high, controls are low and organizational level is spreading horizontally.

The high degree of organization's tendency to reduce the level of soft threats in the district may cause a lack of focus on hard-core threats, and this matter plays an important role in vulnerability of infrastructures. District 3B as a moderated state of the 3A district represents the ideal level of organization's exposure to high levels of threats, but at the same time, infrastructures strength, high level of preparedness, and low probability of crisis growth.

District 4

In district 4A, as in district 3A, the organization had been in a changing environmental conditions with high threat levels, but it has stayed in its nozzle level and the body of organization becomes vulnerable against threats due to the lack of power and ability of the organization to adapt to external and internal environmental changes while high focusing on strengthening the infrastructures, the level of awareness and preparedness of the organization's set.

Despite the being strong the infrastructures and critical arteries in this district, the number of accidents results in increased human and property damages and the probability of a crises growth goes up because of the lack of preparedness of the organization's resources to deal with emergencies, in case of lack of attention to the frequency and number of pseudo events. Major threats that could be posed in this district are generally of a particularly serious and hard type. The crises that threaten these threats can hardly be restrained, and post-crisis reconstruction is very time-consuming.

This district has a slight tendency to create organizational change and responds quickly to changes, organizational culture is adaptive and management style is responsive. Completed objectives are often short-term with a focus on quick results and strategies focused on organizational outsourcing, ongoing changes in key posts, and minimization.

District 4B, as a moderated state of the 4A district, has a strong tendency toward the exit from the variable external environment and reaching to stable conditions. The main focus should be on the principles of leadership and participatory management, and the main objective is to eliminate organizational forces from uncertainty and enhance organizational satisfaction. Strengthening the infrastructures can reduce the severity of threats, but the nature of threats can be changed, which this matter leads to more complex organizational environment.

3. CONCLUSION

The need to develop a hybrid model focused on the management of change in organization (community, city or country) was identified and introduced. In order to integrate threatening and crisis-related activities in the form of passive defense and crisis management. The model presented with consideration of 8 levels, 4 dimensions and 1 direction in the four main districts (A) and four subordinate moderated districts (B) was identified and discussed the characteristics of each of the districts. In all of the districts, district 3A and its modified districts, after applying change management (3B), are based on the realities of current organizations operating in dynamic environments with continuous and extensive changes, that are subject to severe threats and forces the organization to be dynamics, organizational learning, flourishing, focusing on human resources, risk assessment, development of a participatory system and the formulation of strategic objectives with ambitious perspectives. The risk of change management in such a district of the presented model adds somewhat to the vulnerability of the infrastructures (in the face of severe threats), but at the same time, reduces the probability of growing actual crises to a very low level by adding to the organization's preparedness and awareness.



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