

Analysis on emergency management of significant security problems from the perspective of limited rational decision-making

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Abstract Limited rational decision-making plays an important role in emergency management of significant safety problems. According to the theory of limited rational decision making, the decision plan of emergency managers is adjusted from optimal to satisfactory, which makes it possible to start the activities quickly. It also enables the bystander to judge the mistakes and shortcomings of emergency management activities more impartially.

Key words: Limited rational decision-making; Significant security problems; Emergency management

1 Introduction

Limited rationality theory holds that the ability of people to process information is limited. Although people always try to act according to rational, because rationale itself is limited. people have no ability to consider all the choices at the same time, so it can not always maximize the efficiency in the decision-making, and finally can only act within the limited rationality. In the emergency management of significant security problems, the limited rational decision plays an important role. It is the intervention of limited rationality, which makes the emergency management decision-maker act in the first time, and with the help of a more compact emergency management organization procedure, "satisfactory" decision is made according to the situation timely.

2 Definition of emergency management for significant security problems

2.1 Definition of significant security problems

The definition of significant security issues mainly involves two aspects: first, the connotation of the concept. In general, the opposite of safety is accident and risk. Among them, "accident" is an event that hinders people from achieving their goals. "Risk" refers to the overall description of potential danger, threat and other states before the accident. Therefore, the study of major safety problems should focus on risk and accident. The second is the extension of the concept. Through the untiring efforts of the predecessors, the significant security research has gradually extended to ideological security, personnel security, security facilities, equipment, security, information security, network security, and many other fields. People have a deeper understanding of significant safety issues. To sum up, the significant safety problems here refer to the hidden security risks and accidents that occur in certain social fields and can have an important impact on the development of national and social construction. The research scope of major security problems is the safety

problems with certain influence in the field of social activities. The research content is risk and accident cases, and the main categories include personnel safety, equipment safety, information security, ideology security, etc.

2.2 Emergency management in the significant security problems

The concept of emergency management often overlaps with the concepts of risk management and crisis management. According to the definition of domestic and foreign scholars, the object of risk management is risk. Risk includes two factors, namely the probability of the occurrence of risk and the possible impact of risk and the number and manner of its impact. Emergency management is for emergencies. Incident that occurred suddenly, cause or may cause serious social harm, need to take emergency measures to deal with natural disasters, accidents disasters, public health and social security events. The object of crisis management is crisis. A crisis is an extreme emergency, or an especially significant emergency. According to this, the management stage of major security issues can be divided into as shown in figure 1:

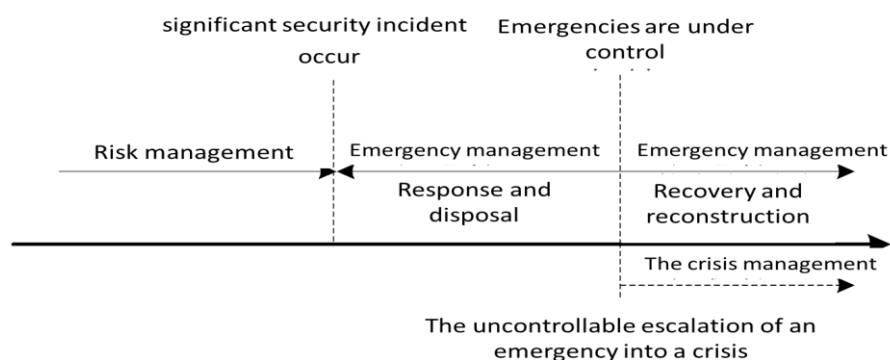


Figure1 The role of emergency management in management of significant safety issues

Shown in figure 1, significant security problems on the evolution process of management development, managers mainly deal with risk management in front of the significant security incidents occurred, focuses on the possible safety hazard identification, assessment and response; After the failure of risk response and major security emergencies, it will enter the emergency management stage. It mainly carries out disaster response, disposal and post-disaster recovery and reconstruction. If significant security emergencies are not effectively controlled, the crisis management process should be launched timely to deal with the emergencies that have been upgraded. Therefore, this article revolves around the process of emergency management, mainly focus on the manager's management activities which taken to reduce the loss and to respond effectively after the significant security incidents happened.

3 Emergency management activities for Significant security issues from the perspective of limited rational decision-making

3.1 Realistic challenges faced by emergency management in Significant security problems

3.1.1 Emergencies of events

The emergence of emergencies is unpredictable. In the early stage of safety management, people can predict and prevent certain security risks by identifying and assessing risks. However, when, where and in what state security incidents occur within a certain period of time is still a difficult problem we must face. The suddenness of the event may lead to the failure of the proposed plan, organization and plan. The disposition of events will depend more on the individual's character, experience and ability. Rapid reaction and action will be the key point for people to judge the effectiveness of event management

3.1.2 The development of the object

If the emergencies are effectively controlled, the emergency management will enter the post-disaster recovery and reconstruction stage, and the emergency management will be transferred from the unconventional management state to the conventional management state. Once the emergency is not effectively controlled, it will quickly escalate into crisis. Accordingly, emergency management itself must be quickly adjusted to crisis management. At this time, the mitigation and response to the crisis will become the top priority. The development of the object determines that the emergency management must always pay attention to two points: first, whether the response measures have real effects; Second, has the emergency escalated into a major crisis? Once it is confirmed that the incident is out of control, the crisis management procedure should be launched quickly to deal with it.

3.1.3 Interaction of influence

With the occurrence of major security problems, the increment of event information is almost proportional to the time. A variety of channels, true and false difficult to distinguish information will quickly spread to all corners of the society. Any individual comment can be a "order parameter" that disrupts normal communication. The interaction of influence makes it impossible for decision makers to choose the best among the relatively favorable environment. Its decision-making should be restricted by both the process of event disposal and external factors such as the masses, public opinion and superiors. The decision must be systematic and transparent.

3.2 Emergency management process from the perspective of limited rational decision

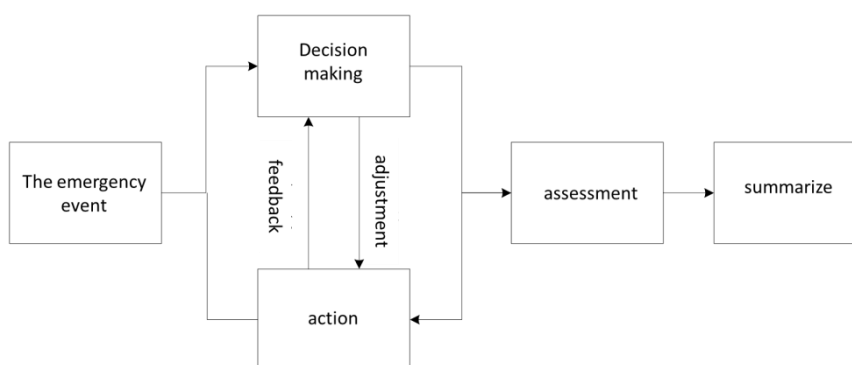


Figure2 emergency management process for significant security problems

From the perspective of limited rationality, the emergency management process of significant security issues changes, and the re-implementation, reduction and three-dimensional will become its obvious sign.

re-implementation, which is primarily based on satisfaction rather than optimization, ensures that prompt and effective action is possible. Under this premise, with the occurrence of emergencies, managers will more closely combine decision-making and implementation process. Both the decision making and the adjustment, feedback of implementation is carried out in a wider range and faster frequency. Reduce link, mainly is the general process of management activities such as planning, organizing, command, coordination, control, feedback, etc., will be simplified for decision making, implementation, evaluation, feedback, the pursuit of better management efficiency and benefits will be important considerations. Three-dimensional, mainly refers to the normal management of the linear management process will be impacted. The close interaction between decision making and implementation will bring the two into a similar synchronous state. The process of emergency management begins to be non-linear. At the same time, more external factors, such as superior intervention, mass supervision and public opinion report, will have a profound impact on management activities in their respective dimensions, and further promote the objectification of emergency management activities.

3.3 Content selection of emergency management from the perspective of limited rationality decision making

3.3.1 Optimization and satisfaction

In finite rational decision-making, the optimal decision is challenged by satisfying decision. Since people do not have the ability to consider all the choices they face at the same time, it is difficult to ensure maximum efficiency. Significant safety management in the stage of risk management, management activities is essentially a kind of normalized management, such as risk identification, risk assessment, risk response, can according to the time sequence in turn. Therefore, the maximum benefit of management has become the main goal of managers at all levels. In the emergency management, people often don't have enough time to deal with the unexpected events. Rapid action on the basis of limited information has become an important indicator for people to evaluate managers. Managers must get used to seeking the best in the range of satisfaction. Get used to breaking out of routine to take action and make adjustments. You must get used to being questioned and questioned in a noisy environment.

3.3.2 Decision-making and action

In the emergency management of major security issues, the interactive process of "policy-action" is accelerated. The chronological relationship between the two parties is very ambiguous, and the two are in a more equal or balanced state. It is often difficult for decision makers to have enough time for routine responses, such as holding meetings, consulting experts, making plans, optimizing plans, and making centralized decisions. The particularity of the significant security problem and the urgency of emergency management, decision makers should make quick decisions and implemented action based on their own experience for inadequate information. Consider that policymakers themselves are also affected by feelings of sadness, anger, anxiety, fear, helplessness, disappointment and even remorse. This makes the decision result more uncertain, and the possibility of decision error is also increasing. Therefore, the comprehensive quality of individuals put forward higher requirements. This is an obvious characteristic of bounded rational decision-making.

3.3.3 Implementation and adjustment

Action improvement and improvement in the emergency management process should not be expected from the summary and optimization after the event, nor should the organization rely too much on hierarchical

feedback. Policymakers' immediate response, intuition, experience and control of the management process are all facing major tests. The ability of the manager to adjust instantly and dynamically will become an important indicator. Due to the huge influence of significant security events themselves, and often in the same decision environment of public and regulators (and in some cases, the public information even more than policy makers) and time node, make the management process is in a state of relatively open. Management activities have more abnormal characteristics. The impact of external oversight on the management process is increasing. To some extent, the behavior of the management subject depending on the internal organization to control the management activities has been greatly impacted by the external supervision. Control behavior has become the response and interaction of external supervision.

4 Countermeasures and Suggestions for strengthening emergency management of significant security problems in the context of limited rational decision-making

4.1 Strengthen the training of managers

People are the primary and decisive factor in the implementation of management. Emergency management of major safety problems has high requirements on the character and ability of managers. Therefore, relevant training on managers should be strengthened. First of all, we should increase the cultivation of psychological quality. Previous management training rarely involves the impact of emergencies on managers' emotions. In fact, the sadness, anger, anxiety, fear, regret and disappointment caused by the occurrence of major safety problems may affect the on-site decision-making ability of managers. Therefore, we should develop and cultivate the qualities of calmness, fortitude and self-confidence required for emergency managers to make decisions through psychological courses and practical exercises. Second, we should increase the use of modern training methods. Modern training means have been able to achieve close or even higher than the scene simulation. With the help of this form of training, the ability of managers to respond quickly, make on-site decisions, resist pressure and think systematically can be systematically cultivated. Finally, we should strengthen our learning exchanges. In order to strengthen the learning and communication of the theory of limited rational decision-making, we should promote each other to learn from each others and improve their ability of emergency management through on-site investigation, experience exchange and other means.

4.2 strengthen the response to external intervention

Emergency management activities on major security issues involve not only effective response to emergencies, but also effective response to external intervention factors. A certain degree of external intervention can promote the smooth development of emergency management activities, but irrational and excessive external intervention will affect the normal development of emergency management. We should properly respond to external interference. First, we should strengthen the guidance of public opinion. The general public should be aware of the value and rationality of decision-making risks. Guide everyone to the reasonable procedure, the means of legal recognition, to avoid after - hindsight arbitrary comment. Second, the disclosure of information should be strengthened. In the handling of major security issues, the most fundamental reason why some gossip can be spread everywhere is that the channels for people to understand information are not yet open. Timely organizing authority departments to verify and release information will

help emergency management departments to occupy the commanding heights of public opinion and master the leading power of information. Third, strengthen communication with all departments. The emergency management process of major safety problems requires the communication and coordination between managers and many organizations and personnel. A high level of communication can help improve people's trust and reduce external interference.

4.3 emphasis should be placed on the summary of atypical experience

In response to solve the major security problems in the process of emergency management, the practice of some atypical may have played a very important role, these practices because of the relatively trivial, is not common, high promotion value and even illegal and often ignored by people. In the process of promoting the emergency management of major safety problems, we should pay attention to the summary of the aforesaid atypical experience. On the one hand, we should proceed from the characteristics of emergencies, deeply study the background, essence, advantages and disadvantages of atypical practices, and grasp their unique value. On the one hand, should pay attention to the analysis of actual case discussion, especially should attach great importance to the study of some failure case, through repeated analysis of the main problems and the cause of the failure and improvement methods, try to learn from failure, from the summary of the progress.

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