

## Study on Enterprise Crisis Management Based on Lifecycle

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**Abstract.:** In information society, enterprise crises breakout continuously, the super-competitive market situation, the deepening theoretical research on enterprise crisis management and its practice applications, enhanced status and functions of enterprise information management and inherent lifecycle characteristics of crises, promote the emergence and development of crisis management. This thesis probed ECIM based on lifecycle with system analysis (SA). Please keep this in mind when designing your figures and tables etc. Present crisis warning index system of enterprise crisis, inquiry into index sign. Propose crisis warning information system management workflow model based on KD and CBR. Analyze the reason of enterprise crisis early warning and preliminary control out of order, put forward some prevention strategy.

### Introduction

The theory of crisis management of enterprise derived from the practice of activities, and it is a micro obscure aspect of crisis management of enterprise. However, with the formation of the formats of super market competition, the increased frequency of corporate crisis, the impact of expanding the scope, the study of crisis management of enterprise is becoming more and more popular <sup>[1]</sup>. As everyone knows, the enterprise must achieve their own goals in the competition of dynamic market, and that is the fundamental point of enterprise management and reliable guarantee to the continuation of the life cycle of enterprise.

Distress is the first stage of the life cycle of corporate crisis management and corporate preventive measures stage. Information management involves determining the phase information what need to scan the external environment and internal environment, divide the crisis, set the type of crisis level and he establishment of early warning systems, crisis information gathering, develop a crisis management plan and the implementation of pre-control strategy, which build crisis early warning indicators and the index value acquisition and processing, information management crisis early warning, crisis management pre-control information<sup>[2]</sup>, and the information is not fully impact on early warning<sup>[2]</sup>.

### Enterprise crisis and its type research enterprise crisis management

Enterprise crisis and its type research enterprise crisis management. First, define the connotation of crisis and its type. Foreign scholar is different from angles. For example, the definition of Hermann (1972) use a "decision orientation"<sup>[3]</sup>, the definition of crisis is a threat to the decision-making priorities of a situation, decision-making making decisions in reaction time is very limited in this situation, and the situation to the decision-making often unexpected direction: Rosenthal (1989) uses the definition of a "researcher", and he think that a crisis is a serious threat to the basic structure or organization system situation and the basic code of value of decision-making in such situation<sup>[4]</sup>, it is important to over a period of time in the case of extreme uncertainty. Barton (1993) argued that the crisis is a cause of potential negative effects of uncertain events<sup>[5]</sup>, the event and its consequences could organizes its members, assets, products, services and reputation; Banks (1996) argued that the crisis is for the products and the reputation of an enterprise such as a realistic and potential negative

impact of events. Derringer (1997) argue that the crisis is a potential threat to the future profit, growth, and even death of events<sup>[6]</sup>.; Fishman (1999) argued that the crisis is the enterprise of unpredictable events, which threat enterprise value<sup>[7]</sup>; Midriff (2001) argued that the crisis is a real threat or potential threats to the organization of the whole affair<sup>[8]</sup>. In addition, Seeger, Ulmer (1998), Pearson and Clair (1998) are respectively defined or enterprise crisis from different angles. <sup>[9]</sup>

However, with the rise and development of enterprise crisis management research, the definition of Chinese scholars to the crisis is also debated. Su Xiang (1998) think the enterprise crisis is due to a number of aspects of the contradictions in the process of enterprise development that lead to a state of unconventionality [10].; Manuscript and Yuan Xinglin (2003) argued that the crisis is the main part of the business or all serious setbacks or difficulties, causes the enterprise financial crisis or loss of, or make the enterprise financial crisis or loss of the trend of a scene. In addition<sup>[11]</sup>, Liugang (2004), Changtieming and He Zhengchu (2004), Wu Yi qin (2005) also respectively from different angles to studied the connotation of the crisis<sup>[12]</sup>.

Based on the above understanding, this paper argues that the enterprise crisis refers to evolve in a complex environment, then the outbreak of a severe impact on companies and their stakeholders, and in all kinds of resources of inadequate especially in situations of incomplete information to make decisions and solve problems.

## Enterprise crisis early warning information management

### Construction of enterprise crisis early warning index system

Enterprise crisis early warn the information of enterprise management and index system of building from the aspects of departure which is rather than a single function or the crisis early warning, involved in all aspects of business, simple quantitative or qualitative indicators. Such as the relationship between enterprises and stakeholders, organizational issues, they are difficult to select or design the quantitative index and can only use the qualitative index<sup>[13]</sup>.

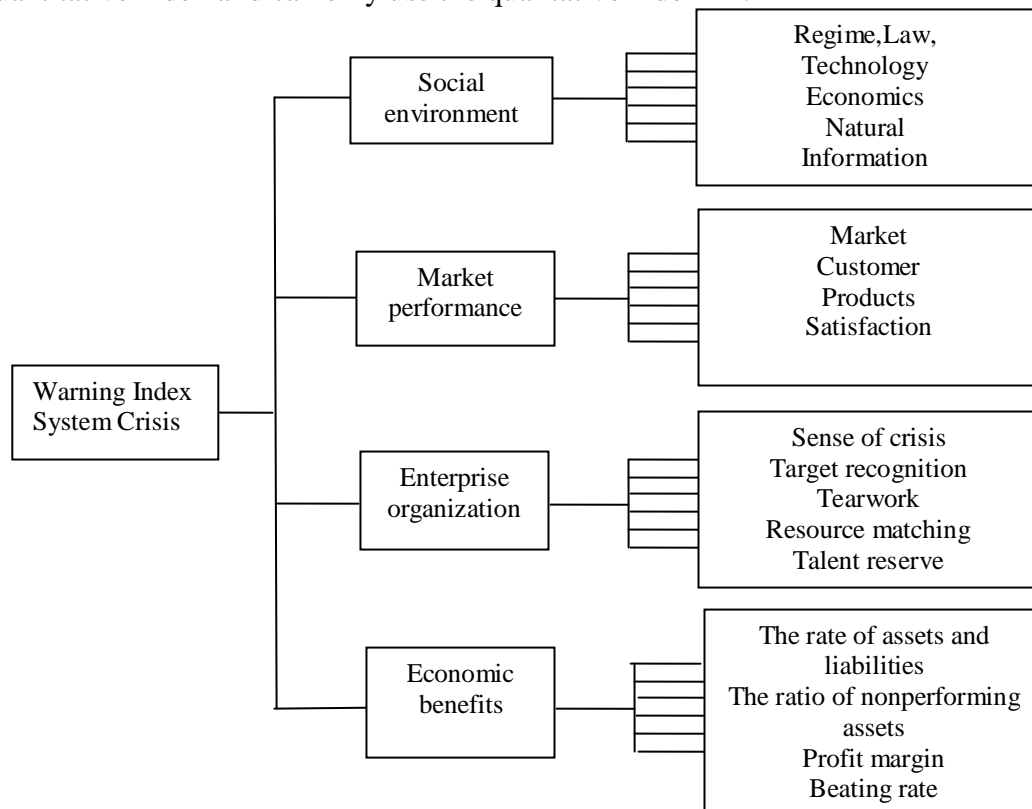


Fig. 1.Crisis early warning index system

It is important to note that the early warning index system mainly use enterprise normal general, in order to prevent system failure, to create a single index to a single high-level alarm mechanism, supplement comprehensive early warning system. As a whole, the early warning of crisis early warning index selection, taking the qualitative indicators. According to the crisis early warning index, selecting principle and conditions in this paper, on the basis of document, from external to internal.

**Acquisition and processing of early warning indicators of enterprise crisis value**

The early warning index system of enterprise crisis includes qualitative indexes and quantitative indexes, the determination of qualitative indexes can adopt Delphi method. In accordance with the requirements for enterprise crisis early warning, the qualitative indexes of conversion, designed the questionnaire or issues list, so that the experts on qualitative indexes<sup>[14]</sup>. The form of questionnaire have a beginning and end of two types: closed beginning form problem by the respondents were free to fill in the answer, closed end form the answer given by the investigators on the questionnaire in advance a number of options, respondents can choose. In order to avoid the beginning may occur in the form of questionnaire respondents answer disingenuous, evaluators jump to subjective conclusion, and the need of objective and simple questionnaire, this paper adopts the closed end in the form of questionnaire, there are two methods: (1) to do the evaluation index system of appropriate adjustments, made into expert scoring problems listing; (2) according to different level, determined the content of the evaluation index made selection of questionnaire, coping questionnaire indexes shows that when necessary. As a result of each expert scoring, can take out a maximum, a minimum value, and then take the arithmetic average.

**Information management based on enterprise crisis early warning**

Crisis mainly includes two aspects: the crisis management plan and control counter measures. Among them, the plan of crisis management includes corporate crisis management mechanism, staffing, resource conditions, operation process, etc.; Control counter measures including object. Given the specific range of enterprise crisis, crisis management needs of information explosion, need to rational organization and storage of information, use to retrieve, satisfies the requirement of preview, and information architecture is a kind of effective crisis precontrol stage of information management methods and techniques<sup>[15]</sup>

According to the crisis management question, according to the retrieval algorithm was used to search the contents, and submit to the crisis management of search results. In terms of composition of crisis information architecture, information organization should fully reflect the crisis site function, to meet the user information logic, information identification standard and consistent, information navigation clear and comprehensive, and provides a variety of search or a search method.

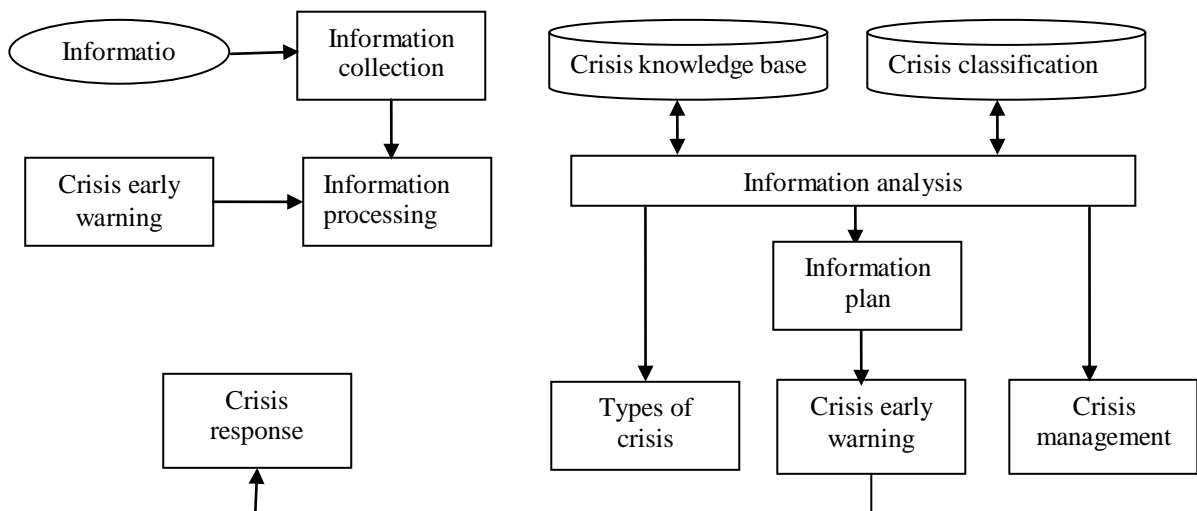


Fig.2.The enterprise crisis early warning

## Empirical analysis

According to crisis early warning, information management based on the idea of this paper which is to design a crisis information management system based on enterprise life cycle.

According to the XXX agricultural development Limited by Share Ltd may encounter crisis types, as well as crisis the size of the loss and the possibility of determining the extent, should focus on the following aspects: information market volatility reflects the consumer to livestock products consumption psychology, this kind of information sources can be considered over the prices of agricultural and sideline products network etc.. The laws and regulations policy adjustment, the kind of information sources can be considered China agricultural information network<sup>[16]</sup>, Anhui agricultural information network, "veterinary bulletin" etc.. Changes in consumer preferences, consumer net source of this kind of information can be considered over. The market competition information, such information can consider all the government investment project announcements and other information sources. The relationship between the stakeholders, this kind of information is the main source of dealers and consumers, enterprises should establish and perfect information feedback channel, collect the real-time feedback information of consumers, nip in the bud. Analysis and design based on the life cycle of enterprise crisis information management system. According to this theory and method, system according to the life cycle of crisis, is divided into three stages of several sub stage<sup>[17]</sup>.

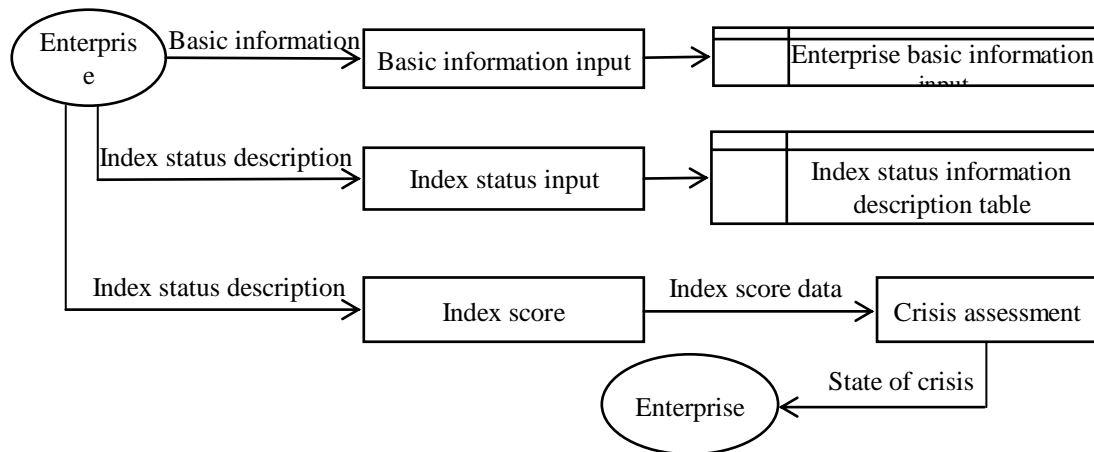


Fig.3.The second layer data flow of crisis early warning system

## Summary

In accordance with the order of the enterprise crisis management, to carry on the research of the first stage of life cycle of enterprise crisis, crisis early warning and control stage of the information construction of meaning; value and processing method of enterprise crisis early warning index system and explains the model of crisis early warning index; Workflow knowledge discovery and case-based reasoning based enterprise, and discusses the problem of information crisis; analysis in the cause of enterprise crisis early warning under incomplete information failure, and puts forward the preventive countermeasures.

## Acknowledgement

The factors involved crisis information management which cannot do without one, based on the research of enterprise information management system in the process of dynamic coordination assumption that human factors are unchanged, and only on the two conditions for the game analysis. In fact, the human factors of crisis information management in an enterprise is changeable, coordination is also very complex, future research needs to other possible scenarios and human factors were analyzed, in order to improve the research conclusion.

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