

# The Relationship between on Administrative Information System and Information Resources Integration in Government Decision Making

—Based on Carle Deutsch's Political Communication Theory

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**Abstract:** Non administrative information system refers to the informal and unofficial information transmission system which includes mass media, academic community and citizen. It has changed the mode of information in the traditional bureaucracy system, and formed the public space of public opinion expression. This paper uses Carle. Deutsch's political communication theory to analyze the effect of non administrative information system in the information collection, information selection and screening, information storage and learning, draw the conclusion: the non administrative information system can promote the convection of political information in the process of information collection, but it will bring "the associated noise", in the information selection stage it can shorten the "interval", but may increase the "load", in the information storage stage it can improve the professional integration of resources, but may has an opportunity cost due to the decentralization of information, in response to the stage it can effectively adjust the "positive feedback", but may have a "mob" and group events. It is suggested that we should make cooperation value of administrative information system, expand the way of information communication channel to avoid the problem of "noise".

## Introduction

In public policy, policy issues are often constructed by four interdependent processes which include problem awareness, problem search, problem definition, and problem statement; Policy problem construction includes four kinds of substance, the problem situation, the meta problem, the real problem and the formal problem. On the basis of the system theory, cybernetics theory and information theory in the "New Three Methodologies", the construction of policy issues is bound to experience the process of information integration, and it is called the political communication theory proposed by Carl. Deutsch which includes receiving information, selecting and screening information, information storage and learning, information transmission, make decision and reaction.

With the government decentralization and the trend of accelerating the innovation of social governance system, diversified social governance go into the field of political life, and NGOs play an important role in the provision of government policy advice and transferring the information of government decision-making. An increasing number of citizens are aware of the way that we can manage public affairs by self financing, such as the community can integrate the public opinion. American practice shows that citizens can manage their own public affairs by self financing. At the same time, the popularization and application of Internet technology led to the differentiation of individual citizens, and show that the citizens can become the main body of political actors, and it makes that the "majority consent" principle of traditional democratic politics has been challenged. Interactive information transmission system will make public transmission become more directly and more widely. In summary, the requirement of the construction of government policy decision in the new period is Multi-subject decision making and citizen's political participation. The key to achieve this requirement is to build a positive interaction mechanism between public opinion and government policy, that is, to broaden the channels of the public agenda into the government agenda, which depends on the establishment of the information reception and transmission system.

"Non-administrative information system" is a concept proposed by Professor Yu Keping in "the basic features and main problems of contemporary Chinese political communication". Non-administrative information system specifically including corporate information systems, news information systems, information systems and other academic institutions, informal, unofficial, independent information systems, and it can broaden the traditional channels of political communication, achieve political transition from a single-channel to a multi-channel communication and reduce the load of administrative information system information channel. This paper defined the "Non-administrative system" to a kind of transmission of information system which composed of information received mass media, academic community and civil liberties organizations. They achieved the goal through the collection and processing of information and political communication and it can formulate the policy community. Non-administrative information system is the public domain in the course of issues construction, and it can be considered as the public forum of public opinion formation. It shows that national "embedded" societies and we can achieve the goal of social governance by working with a network of social organizations.

Mass media, academic institutions and other informal, unofficial, independent information systems has changed the traditional pyramid-style political structure, and it can lead to the development of flat network. It touches on the re division of the social and political interests. Along with the development of economy and society, it is not only the economic development and social improvement, the frequent conflicts in the political level will be inevitable. Faced with the trends of increasingly diverse channels in information transmission, governments need information to make an objective, detailed analysis and evaluation, we should not only regard non-administrative information systems as a way to listen to public needs, and should not be blind to led such information as society's main public opinion. Therefore, non-administrative information systems can be considered as a "double-edged sword", it has the function of preventing or alleviating social contradiction and political conflict, and it also leads to the possibility of sharpening social contradiction and political conflict.

## **The Definition of the Theory of Political Communication**

Deutsch believes that any political system, including their subsystems, which include some mechanism inside. These mechanisms can accept, store and process the relevant information. In Deutsch's political communication theory, the role of communication is not limited to the acceptance and processing of information, it also includes a "feedback" of receiving and processing, and it can make the political system truly achieve control of the environment.

Deutsch's political communication theory defined the to the pressure changes in the environment caused by the political system as the "load." And assuming that, if the conditions for other aspects of the same, the greater the load on the political system, the more difficult it is to eliminate these loads. But when faced with a number of mixed messages, the political system can not respond to all of the information, and it must first screen and choose one of the most valuable part of that information, and convert them into a clear sign from the information understandable language a word. Then, it is possible to make a final decision on the basis of the analysis of the content of the information. The time of processing information by political system, that is from receiving information to respond to the burden on the environment is called "interval" by Deutsch. He also believes that "the longer the interval, the greater the effectiveness of the political system, making it more difficult to cope with the pressure of the surrounding environment to their cause. Effective communication system is not only to solve the problems above, and in the process of information, systems will also (including feedback information) stored up the information, and take advantage of a similar event in the environment again.

## **The Positive Effect of Non Administrative Information System Takes on the Integration of Information Resources**

Role of non-administrative information systems supporting for the government decision by receiving, dealing with information provided by the public and emphasizing the role of information in government decision making. Decision-making process is based on the characteristic pattern, the model and the preparation of the implementation of the decision and order of steps, and Herbert Simon has been considered the decision-making process conditions as four stages, such as to look for required conditions, to identify all possible courses of action, to make a choice in many action programs, to evaluate the choices

**Non-Administrative Information System Can Facilitate the "Political Message Convection" in the Course of Information Reception.** Mass allow political message convection more directly. With the advent of the mass media in the Internet, on the one hand, people can use the Internet to comment directly, even voting. On the other hand, the government's top policy-making departments can use the Internet to keep abreast of public information. In particular, it can also strengthen links between policy-making departments, each department can make decision-making information to the public, so that people can participate in political decision-making and build a network issue. Therefore, the media is a key connection between state and society, and this role so that they can strongly influence the government and social preferences in terms of solutions.

Academic Societies make political message convection more efficiently. Academic and research communities receive only information that can fit their responsibilities well, and it can improve the efficiency of information convection. In the construction of government decision-making issues, the

academic communities tend to be advisory bodies, including various types of research centers and scholars in related fields, they often obtained through field research and information gathering, political communication channel is shorter and more efficient.

Civil liberties organizations make information gathering more representative. It avoids the lack of citizen participation in the government's decision to participate in the decision making, and has a stronger support than the individual. These organizations can integrate social resources effectively, and they afford the commitment to the preliminary work of public opinion collection, therefore it can avoid government get into the information processing costly. At the same time, self-organization is usually based on the establishment of a specific dispute, it has clear objectives and themes, and it has a higher target on gathering information.

**Non-Administrative Information Systems Can Shorten the "Interval" in the Stage of Information Selection.** The mass media can make information resources integration more efficiently. With the development of Internet technology, the ability to mass media and news information system for information filtering is also growing, especially in the handling of crises, the network platform can effectively integrate information, the traditional agenda-setting mode (policy agenda - media agenda - public agenda) has quietly changed, the media and the public began to change the past passive position, self-set agenda to influence the policy agenda. When citizens use the Internet's many features (such as forums, message boards and chat rooms, etc.) to discuss various issues and to form a network of public opinion, information resources are spontaneously integrated and it can reduce the "gap."

Self-organization shows that the public can be regarded as a "customer" status. Cooperation between the management subjects of the public sector needs a platform, and the self-organization can play a role on the platform. Charles Taylor in "The distance between the citizens and the State," a book that put on that "the public sector not only plays to limit the power to expose malpractice role, it can also provide damage, up / down, support or hinder the public debate and the exchange of views. "This shows that self-organizing community, volunteer organizations can not only receive information, also can select and filter information, formulate "public opinion List" and send the feedback to decision makers. This makes the administrative information system receives is second-hand information, reducing the administrative information system filter public opinion time and improve efficiency called "responsive state".

**Non-Administrative Information Systems Can Facilitate "Negative Feedback" Balance in the Course of Reacting.** Run the political system can be attributed to the information input - output process, this process must have feedback to adjust, positive feedback is given the differences between information and feedback information to make political system away from the goal action, a negative feedback system behavior change the direction and make it adapt to the target agreed. Traditional single-channel administrative information systems there is a positive feedback too, negative feedback "gain" phenomenon is too large, specific performance: some political information transfer agencies work very easy to exaggerate the advantages resulting from positive feedback too, another kind of extreme situation is that policy-making organs artificially amplified negative feedback, exaggerated defects in the work of ideological rigidity.

Non-administrative information systems as an independent body spread, and it is not under the direct leadership of the executive authorities, thus dare to expose the focus of the event, routine criticism of social problems, and it can avoid the "positive feedback" is too large. It can be said of non-administrative information system is actually in the public domain issue to build generation.

This broader concept than Habermas refers, and it sustains the belief that the system is the sum of people, groups, and various phenomena in society about social reality, problems expressed, attitudes, opinions and emotions of the performance.

Public opinion environment is gradually formed when citizens are consulted in an unrestricted manner. The public domain provides the detailed information and the information which is needed to discuss the issue in the public domain, can not conceal the truth, also cannot exaggerate the reality, causes the "positive and negative feedback" to achieve the balance.

### **The Negative Effects of Non Administrative Information System on the Integration of Information Resources**

Discussed above, the non administrative information system has the positive effects of the integration of information resources, but due to the high degree of decentralized information process of information transmission is difficult to control and information storage and learning ability is weak and other issues, lead to non administrative information system of information resource integration also has negative effects.

**Non-Administrative Information Systems May Exist "Associated Noise" in the Course of Information Reception.** Currently occupy the dominant mass media network media generally exhibit perceptual, emotional and simplistic, with obvious irrational colors. Network platform is also increasingly becoming vulnerable, marginalized groups catharsis platforms and tools, there has been Karl Deutsch said as "associated noise".

Standing in the public point of view, due to limited personal capacity, come into contact with project information is not necessarily comprehensive. Individual rationality, knowledge is limited, and mostly from the perspective of private interests, and therefore the comments are not guaranteed. And personal interests often are scattered, it is also easy to produce conflicting situations in the process of interests demanding, thus weakening its own strength. Further public self-organization may have the issue of "free rider" and "mob": Olson in "The Logic of Collective Action," a book analyzing the "free rider mentality", referring to the public if an article involving many people, it may have an impact on their interests, then so many stakeholders will decrease the possibility to take actions. Because individuals want others to take action, they can get the benefits of free action. Therefore, the information collected through the self organizing method can not reflect the wishes of all citizens, so that the issue of the building is only a part of the wishes and preferences of citizens, resulting in associated noise".

**Non Administrative Information System Will Increase the "Load" in the Course of Screening Information.** The "Matthew effect" and "snowball effect" in mass media bring about the increase of "load". To seize the commanding heights of public opinion is the general law of the spread of public opinion, the mass media is also the case. Agenda setting and pilot comments that contributed to the network of public opinion, usually in a short period of time rapid dissemination, public opinion generated resonance, the formation of a strong trend of public opinion, and as for the discussion of the facts are clear and the judgment is correct, it is not so important. In the opinion of the polarization field effect, emotional extreme continuous stimulation, louder and louder, forces is more and more strong; and the rational, moderate voice will continue to come under pressure and then become more and more weak until the "silent". On the other hand, when an event or issue, public opinion will snowball like derived, polymerization, fission, diffusion, the propagation

velocity, spread the breadth and impact strength was almost exponentially. In addition, there may be some events are easy to be played, malicious speculation, in order to form a strong social pressure on the real society, and some even hide behind the sinister political purposes. From this, the mass media transfer information may not represent the people, are likely to be affected by "opinion leaders", the government decision-making to the selected information need to have a secondary screening to the mass media, increasing the cost.

## **Conclusion and Discussion**

Results above theoretical arguments and case analysis show common, non-administrative information systems to build a positive impact on issues, but also have a negative effect, but the new era single-channel administrative information system exists "more noise", "weight loss" "big load" and other issues, to play administrative information systems is a general trend, the key is to improve its efficiency, to overcome its drawbacks and establish a system which can extend to all directions.

Theoretical value of this paper is to communicate with Deutsch's political theory demonstrates the relationship between the non-administrative information system and issues between construction, as shown in the above table, grasp the mass media, academic community, civil liberties organizations from the whole common features, and the conclusion can be drawn: (1) In the stage of question identification, the non-administrative information system can promote the "political message convection", expand a single channel of information dissemination stakeholders, but the process is difficult to control due to the information received, there may be "associated noise." (2) In the search stage, non-administrative information system on the outside of the quick reaction, especially the mass media can be in a short time to complete the extraction of key information, the relationship of the "interval", but because of the information screening process dispersion, led to the government in decision-making in need of information for secondary screening, and increase the cost, increase the pressure of the external environment of the political system, increase the "load". (3) In the stage of problem definition, a non-administrative information systems in the academic community so that the information to learn more professional, while promoting citizen self-organization of self-learning, self-governance spontaneous formation of consciousness, but it takes a lot of time, especially in crisis the process, non-administrative information system there is no advantage of high efficiency administrative information systems, non-administrative information systems in a short time is difficult to integrate resources, integration of previous experience and predict cause the opportunity cost of production. (4) In the problem statement stage, non-administrative information system is characterized by its independence dare to expose the reality of the situation, to avoid the "positive feedback" over Japan "negative feedback" gain, to promote "negative feedback" balance adjustment, but may induce "information misinterpretation" and "mob" and so irrational behavior.

Practical value of this paper is that non-administrative information systems pros and cons should be a combination of both, in practice, play a high efficiency administrative information systems, through the expansion of communication channels ways to circumvent its "background noise" too big the problem, avoid non-administrative information systems "associated noise" limitation through government regulation

Non-administrative information systems in the information received in small background noise,

associated noise, the information selection and screening load, small space, in information storage and learning professional, but the dispersion of information passed over the opportunity cost of failure Great, in responding effectively to make the feedback process, but may lead to mob of mass incidents. And administrative information system is on the contradict. In terms of policy, there are the following four points.

First, develop the cooperative value of the administrative information system and the non administrative information system in the information reception. In the information reception, the administrative information system has the "background noise", and the non administrative information system has the "associated noise". Recommends that the government regulation of non administrative information system in decentralized information by executive order and the necessary administrative punishment, and at the same time, non administrative information system should be used to absorb the advantage of public opinion, and promote the political information convection ".

Second, through the cooperation between the administrative information system and the non administrative information system, the "interval" and "load" are shortened ". Non administrative information system, with the feature of quick reaction can effectively shorten the political system of the "interval", but at the same time due to the dispersion of information more "load", and administrative information system of screening high efficiency, just to "load" and non administrative information system. We propose that in the information selection and screening stage, on the one hand, the ability to stimulate the self organization of the key information, while playing the key role of the government in information filtering.

Third, to play the academic society in the information storage and learning in the professional and targeted, at the same time the introduction of administrative information systems to complement each other, reduce the opportunity cost of non administrative information system. Suggestions in information storage and learning stage, government and academic community co production, academic association for the government provide policy advice, final summary to the administrative information system, to avoid the opportunity cost of decentralized information processing.

#### **Notes:**

"Non administrative information system" is a concept proposed by Professor Yu Keping in a text "on the basic characteristics of political communication in contemporary China and the existing main issues," including the community information system, information system, academic institutions, information system the informal, unofficial, independent information system.

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