

ICTs and Individual Convergence of E-governance

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Abstract—The individual convergent tendency of e-governance is deeply influenced by current information and communication technologies (ICTs). Taking advantage of this kind of technology, the individuals form convergent system and mechanism based on their interests, hobbies and benefits. Network is gradually becoming a basic way and important carrier for individual convergence, while network communities become the more common activity units. As a result, the individual's influence is enhanced with the help of such convergence, and the mobilization of e-governance is deepened. However, the limited individuals' willingness and ability and the restricted availability of ICTs have negative effect on e-governance as well. With the further enhancement of convergence, forming a multi-centered e-governance model among the government, market and civil society is a necessity, which can provide structure composition and mechanism composition for the composition model of e-governance.

Keywords: *ICTs; E-governance; Individual Convergence.*

I. INTRODUCTION

Under the influence of quickly changed and advanced ICTs represented by network, individuals' behaviors are undergoing significant changes and deeply affecting the system and mechanism of national governance. The application of ICTs make people acquire unprecedented communication ability, form the convergent bodies based on individual preferences, then extend towards the governance structures of network communities, organizations, enterprises, groups and even nationalities, countries and the globe. This paper studies the individual convergence behaviors in network environment, trying to understand the positive and negative effects of individual convergence phenomena in the e-governance model.

II. ICTS AND INDIVIDUAL CONVERGENT TENDENCY

The high flattening of e-governance model can easily result in the decentralization of individual influence. In the network space, the citizenship is represented as a kind of technical relation, and they form the "user-client" model with the government. Under the support of such model, the government governance of network space will form the "one-to-many" flattening model. Under such flattening governance model, the government can accept the requirements proposed by citizens more conveniently and rapidly, while citizens can also communicate with the government administration department directly and efficiently. In this governance model, the high individuation

is reflected, but also the risk of high flattening is faced. In such high flattening status, citizens may cross the organization form but communicate with the government directly. Of course, people also find that, such direct communication has very small influence due to the too much divergence of citizen individuals.

However, we do not see the formation of such divergence; on the contrary, the convergent tendency appears in the individual behaviors in e-governance; based on the ICTs, the citizen individuals form more and more convergent bodies with the network communities as the basic activity units. The ICTs with network as the main form have provided many possibilities for the cooperation and mutual assistance among different people; common citizens form convergent tendency in the social relationship of a small scope (such as relatives, friends and familiar people), converge with other individuals based on different characteristics, and form the network convergent bodies of different forms, different rules and different scales. As such convergence takes individuals as the basic units, we call it as the convergence of network individuals. In network, more and more forums, blog groups, wechat groups, and social media become more and more active and act as the main forms of network individual convergence. Such emerging convergent bodies not only bring those with the same hobbies and interests together, but also bring those with special interests together; these bodies play more and more important role in the public affairs administration, even play a direct and efficient function in owner negotiation, right protection and group events, and thus arouse the high attention of people.

III. THE OPERATING MECHANISM OF INDIVIDUAL CONVERGENCE

Network communities have become the basic way and carrier of individual convergence. The e-governance takes Internet tool as the carrier, expands the individual activity area to the virtual space, and endows new form to the governance activity. The rapid development of Internet can support citizens to participate in public activities, strengthen community construction, establish domestic relationship, and expand the boundaries of public life. ¹In the e-

¹ Jongpil C.: Comparing Online Activities in China and South Korea: The Internet and the Political Regime. J. Asian Survey, Vol. 48, No. 5, p.740 (2008)

governance environment, network has become the important tool for information transmission, and common citizens can use Internet to make rapid convergence or divergence behaviors.² The virtual world established based on Internet is the activity area corresponding to the real society, and network has become the key break point between the two managements. In the network world, citizens enter into the public area with network as the media, thus becoming the citizens in network world and carrying out various activities in the virtual field different from the reality.

The group formed through network individual convergence is called network community or virtual community. The most representative forms are wechat group, Facebook, Twitter, Linkedin and other social media. The emergence of network community has provided new ways for citizens to participate in governance. Participating in the community and taking part in activities have become the common choices of citizens. The formation of such organization surpasses the limitation of two inherent organization forms, which are government and market. It is a freer and more independent organization form, and individuals can join in, participate and exit in every identity more easily. According to the closeness of individuals involved in the convergent tendency, the communities can be divided into primary groups and secondary groups. The formation of primary groups is the result of social relationship convergence in a small scope, and the convergence of individuals in network environment according to the existing social relationship. It mainly appears in the social relationship of a small scope. Individuals converge with relatives, friends, colleagues and other individuals, thus realizing the networking of relation in reality. This convergence has small change to the relation in reality, but it is a form to supplement network communication and interaction. The formation of secondary community is based on certain common characteristics, and the unfamiliar individuals are converged together.

Under the driving of ICTs, the composition structure and ability of individuals are optimized unprecedentedly. The e-governance is different from the traditional government management with ICTs, as it promotes the substantive changes of the deep structure of government governance and directly brings the structural changes, such as the new form governance represented by social network, network community, Web2.0 technology and virtual world. At this time, we can call it as e-governance.³ The communities formed by convergence become the priority selections for individuals to give play to their influence. In the e-governance activities, the power of single individuals is limited; by contrast, the groups with certain scale and organization always possess greater influence and higher

popularity and have the power advantages which are not possessed by individuals. Generally, the groups of larger scale will receive the attention and emphasis of government more easily, and their opinions and suggestions will be more carefully considered and more probably absorbed into the policy agenda. It is hard for the citizen individuals to participate in process of government decision making directly; therefore, to expand their influence and give play to their role, they form into community through convergence, and give full play to their role in the decision making process of government as the group with the common interest. It will become a more efficient selection way.

IV. INFLUENCE OF INDIVIDUAL CONVERGENCE ON E-GOVERNANCE

Individual convergence has significant influences on the process of e-governance. The convergent system of network individuals allows more subjects to enter into the e-governance system, forming the convergent system of individuals. Many participants establish the networked relations in a large number, under flexible rules and in the changing shapes, so that individuals with similar demands can form a group with a unified demand and centralized power. The governance needs to cope with change of new trend.⁴

Above all, Individual preference is the basic motivation of individual convergence as well as the most fundamental mechanism of adjusting network individual convergence. Generally speaking, the network community is the subprime group consisting of members with the same or similar characteristics. The main reasons for individual convergence during e-governance are individual's value, interest, attitude, demand and benefit. These individuals form the group with certain homogeneity. The generation of network community facilitates the communication between stakeholders, and it can be considered as the field where persons with common interests discuss relevant matters.⁵ Meanwhile, the expression immediacy and subversion ability of network media make radicals' expression of objection possible. Network media is not just limited in the authorized public field, but it expands the scope of core field to promote democracy, and opens two options of "consent" and "dissent", so that citizens have the right of dissent, not being forced to consent.⁶

The entry system of network convergence makes the e-governance structure of virtual community more civilian. The civilian governance activity is an important feature of e-governance which differs greatly from traditional governance. Due to organizational barriers, communication problems and other influential factors, traditional governance activities are often difficult to mobilize

² Rongjun Y.: Reciprocal Effect and Governance of Grassroots Democracy and Power Supervision and Policy Making in Cyberspace. *J. CASS Journal of Political Science*, Vol. 26, No. 3, p.113 (2015) (in Chinese)

³ Frank B. and Regina C.: Defining E-governance. *J. e-Service Journal*, Vol. 8, No. 2, p.12 (2012)

⁴ C.P. Barthwal: e-Governance for Good Governance. *J. The Indian Journal of Political Science*, Vol. 64, No. 3/4, p.293 (2003)

⁵ Barry H. and Brian L. Ed.: Digital Democracy: Discourse and Decision Making in the Information Age. Routledge Press, p.79 (1999)

⁶ Zizi A. P.: A Private Sphere: Democracy in a Digital Age. *J. Polity Press*, p.161 (2010)

grassroots enthusiasm. Most of organizations often screen their own members. At this moment, the grassroots class at a disadvantage in the economic, political, cultural and other important levels is easy to be discriminated when facing choice; however, the elite class that has mastered various initial resources is easier to face more choices. By comparison, the emergence of the network community effectively reduces the barriers between organizations, lowers the entry threshold and simplifies the join procedure of such groups, so that the grassroots citizens can join freely. Meanwhile, network community has no strict limitations and requirements for member identity, so grassroots class has the opportunity to enter into the same platform with elite class for communication. The mobilization and organization activities of network community can penetrate into the grassroots and directly spread to ordinary people at the grassroots level, further strengthening the integration force of e-governance. The grassroots groups which are hard to be influenced in governance activities can also be mobilized in this process. The substantial expansion of mobilization scale provides a large number of individuals for the foundation of network community. The integration depth that can be achieved with the network convergence is the effect that other governance activities do not make.

Another noticeable change in e-governance is the increased flexibility in governance activity and virtual community resulting from ICTs. The converged network community from individuals has greater flexibility. On one hand, due to the flexibility of this mechanism, the combination and dissolution of the network community are relatively easy. The individuals in the group can flexibly switch between different identifies and groups according to their own needs. Facing a specific problem, individual's composite into network communities freely, to give a flexible, timely and correct response. Once the problem is solved, the network community will be dissolved, and individuals can join other network communities according to their own concerns and interests. However, on the other hand, network convergence, as a flexible force, has its unavoidable defects. It is because people can freely switch that their loyalty to the community and their responsibility for maintaining this identity are quite limited, so that the community cannot maintain a lasting influence.⁷ With the decline of attention to an issue, the network community built based on some specific common characteristics will gradually lose vitality. The lasting time of network community will directly affect the development of group power in the government agenda as well as the result. Too flexible network community may be easy to form and dissolve. Once dissolved, its group effect will quickly vanish.

We see that, with the advent of the network age, the Internet has gradually become the main channel for citizens to access information. Encouraging individuals and groups to participate in governance and make two-way communications through interactive features, which may

strengthen the link between government and citizens. However, we should see the dual influences of network convergence. The change of way to obtain information has also led to a series of problems. The steps and results of individual convergence in e-governance also have inevitable drawbacks and difficulties which are not easy to overcome.

V. DIFFICULTIES FACED BY INDIVIDUAL CONVERGENCE

In this section, some difficulties faced by individual convergence will be discussed. Including the limited participation willingness and ability of citizens, and the restrictions of ICTs will also directly influence the individual convergence degree in the e-governance, and then influence the actual participation of e-governance.

When citizens are not so willing to use Internet and participate in governance, they repel themselves out of the e-governance field invisibly.⁸ In reality, "even the relevant services of Internet government are successful and in place, but it's still a huge challenge to ensure citizens to apply these services in high efficiency."⁹ The lack of citizen engagement might imply the absence of individuals' desire for actual government-citizen dialogue. If citizen individuals are not keen on participating in public affairs, without enough government-citizen dialogue, the potential of e-governance is minimal, let alone improving the quality of people's political life. This may lead to deviated results, because e-governance-related citizen behaviors are no more than using e-governance facilities to obtain information rather than as a portal to engage in democratic decision-making.¹⁰

At the same time, possessing the human capital of a certain level is the basis for participation into network activity.¹¹ Those people living at the bottom may lack the conditions and abilities to rapidly grasp new technologies and to use diversified applications efficiently. Also, the Internet information technology is updated rapidly; if one cannot learn new things and adapt to new environment, he/she cannot take up the advantageous position in the information society, even let alone participating in the e-governance. The lack of human capital makes the individuals at grassroots far away from the possibility of participating in political life.¹² The grassroots in the generally disadvantageous place are more easily subject to the adverse influence when they participate in the e-

⁸ Edited by Alexander B. S., Zoe K., Constantine P. Y., Vasilios Z.: E-Democracy, Security, Privacy and Trust in a Digital World. 5th International Conference, E-Democracy, Revised Selected Papers, p.54 (2013)

⁹ Kiran P.: E-Governance Policy for Modernizing Government through Digital Democracy in India. J. Journal of Information Policy, Vol. 2, p.193 (2012)

¹⁰ Toni M., Dave G. and Sabine R.: e-Democracy: Exploring the Current Stage of e-Government. J. Journal of Information Policy, Vol. 4, p.501 (2014)

¹¹ Anthony W.: Democracy in the digital age: Challenges to political life in cyberspace. Psychology Press, pp.32-3 (2000)

¹² Anthony W.: Democracy in the digital age: Challenges to political life in cyberspace. Psychology Press, pp.36-7 (2000)

⁷ Zizi A. P.: A Private Sphere: Democracy in a Digital Age. J. Polity Press, p.78 (2010)

governance.

In addition, the political discourse can be easily led by the political elites, and common citizens can only give play to limited role. The accessibility of information and service is faced with many unsettled problems. Even if the information is released to the public, it cannot be ensured that it will not be contacted by the common individuals.¹³ After the transmission and filtration of layer by layer, the contents really transmitted to the grassroots are few. In addition, when the function of Internet is limited to assisting government to transmit information and citizens can only acquire information passively, the potential of citizens as the subjects of e-governance will be greatly limited.¹⁴

Citizens who gather together under the convergent effect can participate in many network discussions. Some network discussions really play a role in political mobilization, but may not necessarily affect the actual political life. Some network discussions can strengthen ties among citizens; while other network discussions will further isolate some groups, or just deepen the insurmountable differences between groups.¹⁵ In addition, the network discussion about public affairs has limitations. Making specific discussions in the public domain, requiring exchanges and mutual benefits to promote development, and anonymously expressing opinions on the Internet are often insufficient in content and influence. Moreover, network discussion usually occurs among people who have intersected in the real life, equivalently just introducing a new network form based on the existing contact, which makes governance activities still limited to a small part of groups.¹⁶

VI. CONCLUSION AND FURTHER DISCUSSION

Through above demonstration, we can see that by means of ICTs, individuals increasingly form convergence based on preferences. The convergence at the micro level makes individuals form network community, and gathers individual citizens in a dispersed state according to different homogeneity characteristics, such as common interests or benefits. Seen from this angle, the network is becoming the basic mode and the carrier, and the network community is becoming more popular activity unit. Although this convergence has negative effects, the individual's influence can be increased, and the mobilization of e-governance can be deepened.

In fact, for individual convergence, e-governance is facing some constraints. From a subjective point of view, digital gap may occur among citizens due to use of ICTs. From an objective point of view, the construction of Internet facilities will also limit e-governance; especially the

institutional construction of e-governance will affect the e-governance in a more serious manner. In addition, the flexibility of network convergence also reflects the hidden risk, because the required lasting influence cannot be maintained due to excessive flexibility. The lasting time of network community will directly affect the development of group power in the government agenda as well as the result. Too flexible network community is easy to form and dissolve. Once dissolved, the role of such a convergent group will quickly fade away. These problems need to be solved in order to maximize the development of convergent tendency.

Then the appearance of re-convergence which is also based on ICTs is needed. The tendency of re-converge the existing social organizations, and thus form a more complex "re-convergence" effect in the intermediate level would be possible solution. Such re-convergence will expand the scale of stakeholder groups, and take advantage of the power of group in the governance process, thus gradually realizing the pursuits and benefits of individuals and groups. The process of convergence integrates the original social organizations of citizens, not only changing the structure and function of original organization, but at most of the time, complements with the original social organizations; in extreme conditions, such re-convergence may substitute the original citizen social organizations. As for the difference between the network group formed through re-convergence and the wechat group formed through individual convergence, the network communities formed after group convergence has larger scale and influence, the motivations of convergence are richer, and the most obvious motivations for the convergence are emphasized, so that the convergent effect and action dynamics are more prominent. Finally, the composition of fields is promoted at the macro level, mainly reflected in the composition of three governance fields, namely government, market and civil society around specific organization. The composition in the phase is no longer the initial convergence of network individuals, but the institutionalized structural composition, which is the result of overlapping of such fields as the state and civil society driven by information and communication technologies. As a result, in the Internet environment, the transverse breadth and longitudinal depth of convergence have breakthroughs. By means of network, individual citizens achieve the fast and convenient layer-by-layer convergence. They change from governed objects to subjects participating in governance, thereby achieving deep participation in governance activities. Meanwhile, such convergent network communities will communicate and exchange with other communities by expressing their own demands, forming organization composite in a wider range. These two processes generate strong convergence under the catalysis of effect of ICTs.

¹³ Zizi A. P.: A Private Sphere: Democracy in a Digital Age. J. Polity Press, p.121 (2010)

¹⁴ Toni M., Dave G. and Sabine R.: e-Democracy: Exploring the Current Stage of e-Government. J. Journal of Information Policy, Vol. 4, p.501 (2014)

¹⁵ Zizi A. P.: A Private Sphere: Democracy in a Digital Age. J. Polity Press, p.105 (2010)

¹⁶ Zizi A. P.: A Private Sphere: Democracy in a Digital Age. J. Polity Press, p.122 (2010)

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