

Who Supports Administrative Information Sharing in Korea?: An Empirical Investigation of Citizens Profile

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Abstract: Administrative information sharing is being promoted by the Korean government as an innovative measure to improve the quality of public service. At the same time, public concerns for privacy infringement are escalating. The core controversy is whether the policy can offer strong public goods to offset the cost of the potential infringement of privacy rights. Since it is citizens who will pay the cost of restricted privacy rights, according to the policy, administrative information-sharing should be designed and implemented thoroughly from the citizens' perspective. In this context, this study aims to clarify factors affecting citizens' policy-supportive attitudes toward administrative information-sharing. An empirical study was carried out and the results revealed that public trust in government, public opinion, policy benefit, and privacy concerns have significant effects on citizens' support for the policy. The results are discussed in order to draw out policy implications for the successful implementation of administrative information-sharing in Korea.

Keywords: Administrative Information Sharing, Information Privacy, Public Trust

INTRODUCTION

The black-moustachioed face gazed down from every commanding corner. There was one on the house-front immediately opposite. BIG BROTHER IS WATCHING YOU, the caption said, while the dark eyes looked deep into Winston's own.
– from *1984*, by George Orwell (1949).

Lately, the UK government announced plans for a database of private information to monitor and track the daily life of the whole nation, from cradle to grave. Ostensibly in order to improve public services, the UK government tries to integrate and share

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private information. However, this raises voices about privacy concerns at the same time. Although UK officials insist that the system is secure, critics warn that the UK is taking one step further toward becoming a Big Brother country. According to BBC news, some database systems are expected to go online in 2008.

In Korea as well, administrative information-sharing is being promoted, and the issue is becoming controversial. Article 11 of the Korean e-Government Law stipulates that administration agencies shall share the administrative information they collect with other administration agencies that need the same information. Based on this principle of sharing administrative information, in 2005 the Korean government launched a promotional committee for sharing administrative information. The government is also promoting the enactment of a law that will allow public use of administrative information. According to this law, public financial agencies such as private banks shall share the administrative information held by government. This expansion of the range of sharing administrative information will further improve the convenience of public service. However, this will also raise public privacy concerns about the potential infringement on private life and the leakage of privacy information.

Together with the promotion of administrative information-sharing, an electronic resident ID-card system is being promoted by the Korean government. The resident ID-card is a basic document required for everyday routine administrative procedures. In February 2006, the Ministry of Government Administration and Home Affairs announced a tentative plan for a new electronic resident ID-card system. However, the introduction of an electronic resident ID-card system does not always look favorable, due to public apprehension about the privacy infringement that an electronic resident ID-card system might bring with it.

Public concerns about privacy are not new phenomena. Warren and Brandeis, in their landmark article, "The right to privacy" (1890), first developed the notion of individual privacy as "the right to be left alone," something to be secured in reaction to the loss of privacy experienced during the 19th century. One century after their first conception of individual privacy, the public perceives an escalating threat from new information technologies with enhanced capabilities for surveillance, storage, retrieval, and communication of personal information (Clarke 1988; Culnan 1993; Hunter 2002; Mason 1986; Millberg et al. 2000; Ploeg 2003; Robinson et al. 2005). In Korea as well, public concerns for privacy are escalating as our society expands informatization national-wide. Administrative information-sharing and electronic resident ID-cards are typical examples of privacy-sensitive policies in the Korean e-Government.

In implementing an administrative information-sharing system, the core controversy is whether the policy can offer strong public goods to offset the cost of the potential infringement of privacy rights. In the older tradition of public service, the supplier-side

efficiency of public service has often dominated the customer-side effectiveness. However, in promoting administrative information-sharing, the government should endeavor, by every means, to develop a customer-focused system that can deliver maximum values to citizens, since citizens are those who will pay the cost of the restricted privacy rights, according to the policy. Administrative information-sharing should be designed and implemented thoroughly from the citizens' point of view. In this context, this study aims to clarify factors affecting citizens' policy-supportive attitudes toward administrative information-sharing, i.e., who is supportive of the policy for administrative information-sharing. In order to identify factors that may affect citizens' policy-supportive attitudes, this study addresses specifically the research question: Do public trust in government, personal inclination for innovativeness, perceived public opinion, perceived policy benefit, and privacy concerns make any difference to citizens' attitudes toward administrative information-sharing? The results of the study will be discussed in order to draw out the implications for the successful implementation of the policy of sharing administrative information in Korea.

ADMINISTRATIVE INFORMATION-SHARING IN KOREA

The project of sharing administrative information in Korea was first initiated in 2005 to provide higher quality public services, with the greatest emphasis on reducing time and costs associated with citizens' having to prepare the required certificates for government services. In the past, citizens seeking public services had to visit government institutions to prepare various certificates required for processing civil applications. This caused significant economic and social problems in Korea. The Ministry of Government Administration and Home Affairs estimated annual social expenditures of about \$3 billion for citizens to prepare this paper work.

In early 2005, the expert advisory group proposed an innovative measure, the administrative information-sharing scheme, in which citizens could submit civil service applications anywhere and anytime without the previously required certificates, and officials would then verify applications using the system. According to the Ministry of Government Administration and Home Affairs, the first goal of the project was to create a more citizen-friendly, less bureaucratic civil service system; the second goal was to eliminate the inefficiency on the part of public servants in processing paper certificates and civil applications; the third goal was to reform bureaucratic culture and the practice of demanding and circulating unnecessary paper certificates; and the fourth goal was to alleviate the social anxiety caused by the forgery or alteration of certificates.

In 2005, the plan to improve the sharing of administrative information was established and selected by the president of Korea as a governmental policy in the National Administration Task Meeting. In that same year, the regulation related to the promotional committee for sharing administration information was enacted, and the promotional committee for sharing administration information was established under the Prime Minister. Grounds cited for establishing the committee were Article 11 of the e-Government Law, the principle of sharing administrative information which stipulates that administration agencies shall share the administrative information they collect with other administration agencies that need the same information. The unique functions of the committee include establishing and promoting policies to expand the sharing of administrative information, improving related laws and policies, redesigning work flow to expand the sharing of administrative information, developing strategies/systems to promote informatics, reviewing the status of sharing administrative information, and promoting the reduction of paper documents.

As of 2007, various tasks related to administrative information are shared among government agencies, eliminating the need for citizens to visit individual agencies to submit required documents. Government agencies share 42 types of administrative information required for services related to matters of residence, real estate, vehicle, business, taxation, and other high-demand areas. The types of information to be shared will continue to increase, with the addition of information related to 70 services frequently used by citizens. The number of government agencies sharing information is set to expand, along with the inclusion of public agencies and financial institutions, following on from the completion of pilot services. Despite various efforts to share information among administration agencies, administrative information is not yet fully shared, and many agencies still require personally-provided information for civil applications and work processing. In addition to the information-sharing among agencies, government statistics show that 443 million documents/certificates are still being issued each year.

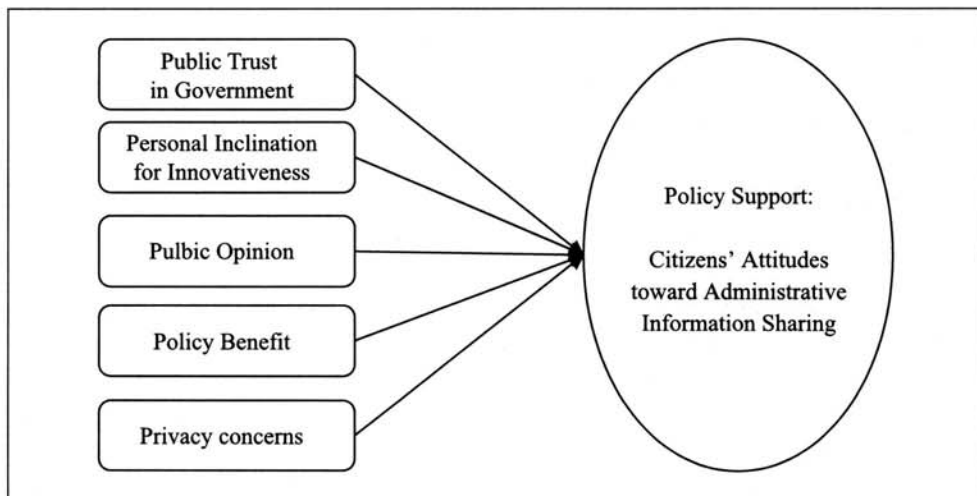
RESEARCH METHOD

Research Model and Hypotheses

The study aimed to profile citizens who have supportive attitudes toward administrative information-sharing. Based on preliminary studies, the following variables were selected as potential factors affecting citizens' supportive attitudes for the policy: public trust in government, personal inclination for innovativeness, perceived public

opinion, perceived policy benefit, and privacy concerns. The research question was whether these factors can be used to explain who supports the policy. The results of the study will be discussed to draw policy implications for developing a customer-focused system to deliver maximum value to citizens. Figure 1 depicts the research model being explored in this paper.

Figure 1. Research Model



Mayer et al. (1995) defined trust in the government as the mental attitude of supporting the government willingly, taking that risk even though the nation may be troubled by the government. Most theorists believe that trust is based on people's evaluation of government performance in providing public goods, and that better-performing public services will lead to increased satisfaction among their users, which in turn will lead to more trust in government (Job 2005). In this context, it is expected that citizens with a higher level of trust in government will have more positive attitudes toward new policies promoted by government (Useem 1982).

Hypothesis 1: *Citizens with a higher level of trust in government will have more positive attitudes toward administrative information-sharing.*

The construct of innovativeness is derived from adaption-innovation theory (Kirton 1976, 2005) which states that people have different cognitive styles by which they are creative, solve problems, and make decisions. These style differences lie on a normally-distributed continuum, ranging from high adaption to high innovation. The key to the

distinction is that the more adaptive people prefer their problems to be associated with more structure, and this structure to be consensually agreed upon, than do the more innovative people. Kirton (1980) argued that users with an adaptive inclination tend to solve the problem under the current environment, while those with an innovative inclination become worried about the occurrence of the problem and tend to want to change the environment itself. To clarify the relationship between this adaptive-innovative cognitive style and users' attitudes toward new information technology, various empirical studies have been conducted, finding that the more innovative individual tends to accept new and somewhat innovative information technology more positively (Foxwall and Hackett 1992; Miller et al. 1993). In this study, a similar relationship is expected between citizens' innovativeness and citizens' policy-supportive attitudes.

Hypothesis 2: *The more innovative citizens will have more positive attitudes toward administrative information-sharing.*

In traditional attitude-behavior research, the theory of reasoned action and the theory of planned action (Ajzen 1985; Fishbein and Ajzen 1975) argue that subjective norms play a major role in explaining individual behavior. Subjective norms indicate the influence of people in one's social environment on his/her behavioral intentions; the beliefs of people, weighted by the importance one attributes to each of their opinions, will influence one's behavioral intention. For example, one might have some friends who are avid exercisers and constantly encourage their colleague to join them. However, his/her spouse might prefer a more sedentary lifestyle, scoffing at those who work out. The beliefs of these people, weighted by the importance one attributes to each of their opinions, will influence one's behavioral intention to exercise, which will lead to one's behavior to exercise or not exercise. In the context of this study, subjective norms can be interpreted as an expression of the perceived favorableness of public opinion for the policy. Therefore it is expected that citizens' perceived public opinion will influence their attitudes toward administrative information-sharing.

Hypothesis 3: *Citizens with higher levels of perceived favorableness of public opinion will have more positive attitudes toward administrative information-sharing.*

Administrative information-sharing is an innovative measure of problem solving in delivering public service. According to innovation diffusion theory and the technology acceptance model (Davis 1989; Rogers 1982), the perceived usefulness of the innovation or new information technology influences users' acceptance of the system. This

view is well accepted and verified in the related literature. This study also expects a similar relationship between the perceived policy benefit and citizens' policy-supportive attitudes toward administrative information-sharing.

Hypothesis 4: *Citizens with higher levels of the perceived policy benefit will have more positive attitudes toward administrative information-sharing.*

Privacy may be defined as something like inner secrets, private matters, and one's private life which one prefers not to make known to the public. The right to such privacy is expanded from the passive right of protection in the past to an active right of executing control (access, revision, deletion) over one's private information. In this context, this study expects that citizens' perceptions of privacy, the controllability of one's own private information, and privacy concerns will influence attitudes toward privacy-sensitive public policies. Specifically, citizens with high level of perceived privacy concerns will tend to have negative attitudes toward administrative information-sharing.

Hypothesis 5: *Citizens with higher levels of perceived privacy concerns will have more negative attitudes toward administrative information-sharing.*

Sample and Measures

Completed surveys were received from 331 out of 500 citizens asked to participate in the study (66.2 percent response rate). After additional screening of unreliable replies, 309 surveys were selected as the final effective sample. Table 1 shows the demographic characteristics of the sample.

Table 1. Questionnaire Respondents Demographic Characteristics

Respondent Characteristics	Group	Frequency (%)
Gender	Female	143 (46.28)
	Male	166 (53.72)
Age	10 - 19	6 (1.94)
	20 - 29	265 (85.76)
	30 - 39	33 (10.68)
	40 - 49	4 (1.30)
	50 -	1 (0.32)
Education	Below high school	6 (1.94)
	High school graduates	13 (4.21)
	Undergraduates	161 (52.10)
	University graduates	89 (28.80)
	Above graduate level	40 (12.94)

Public trust in government is a mental attitude of support for the government, which is assumed to be a relatively stable and consistent system (Mayer et al. 1995). Barber (1985) classified public trust into two sorts: trust in the ability of the government (responsiveness, efficiency, expert knowledge, etc.) and trust in the fulfillment of moral duties by the government (refraining from using authority abusively, ethical expectations, etc.). This study follows Barber's measure of trust in government. Measures of innovativeness are adopted from Kirton (1980). Perceived public opinion is measured by the favorableness of one's acquaintance with and public opinion toward administrative information-sharing, which are adapted from those subjective norms developed by Ajzen (1985). Perceived policy benefits are measured with four items: perceptions of service quality improvement, service speed improvement, routine life improvement, and technical improvement for privacy protection. Following Culnan (1993), privacy concerns are measured with three items: concerns about the expansion of personal information collected, leakage of privacy information, and illegal distribution. All measurements are carried out on a five-point Likert scale. Table 2 summarizes measure instruments used in this study.

Table 2. Measurement

Variable	Item	Description
Public Trust	Trust1	Use authority with discretion.
	Trust2	Responsive to public needs.
	Trust3	Efficient.
	Trust4	Effective.
	Trust5	Equipped with expert knowledge.
	Trust6	Ethically transparent.
Innovativeness	Inno1	Pursuit for new things.
	Inno2	Adapt to change easily.
	Inno3	Seeking new ways of problem solving.
	Inno4	Leading change.
Public Opinion	Opinion1	People around are favorable for the policy.
	Opinion2	Public opinion is favorable for the policy.
Policy Benefit	Benefit1	Public service quality will be improved.
	Benefit2	Public service speed will be accelerated.
	Benefit3	Routine life will be improved.
	Benefit4	Privacy protection will be improved technically.
Privacy Concern	Concern1	More privacy information will be collected easily.
	Concern2	More privacy information will outflow easily.
	Concern3	More privacy information will circulate without consent.
Policy Support	Support1	I agree with the policy.
	Support2	I agree with early implementation.
	Support3	I agree with expanding information-sharing scope.

Validity and Reliability

A confirmatory factor analysis of the five attributions (public trust, innovativeness, public opinion, policy benefit, privacy concern) produced five factors with varimax rotation and eigen-values greater than or equal to 1.0 that accounted for 63.8 percent of the total variance. A common rule of thumb for the minimum criteria for acceptance of an item is that it has a factor loading of greater than 0.5 on its respective factor, implying that more than half of the observed variance of the item is explained the associated factor (Carmines and Zeller 1979). Most items have factor loadings of greater than 0.5, except Opinion1, Benefit1, Benefit2, and Benefit3. However, factor loadings of Opinion1, Benefit1, Benefit2, and Benefit3 are all greater than 0.47 and look marginally acceptable. As summarized in Table 3, most items are clustered as the originally designed measure structure except Trust6 and Benefit4. Consequently, Trust6 and Benefit4 are excluded in the following analysis. Measures of public opinion and policy benefit are clustered as one factor. However, these will be treated as two separate constructs, as originally designed. Excluding Trust6 and Benefit4, our measures seem to be valid instruments.

Table 3. Factor Analysis

Item	Factor1	Factor2	Factor3	Factor4	Factor5
Trust2	.682	.076	-.089	.104	-.218
Trust1	.563	.087	.026	.139	.036
Trust4	.565	-.002	.035	.053	.354
Trust5	.550	-.165	.086	-.010	.079
Trust3	.542	-.049	-.168	-.046	.198
Inno1	.009	.706	.057	-.020	-.074
Inno4	-.023	.674	-.087	.026	-.015
Inno3	.052	.612	.002	.027	.048
Inno2	-.072	.541	.075	.049	.047
Concern2	-.025	-.005	.718	-.033	-.026
Concern1	-.030	.044	.638	.043	.065
Concern3	-.048	.048	.539	-.008	-.482
Opinion2	-.043	.050	-.139	.526	.078
Opinion1	.029	.042	-.171	.492	-.028
Benefit1	.093	-.009	.259	.478	.077
Benefit2	.087	-.051	.237	.470	-.090
Benefit3	.135	.076	.156	.472	-.445
Trust6	.416	.062	.118	-.035	.961
Benefit4	.092	.076	-.025	.475	.518
Eigen Value	2.601	1.847	1.593	1.286	1.119
Variance Explained	14.584	27.357	38.582	49.614	63.805

The measure of internal consistency was used to assess convergent validity. Table 4 shows a reliability analysis result and descriptive statistics for each item in the survey. Cronbach alphas of all the constructs are greater than 0.7 and using Nunnally's (1978) guideline, internal consistency of our measures was acceptable.

Table 4. Descriptive Statistics and Reliability Analysis

Variable	Item	Mean	Standard Deviation	Alpha if Item Deleted	Cronbach Alpha
Public Trust	Trust1	2.411	.803	.696	.751
	Trust2	2.404	.916	.731	
	Trust3	2.038	.840	.714	
	Trust4	2.268	.8232	.667	
	Trust5	2.550	.830	.711	
Innovativeness	Inno1	3.294	.845	.702	.784
	Inno2	3.343	.792	.768	
	Inno3	3.016	.827	.758	
	Inno4	2.851	.808	.693	
Public Opinion	Opinion1	2.938	.746		.707
	Opinion2	3.135	.790		
Policy Benefit	Benefit1	3.644	.731	.669	.752
	Benefit2	3.747	.721	.507	
	Benefit3	3.459	.846	.790	
Privacy Concern	Concern1	3.805	.734	.714	.809
	Concern2	3.822	.787	.583	
	Concern3	3.708	.863	.876	
Policy Support	Support1	3.113	.807	.764	.800
	Support2	2.877	.792	.679	
	Support3	2.991	.845	.738	

ANALYSIS

The primary aim of this study is to determine factors affecting citizens' policy-supportive attitudes toward administrative information-sharing. Two analyses were undertaken. First, Pearson correlation coefficients were calculated between the affecting factors and policy support. Table 5 lists these correlations and their significance.

As indicated in Table 5, there are significant relationships between policy support and independent variables, except privacy concerns (p -value = 0.101). Although the correlation between policy support and privacy concerns is not significant at alpha

Table 5. Intercorrelations among the Study Variables

	Public Trust	Innovativeness	Public Opinion	Policy Benefit	Privacy Concern	Policy Support
Public Trust	1.000					
Innovativeness	-.007 p=.900	1.000				
Public Opinion	.089 p=.120	.079 p=.164	1.000			
Policy Benefit	.200** p=.000	.080 p=.158	.336** p=.000	1.000		
Privacy Concern	.043 p=.453	.020 p=.726	-.028 p=.627	.050 p=.377	1.000	
Policy Support	.207** p=.000	.124* p=.030	.407** p=.000	.456** p=.000	-.093 p=.101	1.000

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

level of 0.1, the p-value of 0.101 strongly suggests that privacy concern is a potential explanatory variable on policy support.

Multiple regression analyses with enter method and stepwise method were carried out to test hypotheses and the results are summarized in Table 6 and Table 7, respectively. Multiple regression analysis with enter method shows that public trust, public opinion, policy benefit, and privacy concern have significant effects on citizens' policy-supportive attitudes toward administrative information-sharing. Although innovativeness showed significant correlation of 0.124 (p value = 0.030) with policy support in the earlier intercorrelation analysis, it turned out to have a marginal effect (p value = 0.106) on policy support when all five independent variables are considered simultaneously in the multiple regression model. In the following regression analysis with stepwise method, policy benefit is selected as the first entering variable, which signals that policy benefit is the most influential factor for policy support. Public opinion, public trust, and privacy concern in sequence are selected by the model as subsequent entering variables. As is expected in the first regression analysis with enter method, innovativeness is dropped out from the final regressing model with the stepwise method.

Public trust in government has a significant positive effect on the citizens' policy-supportive attitudes, with a standardized coefficient of 0.118 (p value = 0.016) in the final regression model with the stepwise method. Much previous research on public trust and policy support has revealed that public trust has a positive effect on policy

support (Chanley 2000; Gamson 1968; Hetherington and Globetti 2002; Miller 1974; Useem 1982). In the case of administrative information-sharing policy considered in this paper, a similar result is found and H1 is supported.

Table 6. Multiple Regression Analysis with Enter Method (Adjusted R Square = 0.299)

	CoefficientB	Standard Error	Standardized Coef.	t	P value
Public Trust	.142	.058	.120	2.467	.014
Innovativeness	.086	.054	.078	1.621	.106
Public Opinion	.288	.054	.273	5.373	.000
Policy Benefit	.434	.066	.339	6.563	.000
Privacy Concern	-.401	.175	-.110	-2.290	.023

Table 7. Multiple Regression Analysis with Stepwise Method

Step	Variable Entered	Adjusted R ²	Standardized Coefficients	P value
1	Policy Benefit	.205	.456	.000
2	Policy Benefit Public Opinion	.275	.360 .286	.000 .000
3	Policy Benefit Public Opinion Public Trust	.286	.338 .283 .114	.000 .000 .021
4	Policy Benefit Public Opinion Public Trust Privacy Concern	.295	.344 .278 .118 -.108	.000 .000 .016 .025

Individual innovativeness has been dropped out from the final regression model with stepwise method; thus H2 is not supported. Foxwall and Hackett (1992) and Miller et al. (1993) found that the more innovative individual tends to accept new and somewhat innovative information technology more positively. This study expected a similar relationship between innovativeness and policy support. Correlation analysis supported this expectation with coefficient 0.124 (p value = 0.030). However, in the following regression analysis with enter method, innovativeness had a marginal effect, with p value = 0.106, and in the regression analysis with stepwise method, innovativeness had been dropped out from the final model. Perhaps innovativeness has a positive effect on policy support as shown in the correlation analysis, but its impact is not strong enough when all five factors are considered simultaneously in the regression model.

Public opinion and policy benefit have significant positive effects on policy support; thus H3 and H4 are supported. When all five factors are considered simultaneously in the regression model with enter method, policy benefit has the highest impact on policy support, with the highest standardized coefficient of 0.339. In the technology acceptance model (Davis 1989), perceived usefulness of the new technology influences users' acceptance of the system the most, and this study implies a similar result. Privacy concern has a negative effect, with a standardized coefficient of -0.108 (p value = 0.025) on policy support; thus H5 is supported. Table 8 summarizes the results of hypothesis testing.

Table 8. Result of Hypothesis Testing

	Hypothesis		Test Result
H1	Public Trust	→ Policy Support	Accepted
H2	Innovativeness	→ Policy Support	Marginally Rejected
H3	Public Opinion	→ Policy Support	Accepted
H4	Policy Benefit	→ Policy Support	Accepted
H5	Privacy Concern	→ Policy Support	Accepted

DISCUSSION AND CONCLUSION

From a citizens' perspective, this study explored the explanatory power of public trust, personal inclination for innovativeness, perceived public opinion, perceived policy benefit, and privacy concern on policy support, i.e., who supports the administrative information-sharing policy. At first glance, our empirical results may seem somewhat simple and conventional. In the related literature, discussions persist about public trust in government, information privacy, policy support, etc. However, empirical evidence showing explanatory relations among variables is rare. In addition, administrative information-sharing is still a novel phenomenon in public administration and will be an upcoming hot issue in an information society. From this perspective, the contribution of this study may be asserted.

Public trust in government is based on its citizens' evaluation of government performance in terms of effectiveness, efficiency, responsiveness, and transparency in providing public goods (Job 2005). In this study's context of implementing administrative information-sharing, the analysis showed that public trust in government is a key affecting factor influencing citizens' support for the policy. This implies that citizens' decision to support the policy or not will largely rely on their evaluation of what government did in the past; the government cannot simply insist that citizens should sim-

ply trust the government to safeguard privacy information, etc. Since public trust is based on government performance in the past, it is path-dependent and can not be built in a short period of time. Barber (1985) classified public trust into two sorts: trust in the functional ability of the government, and trust in the fulfillment of the moral duties of the government. Especially with privacy-sensitive policies like administrative information-sharing, we can expect that the ethical aspect of public trust will play a critical role in formation of policy support.

The present study has revealed that public opinion influences citizens' support for the policy. This implies that administrative information-sharing could be successfully institutionalized only when most citizens agree to it. Administrative information-sharing is not just a one-off policy. It will have a significant impact on citizens' routine lives, perhaps for the rest of their life. It is critical for citizens to be correctly informed about the system from the beginning of the project. In its public relations, the government should not inform citizens only about the positive side, but about the negative side of the system as well, so that citizens have an option, or the right of choice. In order for the policy to acquire stability and sustainable competitiveness, diversity should be respected in the process of implementation. Administrative information can be shared effectively with strong public support only when a proper common vision, developed through a diversity-seeking process, is shared between government and citizens.

It is not surprising that policy benefit has the most significant effect on policy support. In implementing the administrative information-sharing system, the core controversy is whether the benefit is strong enough to overcome the cost of potential privacy infringement. Unless the policy offers strong public goods to offset the possible infringement of privacy rights, constitutional problems may rise. To deliver maximum value to citizens, government should endeavor at every turn to develop a customer-focused system when promoting administrative information-sharing. In the older tradition of public service, the supply-side efficiency of public service has often dominated the customer-side effectiveness. However, administrative information-sharing should be designed and implemented thoroughly from the citizens' perspective, since it is they who will pay the cost of the policy's restricted privacy rights.

To maximize policy benefit from the citizens' perspective, new public service models may need to be explored. That's the way things are in the business domain: we experienced many "killer" business models in the previous years of the information era. Administrative information-sharing is a relatively new phenomenon in the public administration domain, and many new applicable public service models should be generated by applying the concept of administrative information-sharing. For example, administrative information-sharing can improve opportunities for the most disadvantaged through early identification of those at risk, such as homeless people, and addressing

their problems systematically. Further, administrative information-sharing can reduce crime and increase an individual's safety and security by analyzing statistical information from a range of partners, including the health service, police, fire and transport, probation service, community safety, local authorities, etc. As well, administrative information-sharing can facilitate better, more effective, and targeted policy implementation. When citizens have positive experiences of administrative information-sharing in their routine life, the sustainability of the policy will be greatly enhanced by citizens' policy support. CCTV in residential areas is a good example which can be compared to administrative information-sharing. When CCTV in residential areas was first introduced in the Seoul area a few years ago, civil society and many major media criticized the efficacy of the system, evaluating it against their fear of privacy infringement. The controversy continued until recently, when CCTV proved to be a major tool in fighting crime, including the kidnapping of children. Today, CCTV is being installed nation-wide with strong public supports in Korea.

Privacy concern had a significant negative effect on policy support as expected, but with the least significance level (p value = 0.025) among the four significant factors. This does not mean that privacy concern is the least significant factor to consider in implementing administrative information-sharing. On the contrary, the descriptive statistics in Table 4 show that the measured items of privacy concern have higher scores than the others. This implies that both the pros and cons of the policy have relatively high levels of privacy concern, and this has caused a relatively low-significance level of privacy concerns' influence on policy support. More restricted private rights are the most expensive cost that citizens pay for the benefit of administrative information-sharing. With every measure, the government should ensure that appropriate safeguards will be maintained on the sharing of private information. OECD guidelines on the protection of privacy are a good example; the guidelines specify the principles of collection limitation, purpose specification, use limitation, security safeguards, openness, individual participation, and accountability. These guidelines underpin most current international agreements, national laws, and self-regulatory policies. Although the guidelines are voluntary, most OECD member-nations claim to have adopted them. However, practices directly matching the standards seem not to be simple. The Korean government has already had a very costly lesson when implementing the National Education Information System (NEIS), against which civil society posed strong opposition due to its fear of privacy infringement. NEIS is a typical example of privacy controversy on public information management.

In conclusion, administrative information-sharing necessitates important preconditions for its successful implementation. Public trust, public opinion, policy benefit, and privacy concern are key factors to consider in the implementation process. Sharing

common vision and understanding on these factors between government and civil society will be a starting line for administrative information-sharing in Korea.¹

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