

Public Awareness and Attitude
toward
Information Society
in Korea

Kyu-Hyung No
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I. Introduction

The advent of the information society is not only expected to bring materialistic change into society but also to produce perceptual and cognitive alterations on social values. Scholars argue that the core values pursued in the industrial society will be gradually replaced by new values of the information society (Kohen,1982). Specifically, "knowledge or information" will become the first and foremost resource from which a variety of values will be derived.

In a case where the promotion of the information society is solely motivated and carried out by the government or by the elite group, progress may be slow. Toward the information society it is important to procure the participation and support of the general public, which acts as a catalyst to the transitional process. Therefore, the public's attitude and recognition toward information society are significant in two ways. First, they are necessary factors to successfully establish the information society. Second, they act as a barometer by reflecting the degree of informationalization of the nation.

This study is aimed at identifying the recognition level and the attitude of the Korean people toward the information society. In order to achieve this objective, the survey research method was implemented and categorized the respondents into two categories- the " general public " and the "expert group". The expert group consists of those people whose occupations are in information related industries or government organizations.

Two different methods of selection were employed, depending on

the group. The stratified cluster sampling method was used to draw 1,000 people from a nationwide survey to form the general public. In case of the expert group, 1,500 respondents were chosen by systematic random sampling from annual organizational publications. The return rate of the mail survey was 49% and both surveys were conducted in August, 1986.

II. Recognition and Attitude toward Information Society

In order to measure the recognition level of the information society, the study focused on two aspects, principle knowledge and awareness knowledge. The former looks at whether a person understands the major knowledge involved in the transition from the industrial society to the information society. Awareness knowledge measures the extent of a respondent's knowledge on the present condition of informationalization in Korea.

Examination of the people's attitude toward the information society was checked by measuring the level of consensus to establish the information society in Korea. Furthermore, people were asked what they perceived as necessary information services that would be available in the information society.

1. Principle Knowledge of the Information Society

1) The Major Industry in Korea

The study asked the respondents to choose what they believed to presently be the major industry in Korea. The answers would reflect what they recognized as the present economic and social stage in Korea.

<Table 1> The Major Industry in Korea

(%)

industry	expert	public
agriculture	3.1	9.9
light industry	40.4	18.6
heavy industry	31.4	31.1
information industry	11.1	20.1
service industry	9.2	10.7
don't know	3.9	9.2
no response	1.1	10.4

We can interpret the different responses of 'light industry' and 'heavy industry' as a signal that people recognize Korea to belong to the industrial age. The results reveal that 71.8% of the expert group and 49.7% of the general public regard Korea as an industrial society. Although the majority of the two groups arrive at the same conclusion, they emphasize different industries within the industrial society. 40.4% of the expert group chose 'light industry' while 31.1% of the general public selected 'heavy industry' as the major industry in Korea.

The expert group put more emphasis on 'light industry', while the general public was relatively more inclined toward the 'heavy

industry'. In analyzing the responses, the expert group reflects the actual situation in Korea more accurately than the general public.

Other industries were ranked in the following order by both groups: information industry, service industry and agricultural industry. The general public's response are spread compared to those of the expert group in actual percentages. For instance, the general public gave more weight to other industries, except for 'heavy and light industries', even though the rank was the same with that of the expert group. The fact that 20.1% of the general public emphasised the information industry implies that they seem to be persuaded by the recent messages about the information society through mass communications.

2) Rank for Technology Investments

Both the expert group and the general public indicated that 'computer and telecommunications' (35.7% and 30.6%, respectively) are top technological priorities for investments to improve national development (table 2).

It is noted, however, that the expert group regarded 'new materials' (34.6%) as almost the same priority of investment with that of 'computer and telecommunications' and placed other technologies except 'biotechnology' (12.4%) below 10%. On the other hand, the general public considered 'biotechnology' (19.8%), 'new materials' (16.7%), and 'energy exploration' (16.5%) as technologies to make equal contributions to national development.

Generally, however, 'old' technologies were assessed as low

from the future (table 3).

<Table 3> Expectations of the future society

(%)

items	expert	public
ethical and moral	38.6	33.3
material affluence	5.3	9.5
social equality	31.4	32.2
conquest of diseases	1.0	4.4
convenient lives	21.2	18.5
others	2.1	1.5
no response	0.5	0.6

As shown in the table 3, the expert group indicated 'ethical and moral' (38.6%) and 'social equality' (33.3%) as the most important aspects to be realized in the future. This is the same case with the general public (33.3%, 32.2% respectively). These results imply that both groups of respondents have the same expectations and ideas of what should be emphasized in the information society. Both the expert group and the general public emphasized mental or non-material values as closely connected to improving the quality of life in the information society.

2. Awareness Knowledge of the Information Society

1) Awareness of the information society

<Table 2> Rank for Technology Investments

(%)

items	expert	public
new materials	34.6	16.7
biotechnology	12.4	19.8
computer & telecommunications	35.7	30.6
energy exploration	8.2	16.5
traffic & transportation	1.0	4.7
marine development	5.3	6.3
aerospace technology	1.8	4.9
others	0.5	
no response	0.6	0.5

priorities by both the expert group and the general public. 'Traffic and transportation' was particularly given the lowest weight with 1.0% from the expert group and 4.7% from the general public. These results show that both groups of respondents recognize so-called, high technologies, and, particularly, computer and telecommunications as important factors for national development.

3) Expectations of the future society

The information society can be seen as a blue-print of the future which will realize the expectations and the dreams of the society and its individuals. The study examined the expectations of the respondents toward the information society in terms of what they hoped for

Awareness of the information society can only follow after one is able to recognize the information society. The study asked the respondents whether or not they have heard of the term 'information society' and they know the meaning of it.

The percentage of those who have heard of the 'information society' and know the meaning of it totaled 85% of the expert group and 46% of the general public.

These results are consistent with those of the previous surveys conducted by Seoul National University and Pusan University. Both surveys reported that approximately 50% of the population lack recognition of the information society (table 4).

<Table 4> Awareness of the information society
(%)

items	The Study		S.N.U.	Pusan Univ.
	expert	public		
know	85.2	45.2	50.8	48.7
do not know	14.6	54.8	49.2	51.3

To be more specific, 69% of the expert group and 27% of the general public responded that they have frequently heard the term and know the meaning well. 16% of the experts and 19% of the public answered that they have heard the term several times and understand the meaning. 13% of the expert group and 54% of the general public

belongs to either 'have not heard the term' or 'have heard the term but have no idea about it'.

2) Sources of awareness

In order to see what were major sources of awareness of the information society, we looked at forms of media which were utilized to provide information (table 5).

<Table 5> Sources of awareness

(%)

items	expert	public
TV and radio	34.1	49.0
newspapers	30.4	19.5
books	15.1	2.7
education & seminars	9.6	6.1
interpersonal comm.	4.2	8.1
government publication	2.7	2.4
others	1.6	0.9
no response	2.3	11.3

As shown in Table 5, the television and radio are considered as major sources to induce awareness of the information society by both the expert group (34.1%) and the general public(49.0%).

Interestingly, the expert group relies heavily on newspapers (30.4%) and books (15.1%), forms of written media. The general public,

however, depends on interpersonal communications (8.1%). Both groups relied the least, less than 3%, on government publications.

3) News awareness of the information society

In order to measure the awareness of the information society further, the study asked the respondents to choose familiar news items.

Listed items include news concerning the information society and general news that occurred in 1986. The two different categories of news may provide relative comparison (table 6).

'Discount of long-distance telephone calls' was the most well known item under news on the information society to both of the expert group (91.2%) and the general public (75%). More than 50% of the expert group was familiar with the news in the questionnaire.

Less than 50% of the general public, however, were not acquainted to the most of the news on the information society. The general public was particularly attentive to news which have relevance to their daily lives. Examples of news with direct influence are: 'plan to raise the telephone rate' (56.3%) and 'drive for one telephone per family' (51.3%).

In comparing recognition of general news with that of news on the information society, 'discounts of long distance telephone calls' was the only item which drew enough awareness to be compared to the top general news items such as: 'import and sale of foreign cigarettes' (89.0%) and 'establishment of the special committee for constitutional reformation' (75.1%).

<Table 6> News awareness

(%)

rank	items	expert	public
News on the Information Society			
1	Discounts of long distance telephone calls	91.2	76.2
2	Development of domestic TDX-1	73.3	40.9
3	Plan to unify the telephone rate system	70.7	46.8
4	Plan to establish the civil service computer network	68.6	28.1
5	Drive for one telephone per family	66.7	51.3
6	Plan to raise the telephone rate	59.8	56.3
7	Computerization of the personal identification card	51.9	37.9
8	Plan to utilize the post office as a multi-channel of information service	43.6	32.0
9	Passing the bill to promote computer networks	34.2	18.4

General News			
1	Import and sale of foreign cigarets	96.9	89.0
2	Establishment of the special committee for constitutional reformation	94.9	75.1
3	Foundation of the union for semi-conductor research	46.0	39.3

3. Attitude toward the information society

1) Level of consensus to establish the information society

In addition to analyzing principle and awareness knowledge, the study examined the level of consensus of the two groups toward informationalization. Respondents were asked whether or not they would support the government if it decided to carry out informationalization as the foremost policy for the national development (table 7).

<Table 7> Level of Consensus to establish the information society (%)

level of consensus	expert	public
agree	38.3	33.3
rather agree	42.1	36.0
neither agree nor disagree	11.3	13.2
rather disagree	4.7	3.7
disagree	1.4	0.8
others	0.6	12.2
no response	1.6	0.8

According to table 7, 80.4% of the expert group and 69.3% of the general public would support the suggested government policy. 6.1% and 4.5%, respectively, however, expressed objection towards the policy. Other respondents maintained neutral positions as 'neither agree nor disagree' or lacked knowledge of the information society

itself and had no opinion on it. The latter case shows comparatively different results with 12.2% of the general public and 0.6% of the expert group.

An cross analysis of the level of consensus and recognition of the information society, however, reveals a lower level of consensus than the results mentioned above. The result shows that only 36.8% of the general public possessed both positive attitude and recognition of the information society. This is approximately half of the original percentage that would support the government to establish the information society. Therefore, approximately only one third of the public can actually be seen as supporters of the information society in a strict sense.

2) Perceived necessary information services

In order to measure the need for the information society, the general public was asked to select their necessary information services among the various services which would be available in the information society (table 8).

'Home security service', 'one telephone per family' and 'computerization of civil affairs' were designated as the most necessary information services to the general public by approximately 9 out of every 10 respondents. 'Home shopping' and 'home office' received only about 25% of each group and was the lowest of necessary services.

What respondents perceive as necessary information services seem to be dependent on two factors. First, the service must provide certain benefits to the whole society. Second, the service should

impose little change to present lifestyles. For instance the top three services provide many improvements to a wide range of recipients to the individual, community, and society. Furthermore, those services do not require drastic changes to existing life patterns. Less necessary services confine benefits to only the individual and compel drastic changes to one's lifestyle (e.g. home shopping). Therefore the availability of information services should first commence with those services that provide a wide range of benefits and the least amount of changes to present lifestyles and later to services that benefit the individual and require major changes.

<Table 8> Need for information services (General public only)

(%)

items	not so necessary	neutral	necessary
Home security service	2.2	4.2	93.5
One telephone per family	2.0	7.6	90.0
Computerization of civil affairs	2.9	7.6	89.5
Unified telephone rate system	6.4	11.5	82.1
Popularizing data banking	6.4	14.8	78.8
Computer diffusion to each family	12.2	30.9	56.9
Telemetering	13.8	35.0	51.2
Home shopping	43.6	28.4	28.0
Home office	53.5	22.0	24.5

III. Personal Characteristics and the information society

People may react differently to informationalization. Perhaps there is a pattern to the way an individual responds to innovation depending on his personal characteristics and predispositions. For this reason, the study classified the respondents into 5 categories based on personal characteristics. Value system, socio-economic status and innovativeness are examples of some characteristics that will be examined to ascertain their connection to one's recognition and attitude toward the information society.

1. Establishment of the categories

The study referred to Maslow's, Five Stages of Human Motivation (1955), Mitchells's, Personality Types (1984), and Roger's, Adaptor Categories of Innovation(1982) in order to build systematic categories which could best explain and predict one's recognition of the information society. Five categories were established based on the personal characteristics of the respondents, including value system, socio-economic status and the degree of innovativeness. A brief description of each category follows.

1) Innovators

Innovators are characterized to be adventurous and have much curiosity in new things. They are open-minded, economically rich, and

able to understand rather complicated problems. Futhermore, they are are willing to adopt reasonable innovations.

2) Achievers

Achievers conform more to society and are traditional compared to innovators. They often play the role of opinion leaders in a society. Achievers may seriously consider the ramifications before adopting innovations but are not afraid of innovation.

3) Belongers

The basic desire of belongers is to maintain harmonious human relationships. They try to associate with others, but do not play leading roles. They stick to social tradition and belong to the middle class.

4) Sustainers

Sustainers, just above the survival stage, try to make certain their safety in society. In general they dislike changes and adopting changes will only concede when their social and economic safety is secured.

5) Survivors

Survivors, at the lowest social level, try to meet physiological

needs. They strongly stick to tradition more than any other type. They are afraid of change and dislike or are indifferent to innovation

In order to distinguish the respondents into five categories mentioned above, the study asked a series of questions concerning attitude and social backgrounds.

In table 9, the five categories of respondents are brokendown according to different levels of education and income, and occupation.

<Table 9> Characteristics and distribution of the categories

(%)

categories		Survivors	Sustainers	Belongers	Achievers	Innovators	average
E	primary	65.2	25.6	9.1	4.8	1.3	17.9
D	middle	13.4	48.8	12.2	2.9	0.0	15.7
U	high school	12.5	14.7	69.6	53.3	7.9	46.0
C.	college	8.9	10.9	9.1	39.0	90.8	20.5
IC	below 20	90.2	60.5	39.5	26.7	21.1	46.2
NO	21 - 40	8.0	32.6	50.5	6.7	7.9	32.7
*M	41 - 60	0.9	3.9	6.9	44.8	38.2	13.2
E	above 61	0.9	3.1	3.1	21.9	32.9	7.9
O	managers	2.1	2.8	2.3	20.0	43.2	8.5
C	white color	2.1	12.3	51.7	45.3	29.7	37.1
C	blue color	61.7	29.2	7.1	7.4	1.4	16.4
U.	students & housewives	29.8	47.2	36.6	25.3	23.0	34.5
	unemployed	4.3	8.5	2.3	2.1	2.7	3.4

(* Unit of income is ten thousand won.)

2. Recognition of the Information Society

Recognition of the information society increases from the survivors to the innovators. In other words, recognition is higher among those that are less traditional and willing to adopt changes.

<Table 10> Recognition of the information society
by the five categories

(%)

items	Surviv ors	Sustai ners	Belong ers	Achiev ers	Innvat ors
heard frequently and know well	12.6	19.7	23.6	38.7	51.3
heard frequently but no idea	17.5	25.2	24.3	16.2	15.4
heard sometimes and know well	17.8	11.8	22.2	27.9	17.9
heard sometimes but no idea	36.9	19.7	18.6	13.5	11.5
never heard of it	25.2	23.6	11.2	3.6	3.8

$\chi^2=115.2$, $df=16$, $p<0.001$

The respondents who 'have heard of the information society frequently and know the meaning well' and 'have heard of it several times but understand the meaning', shows consistent results in order of survivors (30.4%), sustainers (31.5%), belongers (45.8%), achievers (66.6%) and

innovators (69.2%). Therefore, approximately 3 out of every 10 survivors and sustainers grasp the meaning of the information society, while almost 7 out of every 10 achievers and innovators know the meaning well.

3. Attitude toward the information society

Similarly to recognition, positive attitudes increase from the survivors to the innovators (table 11).

<Table 11> Attitude toward the information society
by the five categories

(%)

items	Survivors	Sustainers	Belongers	Achievers	Innovators
agree	14.6	28.3	37.1	46.4	34.6
rather agree	26.2	24.6	34.8	39.1	50.0
neither agree nor disagree	26.2	13.4	12.1	7.3	9.0
rather disagree	2.9	1.6	4.5	3.6	3.8
disagree	1.9	1.6	1.0	0.0	0.0
don't know	28.2	20.5	10.5	3.6	2.6

$\chi^2=90.0$, $df=20$, $p<0.001$

Approximately 86% of the innovators and achievers as opposed to 41% of the survivors agreed with the government's decision that the

promotion of the information society should be carried out as the policy for national development. 62.9% of the belongers also agreed, which is the approximate mid-point between the innovators and achievers at one extreme and the sustainers and survivors at the other extreme.

IV. Conclusion

Informationalization in Korea are mostly proposed and designed in a top-down way from the government. In order to successfully implement this policy, however, the government must have the support and cooperation of the people.

Rogers (1982) argued that innovation of new ideas or new products passed through five stages: knowledge, persuasion, decision, implementation and confirmation. Informationalization can be conceptualized as an innovation with new concepts and ideas regarding both the social structure and the individual. The idea of the information society will be diffused and information related equipments will be dispersed in order to successfully adopt the innovation of informationalization. Roger's theory will be applied to informationalization in Korea.

From the views of his five stages of innovation, Korea can be said to belong to the initial stages such as the knowledge and the persuasion. About half of Korean people have not yet heard of the information society and are not persuaded of the benefits that the information society will bring.

Therefore, in order to advance to the upper stages of innovation, it is necessary that the government take action to increase the nation's positive attitude and recognition of the information society. In order to efficiently carry out this objective, two preliminary steps should be taken.

First, a clear picture of the information society should be established. The government should distribute clear and definite blue print of the information society to the people. This would require continuous monitoring and collection of the people's response to the distributions.

Second, it should utilize efficient communications methods in order to disseminate information to the correct target audience. As shown previously in table 5, 49% of the respondents depend on broadcasting media, more educated respondents depend on written media, and less educated respondents depend on interpersonal communications. People should not be categorized neither in masses nor as a highly homogeneous group. Rather, it should be recognized that people are made of various classes distinguished by their education, value system, social status, and regional identification. Therefore, the government must choose efficient means of communications for different audiences.

As the study has shown, the five categories distinguished by value system, socio-economic status and innovativeness possess different recognition levels and attitudes towards the information society. Generally, on a continuum of rising recognition and attitudes, the categories go up on the continuum, beginning with the survivors and rising towards the innovators. This kind of the typology may be helpful to identify the target audience. The content and communication

media should be different for each of the 5 types of respondents.

In regard to information services, a step by step strategy based on the expected acceptance of the people is recommended. Information services which provide a broad range of benefits and require minor changes should be provided first. Subsequently, the completion services that are directed to the individual and require major changes should follow.

Bibliography

Kochen Manfred, 'A New Concept of Information', The Infrastructure on an Information Society, North-Holland, 1982.

Martin James, Telematic Society, Prentice-Hall, 1981.

Maslow A. H., Deficiency motivation and growth motivation, Univ. of Nebraska Press, 1955.

Michell Arnold, The Nine American Life Styles, Warner Books, 1984.

Naisbitt J., Megatrends, Warner Books, 1982.

Rogers Everett, Diffusion of Innovations, Free Press, 1982.

Rogers Everett, Communication Technology, Free Press, 1986.

Toffler Alvin, Future Shock, Random House, 1970.